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ORIGINAL LECTURES.

A CLINICAL LECTURE ON CONGENITAL PULMONARY STENOSIS, AND ITS INFLUENCE ON DISEASE OF THE LUNGS.

By HERMANN LEBERT,
Professor of Clinical Medicine in the University of Breslau.

Gentlemen,—A boy, four years of age, is before you, who suffers from a disease which is very seldom observed even in large Hospitals, but which, perhaps for this very reason, is well described in Medical literature; so much so that, if one were to collect together all the published cases, there would be about 150, which have been tolerably and even well described, since they have been gathered together, with a certain degree of predilection, from the commencement of the 18th century.

The student who has examined our patient has formed, for the most part, a correct opinion on his case: he has diagnosed an organic disease of the heart, the cause of which he considers to be congenital; he has ordered a bland but nutritious diet, and for the difficulty of respiration he has recommended the occasional use of digitalis. His difficulty began only with the necessity for arriving at a more precise localisation of the disease of the heart, and to accomplish this a thorough knowledge of heart diseases is necessary.

I will try to draw a concise general picture of the case of the patient, who has come from a distant locality to seek our advice.

Congenital Stenosis of the Osteum of the Pulmonary Artery—Manifest Cyanosis—Dyspnœa of great Intensity—Catarrh of the Lungs—Congestion of the Liver.

The boy, Louis L., aged 4 years, is the son of healthy parents. The mother, who is with him, states that she has had eight children, who all, excepting the patient, enjoy good health. The boy was not cyanotic the first month after birth, but from the commencement of suckling he suffered from some difficulty in the breathing whenever he was put to the breast, and on account of this he frequently left off suckling. No notice was taken at that time whether there was palpitation of the heart, and whether the difficulty in breathing was habitual. It was only when the child had been removed from its quiet passive position and transferred to the cradle, when it began to perform active movements, and particularly when at the age of 14 months it began to walk, that the mother noticed how the previously red-cheeked child was beginning to assume a bluish appearance of the face and hands. The slightest exercise then caused want of breath in the child; it also increased the cyanosis, and brought on cough. In consequence of this the boy, well-built, with fair appetite and good digestion, was obliged to keep nearly always quiet. The want of breath afterwards increased to such a degree that the little patient became less and less able to move about, and for the last year has not been able to walk at all; during this period, from time to time, fainting fits have made their appearance, which have lasted from ten to fifteen minutes, and have caused loss of consciousness, from which the patient has recovered only slowly. From this time a moderate degree of dyspnœa has remained habitual even during rest, frequent cough has come on, and the appetite has diminished; but there has never been any hydropic swelling of the feet or legs.

Looking at the *status præsens*, you see a well-built child before you, suffering from cyanosis to a high degree; the skin of the face, the palpebral and ocular conjunctiva, the mucous membrane of the mouth, and even that of the tongue, exhibitng a dusky hue; the same colour is seen in the ears, fingers, and hands, also in the toes, particularly the last phalanx, which looks almost blue; the phalanges themselves appear to be normal, not having that claw-like curvature which is sometimes observed in cases of cyanosis. In the neck, the carotids are seen vehemently throbbing, yet on auscultation they present no abnormal sound. No venous pulse is visible, either in the neck or at the liver. The respiration is laborious, even when the body is at perfect rest, all the auxiliary muscles of respiration working moderately, and respiratory movements accelerated—40 in the minute. The whole chest is much curved, and equally raised at each inspiration, and the supra-clavicular fossæ totally obliterated, the chest exhibiting the appearance characteristic of general emphysema. The left side of the thorax is very prominent from the second rib downwards, and having its maximum prominence near the nipple, at the level of which the circumference of the chest measures two centimetres more on the left than on the right side; the prominence extends—although to a less degree—to the lower part of the sternum and part of the right thorax. The impulse of the heart is to be felt over a rather large area, extending from the nipple below upwards over one intercostal space, and laterally to the right margin of the sternum and the upper left part of epigastrium; it is particularly felt at the fifth intercostal space in the mammary line: it is firm, strong, resistent, and perceptible as far as the sternum. From the second rib to the lower border of the sixth, the sound on percussion is dull. The natural pulmonary note ceases at the inner border of the left mammary line; from the nipple the dulness extends inwards to the right sternal border. On auscultation loud sharply accentuated sounds are heard at the apex; above this and internally, at the third left intercostal space, a loud intense protracted systolic bellows sound is audible, which begins before the systole, and continues into the beginning of the diastole. No evidence of this murmur is to be discovered on the right side of the sternum, either above or towards its middle; at the sternal edge, on the left side, over the second and fourth intercostal spaces, the sound is audible, but with considerably less intensity. The pulse is moderately accelerated, 104 per minute, regular, and of moderate strength. No pains are complained of in the region of the heart, nor in the chest. The respiration sound is everywhere of the exaggerated vesicular or puerile character, combined with catarrhal—more sonorous than rattling—sounds, which are not concentrated towards the bases of the lungs. The liver is much swollen and resistent, and extends beyond the lower border of the false ribs, nearly by a hand-breadth. The spleen is of normal size. No hydropic effusions nor infiltration exist. Appetite is variable, but on the whole rather impaired. Bowels regular. Urine normal. The strength would be tolerable if the great dyspnœa did not interfere with movements.

The diagnosis in the case is not difficult. The dyspnœa, which clearly began at the time of suckling; the cyanosis, the development of which took place during the first year of the patient's life; the unquestionable evidence of preponderating hypertrophy of the right ventricle; the bellows-sound, which is only to be heard over the point of origin of the pulmonary artery—all these points indicate some disease of the pulmonary artery at its origin. Disease of the aorta may be at once excluded from the diagnosis, because the bellows-sound does not continue to be audible along the course of the aorta. Further, we are warranted in saying that we have to do with stenosis of the ostium of the pulmonary artery; if it were a case of insufficiency of the valves, a diastolic sound would be heard in the same situation; but, on the other hand, a protracted systolic or a double sound leads one to diagnose stenosis.

This diagnosis must not, however, be formed with a feeling of predictive certainty. Professor Dittricht was the first to show that pulmonary stenosis may also be located in the right conus arteriosus, and I have discovered in the records of Medical literature five such cases, with minute anatomical descriptions. In such cases, the disease has begun, not with valvular endocarditis, but with myocarditis of the conus of the ventricle; and I may here remark that, according to observations made by me, this intra-uterine myocarditis may be of syphilitic origin. I had a patient who was suffering from syphilis, with a very large indurated chancre on the glans and prepuce; long after cicatrisation had taken place he married; on the wedding-night the cicatrix burst during the attempts at coitus; a drop of blood came in contact with the posterior commissure of the vulva, and a syphilitic ulcer formed at that spot, which I had the opportunity of examining before the hymen had been ruptured. Secondary syphilis manifested itself in the woman, pregnancy afterwards took place, the child was born at the full time with all the symptoms of congenital pulmonary stenosis, but soon died. Syphilitic myocarditis of gummatous nature was described and depicted by me years ago.

There can be no important diagnostic difference between stenosis at the valves and below them. I have, however, seen a case in which important changes in the heart, with defective development of the pulmonary artery, were connected with a sharp systolic bruit over the second and third right intercostal spaces, and in which, nevertheless, neither myocarditis of the right conus arteriosus nor endocarditis of the pulmonary

valves had existed, the bruit having probably originated at the round opening by which the two ventricles communicated; at all events, under such conditions, probabilities are greatly in favour either of inflammation of the conus or of the pulmonary valves.

We can go yet another step in the diagnosis: the pulmonary stenosis involves besides a patent condition of the septum of the ventricles, of the foramen ovale, and even of the ductus Botalli, since the great obstruction in the pulmonary artery necessitates other routes for the blood. Finally, another conclusion, warranted by all cases of the disease, is of interest—that the endocarditis of the pulmonary valves or the myocarditis of the conus, must be established before the termination of the third month of intra-uterine life of the embryo, because after that time there no longer exists, normally, any communication between the two ventricles.

I am content with these diagnostic considerations, and will merely add that the prognosis must be considered bad. Besides the chance of sudden death, which is a frequent consequence of heart disease, besides the occurrence of constantly increasing want of systolic action of the heart, and consequent stagnation in different organs, these patients have the miserable prospect of perishing from tuberculosis, should they live to arrive at the time of puberty—a point to which I shall soon have occasion to refer again.

The treatment of such cases must principally be of a hygienic character. The greatest possible amount of rest, or at most very slow and cautious movements, avoiding ascents; nutrient but mild diet, large quantities of milk, and a moderate supply of meat; succulent vegetable food, abstinence from leguminous vegetables and those tending to produce flatulence, etc.; avoidance of all exciting drinks, as coffee, tea, beer, and wines; the inhalation of pure fresh air during summer; freedom from all mental excitement and emotion, as well as mental labour attention to the regular action of the bowels—these are the most important dietetic and hygienic regulations. At periods of habitually increased dyspnœa with cough and tendency to asthmatic paroxysms, digitalis has been of most service to our little patient. The best form is that of an infusion, ten grains to five ounces, with one ounce of syrup, of which a dessert-spoonful is to be taken every three hours. Alternately with this the tinct. digitalis may be given, five to ten drops daily. During the last session in this Hospital as well as in my private practice, I have been trying a preparation, as far as I know, not hitherto in use, with the result of which I am very well satisfied—namely, the seeds of the digitalis plant; they are rich in digitaline, and therefore I have ordered our apothecary to keep such seeds in stock. I order the semina digitalis gr. ss. to gr. j. pro dosi three or four times a day, and I have an infusion of them made of eight to sixteen grains.

Digitaline I do not employ in children's practice. Every Physician who has had ample opportunity of seeing heart diseases will agree with me on this point, that it is desirable to have a variety at command from amongst the preparations of digitalis. In times of very extreme dyspnœa, I shall order for the child, in addition to the digitalis, the tinct. opii benzoica, the liq. ammoniæ anisatus, and combined with these such counter-irritants as act rapidly.

I will now proceed to give you an abstract of the other case to which I alluded:—

Origin of Aorta from the Right Ventricle anterior to a very small Pulmonary Artery—Hypertrophy and Dilatation of the Right Ventricle—Patent Foramen Ovale and Ventricular Septum—Tubercular Deposition in the Lungs—Patient 20 years of Age, a Man; no Symptoms of Heart Disease up to the Age of 17; the Sudden Occurrence of Symptoms after Exertion—Death from Asthenia, with constant Dyspnœa—Symptoms of Pulmonary Stenosis, and in last few months of Tubercular Deposition in the Lungs.

Otto K., aged 20, a tailor's apprentice, was for the first time admitted into our clinic February 20, 1862. He states that he was perfectly well until six months ago; at that time, whilst raising a heavy weight, he felt a sudden pain in the right upper region of his chest, combined with oppression and difficulty in breathing. Since that time he has been troubled with palpitation and a throbbing sensation at the second and third right costal cartilages, combined with want of breath, cough, slight expectoration in which traces of blood have been observed, and with a feeling of anxiety. Patient is of a delicate but well-proportioned build; the colour of his face is somewhat pale, with no trace of cyanosis. When at rest the respiration is regular, though somewhat accelerated; pulse 88, moderately full, regular. The chest is flat; the impulse of the heart is seen at the fifth intercostal space; at level of the second and third ribs, at the edge of the sternum, a throbbing sensation is distinctly felt. On the right side there is slight dulness from the second to the fourth sternal ribs; on the left side the cardiac dulness extends to the sixth rib from the same height as on the opposite side. The transverse diameter of the area of cardiac dulness is thus increased. Over the dull space a sharp systolic bruit is to be heard, which is loudest over the second and third right intercostal spaces. There is no pulsation in the jugular veins; lungs are normal. The liver and spleen are not enlarged; urine is free from albumen; digestion is fairly good. Under the administration of nourishing diet, complete rest in bed, and the use of digitalis, combined with the acetate of lead, the subjective symptoms so diminished that the patient was able to leave the Hospital on April 25. After two months' interval, however, on June 26, he again seeks and gains admission. His appearance at this time is pale, and he looks emaciated; there is no cyanosis; pulse 78, stronger on the right side than on the left; appetite good, bowels somewhat constipated; patient complains of violent cough and viscid mucous expectoration, which is sometimes stained with blood, and of pain in the upper part of right chest; palpitation less frequent; dyspnœa considerable and troublesome. The intercostal spaces are somewhat drawn in; there is equal expansion of both sides of thorax; in the neck pulsation of the carotids and an undulatory movement in the jugular veins are to be seen. Above the sternal notch a distinct vibration, which is synchronous with the impulse of the heart, is perceptible. In both apices occasional rattling can be heard. Over the area of cardiac dulness the systolic bruit almost covers the diastolic sound; a distinct vibratory feeling can be perceived by the hand placed on the sternum. The liver and spleen are normal. Treatment was the same as on the previous occasion. On July 2 the patient brings up six ounces of red frothy blood, and again a smaller quantity on July 6. The pulse increases to 84, and does not again diminish in frequency; cough gets worse, sputa sometimes mixed with blood. In the beginning of August the temperature is raised, the pulse 104 to 108, once even 116; there is increasing weakness; the systolic blowing sound grows louder, so that the first sound of the heart can be heard only feebly, and towards the middle of August not at all. Frequent hæmoptysis occurs, which ceases under the administration of liquor ferri sesquichloridi; cough continues. At the apices catarrhal rhonchi are heard, with slight dulness in the right supra-spinous fossa. On October 9 patient again has hæmoptysis, nevertheless he gains strength and leaves the Hospital, attending the out-patient department during the winter. The symptoms of disease in the circulatory system as well as the dyspnœa continue; now and then hæmoptysis occurs, strength decreases, body loses weight, and there is constant cough. In the middle of March the patient has for the first time swelling of the legs, and again he is admitted into the Hospital. He looks very pale and anæmic, is much emaciated, face and eyelids are a little puffy, there is slight œdema of the legs and feet, the lips and tip of the nose are livid and dusky. He makes the same complaints as formerly, but his appetite is worse; he sweats a good deal at night, and he sleeps badly. He has also pyrexia with remissions and exacerbations, and his urine is highly coloured. The jugular veins exhibit again that kind of undulation which was before mentioned, and the finger, when placed in the sternal notch, feels the same vibratory thrilling. The spinal column has a slight curvature towards the left at the level of the third and fourth dorsal vertebræ. At the line of the fifth ribs the cardiac dulness extends across the sternum, the area of dulness occupying a space two fingers' breadth to the right and left of the respective edges of the sternum. There is no dulness over the lungs, excepting at the outer part of the right infra-clavicular region. The systolic bruit can be heard over the whole middle and upper parts of the front of the chest, but most distinctly below the sternal notch. At both apices and over the whole front of the chest frequent large and small moist crepitation is heard; behind, above the spine of the scapula on both sides, the respiration is feeble, tubular breathing and numerous moist sounds are heard. The pulse is small, more frequent in the evening than during the day. Increase of the œdema of the lower extremities ensued, the face became more swollen, marasmus progressed, and the patient died in April.

Post-mortem Examination.—The skull is of normal thickness, the dura mater rather congested, arachnoid and pia mater also somewhat hyperæmic, the veins particularly being full. Both corpora striata on section present two elevations of a grey colour and the size of peas, but the brain is otherwise normal.

The middle part of the thoracic cavity is totally occupied by the heart, which lies in the centre of the chest; œsophagus healthy; descending thoracic aorta with thin walls, its calibre much diminished, its inner surface smooth. Mucous membrane of trachea red, that of larynx bluish; in the mucous membrane of the larger bronchi of the left upper lobe, numerous yellow deposits of the size of pins' heads are seen. The right upper lobe is tough, voluminous, puckered with cicatrices, exhibiting yellow isolated spots on the blackish-blue surface; the anterior edge emphysematous; the whole lobe containing no air, but thoroughly filled up with cheesy masses and containing several cavities the size of hazel-nuts. The upper part of the middle lobe contains air, but its lower part is infiltrated with tubercle. The lower lobe shows disseminated tubercular deposits in the reddish-brown, tough lung tissue, which on section presents a smooth surface. The left upper lobe exhibits a few tubercles; the pleura of the left apex is covered by a thick layer of lymph, and it has also puckerings; the lower lobe is everywhere infiltrated with cheesy tubercle.

The pericardium contains no fluid, and the surface of the heart exhibits nothing abnormal. The heart is of the size of a man's fist, and is of a rather globular shape, the largest transverse diameter being eleven centimetres, the greatest vertical diameter thirteen centimetres. The right ventricle is much hypertrophied, the thickest part measuring 15 millimetres; the right auricle remarkably enlarged, so much so that a medium-sized apple might be placed in it; foramen ovale still open, its lumen of an oblong-oval shape, about the size of a fourpenny piece. If the finger be placed, as is usually done, over one cusp of the tricuspid valve in order to get into the pulmonary artery, and then the part be cut open, we disclose the lumen of a vessel, which at first appearance seems to be a normal pulmonary artery; on closer inspection, however, we find that five centimetres above the normal semilunar valves, three vessels arise from this one tube in the same manner that the innominata, carotis, and subclavia sinistra take their rise normally from the aorta. We have therefore to do with the aorta. Below one of the semilunar valves of that large primary tube, an opening is to be seen of such a size as to be capable of admitting a full-sized finger. This opening is bordered at its lower margin by a semicircle of very strong muscles, some of which come from the fleshy part of the ventricular septum. The finger introduced into this opening passes into the left ventricle, which is of normal size, but smaller than the right, its walls measuring only 11 millimetres in thickness. This opening is placed on a level just below the large cusp of the tricuspid valve; the mitral valve is normal; left auricle not enlarged. The aorta when laid open measures 8 centimetres in breadth just above the valves; the pulmonary artery measures 2½ centimetres at a similar distance from the valves. Behind that part of the boundary line of the opening between the ventricles, which runs in an upward direction, situated close to the septum of the ventricles, there is in the right ventricular cavity a small opening, into which a minute catheter might be passed, and through which we reach the pulmonary artery, which takes its rise from the left side of the ventricle near the aorta, and which gives off branches—viz., the two pulmonary, at the proper distance from the valves. There are two valves, the one of which shows a trace of a septum tending to divide the point into two parts; the other is normal when compared with the calibre of the pulmonary artery. The veins enter the auricle in a normal manner, except that the superior vena cava seems to be of relatively small size, whereas the vena coronaria magna is enlarged. The right auricle is not notably enlarged; nowhere is there fatty degeneration of the heart; liver is of normal size, has an appearance of waxy degeneration; spleen, kidneys, and intestinal canal healthy.

An interesting feature in this case is the predominant affection of the right lung; this is accounted for by the circumstance that the heart, being in an unusually high position, and too much towards the right, must have compressed principally the upper part of the right lung. Consequently this case, which seemed to be an exception to the principle laid down by me—viz., that pressure exercised by the heart has a decided influence on the localisation of the disease of the lung in that part where the pressure occurs—affords in reality strong support to the principle.

ROYAL INSTITUTION. — The session commenced on Tuesday last with an able lecture on "Light" by Professor Tyndall.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE CLASS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon to the Ophthalmic Department of the same.

CATARACT.

SOME OF THE PHYSIOLOGICAL CONDITIONS OF THE CRYSTALLINE LENS AND ITS CAPSULE—DEFINITION OF CATARACT, AND FORMS OF THE DISEASE—CONGENITAL ANOMALIES OF THE CRYSTALLINE LENS—PROGRESS OF CATARACT—DIAGNOSIS OF CATARACT—EFFECT OF CATARACT ON SIGHT—CAUSE OF CATARACT—TREATMENT—COMPLICATIONS OF CATARACT WITH INTRAOCULAR DISEASES WHICH INTERFERE WITH TREATMENT—THE REMOVAL OF CATARACT—GENERAL CONSIDERATIONS—OPERATIONS FOR EXTRACTION — CONSIDERATION OF THE SEVERAL ACTS OF EXTRACTION, TOGETHER WITH CONTINGENCIES—UNFAVOURABLE CONDITIONS WHICH RETARD RECOVERY, DAMAGE THE EYE, OR QUITE DESTROY SIGHT—EXTRACTION OF HARD CATARACT THROUGH A SMALL SECTION OF THE CORNEA—MODIFIED LINEAR EXTRACTION—OPERATION FOR DISPLACEMENT—SPONTANEOUS DISLOCATION OF HARD CATARACT—OPERATIONS FOR SOLUTION—EXTRACTION OF SOFT CATARACT—REMOVAL OF SOFT CATARACT BY SUCTION—OPERATIONS FOR CAPSULAR CATARACT—TREATMENT OF TRAUMATIC CATARACT.

GENTLEMEN,—*Some of the physiological conditions of the crystalline lens and its capsule require to be told*, in order to explain sufficiently the pathological changes of cataract, certain points connected with its diagnosis, and the treatment. There has been a very great deal of research here, but the notice of a little of it will suit my purpose.

It is unnecessary to speak much of minute structural anatomy. This is nearly sufficiently given in anatomical books in the hands of every member of the Profession. Some few points need only be introduced.

Crystalline Lens.—The centre of the anterior surface, and of the posterior, are called the poles, and the circumference the equator. It is elastic, but this depends on its capsule. Alone it is readily broken. The figure is disc-shaped, less convex before than behind, and round at the equator rather than sharp. On the anterior surface there is a single layer of large, very transparent, hexagonal cells, with a nucleus and nucleoli. They are largest and most numerous at the pole, smallest towards the equator, where they disappear. They do not exist at the posterior surface. They are sometimes described as the epithelium of the capsule. This is the softest portion of the lens, and on the health of it does the nutrition of the whole seem to depend.

At birth the lens fibres or tubes are in their most delicate state; this includes the tube wall, and its contents which are watery. The protein element, crystallin, is at its least. As the body grows crystallin increases, density is added, and that chiefly centrally. The lens, therefore, undergoes marked changes with the maturity of the body.

This is the state of the adult lens. First, the hexagonal cells in front; then a stratum of soft fibres all round, the cortex; in the centre, a distinct nucleus of denser fibres.

Coloration is another adult change. The lens has ceased to be colourless, its nucleus having acquired a light yellow tint. After that period the colour becomes deeper, and pervades the whole. At a very advanced age it resembles a piece of amber. Coloration interferes with transparency. My own observation induces me to think that as soon as a nucleus can be detected, coloration may be recognised. If this be so, the nucleus is always coloured in some degree, and never clear.

There is no absolutely definite time, to a year or so, for the several structural changes, any more than those occurring in any tissues of the body, and which are incidental to increasing age. There is much variation in the time of their coming on. Perhaps it is about the thirty-fifth year that all may be fully recognised. Those persons who get grey early, and soon show shrinking of the skin textures, have the ocular changes proportionately early.

There are senile changes in the lens, consisting of greater density, especially in the nucleus, more coloration, and loss of convexity. These get more marked as life is prolonged. The lens of a very old man is like a bit of amber, and is nearly twice as heavy as that of a child. It is said that a boundary line

may be seen sometimes between nucleus and cortex with a simple microscope, and that occasionally it is more apparent from a cloudy stratum between them, due to certain demonstrable structural alterations in the lens fibres.

The capsule of the lens, is a closed envelope, transparent, smooth, elastic, permeable to fluid, and without texture, homogeneous. It is like a layer of glass moulded on the lens, and not separated by any fluid in man or even in the lower animals. The front, which is almost always called the anterior capsule—an incorrect expression—is the thickest part, but it thins towards the equator. The back or posterior capsule, is thinner, and thinnest at the pole.

While the capsule resists the touch of any blunt instrument, such as those used for the extraction of any extraneous bodies from the chambers of the eye and the formation of an artificial pupil, escaping unhurt, and does not easily break under pressure, it is very readily wounded by sharp ones, and then quickly tears, owing to its elasticity, and has a tendency to split beyond the limit of the wound. The torn edges of the anterior capsule in life always roll inwards. It may be further mentioned that it never breaks into scales or fibres under injury, but shreds, and the edges of which are mostly clean and not jagged.

Alterations in the capsule from age consist, according to a few observers, of a deposit of hyaline, or transparent material, on the posterior part of the anterior capsule, which gives a thickened and uneven look.

The lens and its capsule have neither nerves nor blood-vessels. Not long before birth, the capsule is surrounded by a vascular layer, which is united with the margin of the iris, closes the pupil, and forms the well-known membrana capsulo-pupillaris. In some of the reptile tribe, the anterior capsule keeps vascular as a permanent state.

After birth the lens and its capsule get their nourishment directly from the aqueous humour and the vitreous, and indirectly from the vascular parts around. It is supposed that the ciliary processes contribute much to their nutrition. The health of the lens must therefore depend upon the state of the circulating fluid, the blood in general, as well as on the local circulation. This physiological point has been much elucidated by the philosophical experiments of Dr. Bence Jones, "on the rate of passage of crystalloids into the vascular textures of the body, and non-vascular, and out." Dr. Jones's paper is in the *Proceedings of the Royal Society* for June 15, 1865. I strongly advise the perusal of it. In one instance, six hours after two grains of chloride of lithium were given, the smallest part of the lens of a guinea pig showed the substance very distinctly. Even when the lens is opaque, all its physiological functions are not quite lost, for in several experiments which Dr. Jones made, the lithium was detected in cataracts from patients who had recently taken carbonate of lithia in water. The subject is further pursued in papers read before the Royal Institution of Great Britain.

Senile changes in the lens and its capsule are apparent in the living eye, and are most striking in the state of the pupil. In elderly people the pupil loses the blackness, and gets cloudy or of a light amber tint or brownish-yellow, and the colour seems to penetrate deeply. This is so often the source of mistakes, it being supposed that disease is present, that I never lose an opportunity of speaking about it. An elderly person never has a black pupil so long as his lens is present. When the changes are far advanced they frequently give the appearance of cataract.

Many a patient has been brought to me under the supposition that there was incipient cataract. I pointed this out many years ago when I commenced to learn Surgery, before the ophthalmoscope was invented, and gave hints to prevent mistakes.

The coloration is most marked in dark races of men, and sometimes to such a degree that it may not be possible, at first sight, to determine when cataract does or does not exist. I have seen it so apparent in mulattoes—and I am told it is still more marked in negroes—that an experienced Surgeon might be deceived from looking at the pupil with his naked eye, and pronounce cataract to be present, if any of these persons had complained of defective sight. In the case of a woman of colour, an operation for supposed cataract was proposed by one to whom, both as an author and as a Practitioner, Ophthalmic Surgery in this country owes much of its advancement. The coloration was so intense as to deceive him, the defective sight being due merely to presbyopia and vitiated secretion from the Meibomian glands in consequence of chronic ophthalmia.

Examination of the pupil by oblique illumination and with the ophthalmoscope will show the change in a definite manner. The lens surface has sometimes a satin gloss, with a greyish or drab-colour centre. The circumference of the nucleus gives a dullish grey or yellowish-grey reflection. This will be spoken of again when I come to the diagnosis of cataract. It is my recommendation to the student to get familiar with these senile effects, by examining many persons far advanced in age.

Senile changes do not predispose to cataract, nor pass into it from mere intensity.

(To be continued.)

ORIGINAL COMMUNICATIONS.

THERAPEUTIC NOTE ON CHLORAL.

By Sir J. Y. SIMPSON, Bart., M.D., D.C.L.

Several years ago, when discussing the past history and probable future advances of the Materia Medica, I took occasion, amongst other matters, to observe as follows :—

"Our therapeutic means are most probably destined to have early and important additions made to them through other discoveries in chemistry, particularly in modern organic chemistry. For there can be little doubt that some of these almost innumerable compounds which organic chemistry is daily adding to its stores will be found to be endowed with marked therapeutic properties, and that we may find in them most powerful and possibly concentrated forms of medicinal agents capable of fulfilling all our principal therapeutic indications—and perhaps with properties superior to the drugs at present used; as an antiperiodic, for example, even more certain than quinine, and yet without its occasional tendency to produce headache and nervous symptoms; or a narcotic, as important as that most useful of all drugs—opium—and yet without either its direct constipating effects or its indirect tendency to excite subsequent nausea, vomiting, etc."(a)

Chloral C_2Cl_3OH, an artificial organic chemical compound, was discovered by Baron Liebig in 1832. Both in its fluid form and when solidified by the addition of a little water into hydrate of chloral, it has been known during the last thirty-seven years chiefly as a chemical curiosity. But lately Dr. Liebreich, of Berlin, has suggested hydrate of chloral as an hypnotic and anæsthetic remedy. I am indebted to the courtesy of Dr. Liebreich for sending me an early specimen of this new drug, and latterly I have used it to a considerable extent in practice. My impression is that, in introducing chloral, Dr. Liebreich has proposed a remedy which will yet prove of immense value in the practice of Medicine, Surgery, and Midwifery.

Hitherto I have principally employed it as an hypnotic and anodyne. In sufficient doses I have found it, as a general law, as sure a producer of sleep and soother of pain as opium or any of its preparations. It is usually swifter in the induction of its narcotism, more tranquil in its action, and more prolonged in its effects than opiates are when taken as hypnotics; but, above all, it seems, in a great measure, free from some of the minor drawbacks and disagreeable accompaniments produced by a full and large dose of opium. In this respect it appears to me to fulfil successfully the indications which I predicted in the extract above given, of being a narcotic as powerful, and indeed more powerful, than opium, "and yet without either its direct constipating effects, or its indirect tendency to excite subsequent nausea, vomiting, etc." The sleep induced by a full dose of it steals on without any premonitory symptoms. It is usually deeper, and yet more quiet and calm, than that produced by opium; and it does not leave subsequently the thirst, dry throat and tongue, disturbance of stomach and appetite, and languor of mind as well as body, which most persons unaccustomed to the use of opium commonly feel after a deep and narcotic dose of that drug.

Ever and anon cases are well known to occur in practice in which patients declare their inability to take opium in any form without suffering severely from nausea, faintness, restlessness, and other evil effects. In several such cases I have now used chloral as an hypnotic with perfect success. A patient here at present from New York assures me that the preparations of opium and other vegetable anodynes have always acted upon her as poisons, and without producing their usual hypnotic effects. "Such," she writes me, "being my experience of anodynes, I was unwilling, as you remember, to take

(a) "Physicians and Physic" (1856), p. 100. *Monthly Journal of Medical Science*, vol. xvi. p. 359.

chloral, and hoped nothing whatever from it. It was administered to me in two half-doses [thirty grains each]; the first dose, taken in the day-time, with light in the room and my people walking about, did not put me to sleep, but it soothed and calmed me completely. The second dose, given at night, was followed by nearly four hours of natural and refreshing sleep. I felt neither giddiness nor heaviness on waking, and neither then nor later did I experience any sensation of nausea as after other anodynes."

Two or three weeks ago I had under my care an old patient, a lady of great sensitiveness and intellectual power, from one of the midland counties of England. When last in Edinburgh she was the subject of a slight operation, and twice took a dose of chloral at night to induce rest. She slept under it quietly and refreshingly, far beyond her usual breakfast hour. Opium, henbane, and other anodynes had, when used, generally induced in her disturbed sleep, occasional sleep-talking, and sometimes somnambulism. A few days before coming on this last occasion to Edinburgh, she had a conversation with her mother regarding the kind of monument which they should erect over the grave of her father, who died two or three months since. That same day she had travelled up from Wales, felt ill, and had given to her a dose of henbane towards bedtime, with the hope of producing rest. In the middle of the night her husband was awoke by the ringing of his door-bell, a shower of small stones launched against his bedroom widow, and the dog barking within. On rushing down and opening the door he found his wife, whom he believed to be in bed, standing outside. The henbane draught had produced a fit of sleepwalking. After her husband and she had fallen asleep she had risen, dressed herself in her day clothes over her night clothes, removing for that purpose her bonnet and muff out of their special receptacles, and, in the middle of a dark and wet night, had walked off to a distance of two miles. She awoke with her left hand holding her two gloves within her muff, and the right hand grasping the cold iron handle of the inner gate of the churchyard in which her father had recently been buried. After using the chloral she expressed to me great satisfaction at the idea that she had now a medicine which seemed to produce nothing but a tranquil sleep, quite different from the disturbing effects of the narcotics which she had previously taken; and two days ago I saw an order from England at the apothecary's for several doses to be forwarded to her.

Sometimes chloral produces its hypnotic effects when opium, from its long-continued use, has ceased to do so. To a patient who has had daily morphia injected subcutaneously for some years for neuralgia of the side under the hands of different Practitioners, my assistant, Dr. Bell, gave at my request a drachm dose of chloral. Latterly a grain of morphia has been injected daily with the effect of relieving the pain, but without producing sleep. She swallowed the dose of chloral early in the afternoon, and was asked to lie down in bed. I saw her in a quarter of an hour afterwards deeply asleep; and the lifting of one eyelid to look at the dilated pupil did not awaken her. She awoke out of the slumber free from her neuralgia.

I am not aware of any special contraindications to the employment of chloral when used for somniferous purposes. Even in head and chest affections, where I should have been chary of having recourse to opium as an hypnotic, I have employed chloral with perfect success. The contraindications to opium offered by a tendency to constipation, etc., do not exist against chloral.

Like all other remedies in the Pharmacopœia, it will, no doubt, occasionally fail to produce its desired effect; but as seldom so, perhaps, as most of them. In a few instances the sleep induced by it has been dreamy and hysterical, particularly when the patient was not kept in a state of perfect quietude; but these are rare exceptions to the general rule.

In the present remarks I have spoken specially of the somniferous or hypnotic powers of chloral. I have used it for other purposes, but it is not my intention to dwell upon them at present. It will not fulfil all the many and almost endless indications for which opium is used in Medicine; but I have seen enough to convince me that it will prove a very valuable anodyne in some cases of neuralgia, hysteralgia, dysmenorrhœa, pleurodynia, etc., and in the pains attendant upon cancer and acute local inflammations. In some cases of irritable bladder and chronic cystitis I have found it give the patient much longer and more perfect rest than large doses of opium. In several instances it has seemed to me, when given in small and repeated doses, to soothe down both acute and chronic cough with remarkable effect; and I have known it to relieve asthma. Lately in a young lady whom I saw in consultation with Dr. Taylor, suffering under a severe attack of congestive bronchitis with some hæmoptysis, orthopnœa, a small dose (twenty grains) of chloral was given at night. "She speedily fell asleep," wrote Dr. Taylor to me the next day, "and slept soundly until 4 a.m., when she sat forward in bed and coughed, but appeared to be only half awake. When I called in the morning at 10.30 she was still enjoying a most placid slumber. As I contrast," Dr. Taylor adds, "the distressed and audible breathing of last night with the tranquil sleep and improved state of the patient to-day, I cannot help concluding that chloral has a directly sedative effect on the whole respiratory surfaces."

Occasionally I have exhibited chloral in continuous small doses for one, two, or more weeks in succession, and apparently with most marked benefit, particularly in cases of chorea, threatened or incipient insanity, etc. A patient from Illinois, who, for several years, has always regularly suffered excruciating spasmodic pain in the left iliac region, attended with some discharge, for eight days before menstruation began (she has disease of the fundus uteri and left Fallopian tube), has, during the last two periods, kept at bay this old and formidable suffering by taking chloral night and morning during the threatenings of it. She strongly assures me that formerly she had used very large doses of opium and other anodynes without any such favourable effect. I have found the parturient uterus to go on contracting regularly and strongly when the patient was so deeply asleep under chloral as to be only very imperfectly wakened up with the expulsive efforts of labour.

It has been employed in continued fevers to induce sleep and quietude and reduce the pulse. Dr. Liebreich speaks of its utility in rheumatism, convulsive coughs, tetanus, acute mania, and delirium tremens, and as a sedative after Surgical operations.

The dose of chloral to an adult for an hypnotic which I have usually employed has varied from 50 to 60 grains; but 25 to 30 grains suffice in some patients. In a case of long-standing sleeplessness, and which had resisted great doses of opium, Indian hemp, etc., 120 grains failed to produce any effect. When used for anodyne and other medicinal purposes, a continuation of smaller doses—as 10 or 20 grains several times a day—is sufficient.

In administering chloral I have given it only by the mouth and by enema; almost always as a draught. It is somewhat acrid and pungent to most palates, and hence requires to be diluted well with water, and to have added to it a large quantity of syrup.

When it first came into use in this country the charge for a dose containing 1 drachm or 60 grains of chloral was as high as 3s. 6d.—an almost prohibitory price. A draught containing the same quantity is now sold by our druggists at Edinburgh for sixpence; and doubtless it will become much cheaper when it becomes more employed.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

Part II.

[*Continued from Vol. II.* 1869, *page* 654.]

ON DISEASES OF THE KNEE-JOINT ENDING IN ANCHYLOSIS WITHOUT SUPPURATION.

In the preceding section I have somewhat fully illustrated the different forms of inflammation of the synovial membrane and bone, and have attempted to point out the clinical symptoms by which each form of disease is to be recognised. I have also shown, by the quotation of cases, that all these different affections are quite capable of a complete recovery under Surgical treatment; for, in every instance which has been related, the knee-joint was thoroughly restored to its healthy condition.

In the present section I have a different object in view, for in this I propose to demonstrate how recovery may take place in knee-joint disease with a stiff or anchylosed articulation without suppuration; pathological and clinical changes taking place in the knee-joint not unlike those we have already illustrated as taking place in the hip. These changes are, however, influenced by the peculiar anatomy of the joint, and are not, consequently, so frequently met with in the knee as in the hip.

The cases I am about to quote are clearly next in severity to those I have already given. They are not so bad as the cases that are to follow, for in those disorganisation of the joint, as indicated by suppuration, will be the leading clinical symptom. Nevertheless, they are of a severe nature; for it is pathologically certain that true anchylosis of a joint cannot take place without disintegration of the articular cartilages—without some degree of disorganisation—although that process may not show itself by external suppuration, and that synostosis can only occur after the destruction of the interarticular fibro-cartilages. In the hip-joint I have already illustrated the clinical fact that anchylosis is by no means an infrequent result of articular ostitis without external suppuration. In the knee such a result is by no means so common, and as an explanation of this truth there can be little doubt that the existence of the interarticular fibro-cartilages has much to do with it; for it is clear that a good anchylosis cannot take place between the two articular surfaces of the tibia and femur whilst these cartilages exist in their integrity, and they are not of a nature to be absorbed or to undergo granular degeneration like the ordinary cartilage which covers the articular lamella of bone, or to disappear without complete disorganisation of the joint, as is indicated by suppuration.

It is probable that fibrous anchylosis may take place in the knee-joint without the total destruction of the fibro-cartilages, and in the following cases this fact is illustrated; but for bony anchylosis to become perfected under similar conditions is highly improbable, although, as in a case to be quoted, it seems possible.

The presence of these interarticular fibro-cartilages in the knee-joint consequently helps to explain the clinical fact that an anchylosis of the knee-joint is more difficult to secure than that of another joint differently formed, and why synostosis is only seen after a complete disorganisation of the articulation. A form of treatment may consequently be justifiable or necessary in diseases of the knee-joint that may not be so in other articulations, and operative interference called for under circumstances which cannot present themselves in disease of joints differently formed.

Case 20.—*Anchylosis of Knee-joint after Injury.*

George C., aged 13, came under my care at Guy's Hospital on March 23, 1863, with an anchylosed knee-joint, on the right side, the result of an injury received four years previously. There was swelling after the accident, and pain, but no suppuration. The case was treated from the first by means of splints. The anchylosis was complete, and the limb was a good one. No breaking down of the structure was attempted.

Case 21.—*Disease of Knee-joint—Articular Ostitis and Pulpy Synovial Disease—Recovery with a Stiff Joint.*

George R., aged 7, came under my care at Guy's Hospital on March 27, 1865, for some affection of his left knee-joint. It had existed for many months, and had come on with a dull aching pain. This pain had been present for some months before any swelling appeared; a visible enlargement had made its appearance for about three months. When seen the joint was much enlarged, it measured in circumference ten and a quarter inches, the sound joint measuring nine. The synovial membrane was clearly much thickened, the points of bone being covered in. There was increase of heat in the joint and pain on pressure, but the joint moved smoothly. Fomentations were used and tonics were given for some months, with at first but little good effect, the enlargement of the joint gradually progressing. A splint was consequently applied, and absolute rest enforced. The symptoms then took a good turn, and everything promised well, when the child disappeared from observation, and when he reappeared on July 11, 1866, the joint was at an obtuse angle, but free from all signs of existing inflammation. A posterior screw splint was consequently applied, and within a few weeks the position of the joint was altered for the better. A gradual convalescence followed, and by the last report (September, 1867) the boy was pronounced cured, with a nearly stiff joint and a straight limb.

Case 22.—*Anchylosis of Knee-joint after Chronic Disease without Suppuration.*

Mary D., aged 21, a married woman, the mother of two children, both of which she suckled for months, came under my notice on January 18, 1869, to show me her knee-joint, which was firmly anchylosed. She had been under my care for chronic disease of the joint for twelve years, and for six the joint had been stiff and the limb useful. The disease had been of a very chronic nature, and the knee had been kept in splints nearly the whole of six years. The joint had never suppurated, and, with only short intervals, she had been able to get about with it. She kept on the splints, or rather gutta-percha casing, from the feeling of security they gave, not from necessity.

Case 23.—*Anchylosis of Knee-joint without Suppuration.*

Mary G., aged 16, came under my care at Guy's Hospital on February 21, 1869, for some temporary complaint, when I observed that she had a stiff knee-joint. On inquiry, I found she had had disease of the left knee when she was only four years of age, and that it had been "bad" for about six years; for the last six it had been quite well, and she had used it freely, although it was firmly anchylosed. Suppuration had never taken place in or about the joint.

On examination, no signs of disease remained about the joint beyond its complete anchylosis. The bones were all in their normal position and of their natural size. The soft parts were also quite healthy.

The girl found very little inconvenience from the stiffness of the limb—she was so used to it.

Anchylosis of Knee-joint after Acute Rheumatism.

Kate D., aged 47, came under my care at Guy's Hospital on July 29, 1869, for a stiff knee-joint. It had been gradually coming on for six years, after an attack of what was called rheumatic fever, which affected many joints, and "settled" in the knee. She was laid up for seven months with an enlarged joint, but not a suppurating one, and at the end of the year she walked. Since then she had been about upon it freely, and had suffered no pain.

She never wore a splint or any mechanical appliance. The knee was completely fixed—indeed, it was a good example of anchylosis.

Case 24.—*Anchylosis of the Knee-joint after so-called Rheumatism, without Suppuration.*

Jane B., aged 45, came under my care at Guy's Hospital on February 21, 1861, for pain and stiffness of her left knee. It had come on eleven months previously, after what was described as rheumatic fever, the disease settling in the knee. The joint was at the first much swollen and excessively painful, and when the swelling subsided the stiffness gradually became worse.

When I saw her the joint was of its normal size, but the tibia and fibula were clearly partially dislocated backwards. The joint was somewhat stiff, and very limited flexion or extension was allowed. The attempt to bend it caused pain.

A posterior screw splint was adjusted to the limb, and tonics were given, such as quinine. Everything went on well from this date. By means of the screw splint and the gradual pressure applied to the bones through it, the dislocated bones were replaced, and by September 6, 1861, or after six months' treatment, good union had taken place, the joint being quite stiff, and the bones in their natural position. A leather splint was given to the woman to wear, and she went about her work without pain or difficulty.

Seven years subsequently (on August 8, 1868) this patient again came to see me to show me her leg. She had gone about on it with the leather casing during the whole of that period, and had suffered but little inconvenience from it, and no pain. The bones were in their natural position, and firmly anchylosed. The patella, likewise, was quite immovable. She had no pain or any sign of weakness in the joint, and, on the whole, it was the most perfect anchylosed joint I had ever seen.

I told the woman she might go about without the splint if she liked, the cure seemed so perfect; but she said she felt so much more safe with it on that she preferred to wear it.

Case 25.—*Articular Ostitis—Expansion of Epiphyses of Knee-joint—Recovery with Anchylosis.*

John F., aged 10, came under my care at Guy's Hospital in 1860 for disease about the left knee. It had been the seat of a dull aching pain for two years, and had become perceptibly larger for one year. The child had gone about on it, although with a limp, during the whole of this time, and at different intervals the joint had been hot and painful.

On examination, it was clear that the epiphyses of the femur and tibia forming the left knee were much expanded. There was no effusion into the joint or any thickening of the soft parts. The movements of the joint were also perfect. Tonics were given. The boy was directed to be kept off his legs, and fomentations were applied. In six months all symptoms of inflammation had disappeared, and firm pressure could be tolerated without pain. In another six the expansion of the epiphyses was less, and in two years all evidence of disease had disappeared, the two knees being similar in size and equal in every other point. There was good movement of the limb, some crackling only existing on forced flexion.

Nothing was seen of this boy for five years (February 21, 1867), when he called upon me to show me his leg, which was a very good one in all respects; but the knee-joint was perfectly stiff. It had been so for about three years, having gradually, without any pain or evidence of disease, stiffened since he left my care in 1862.

The boy had walked upon the limb during the whole of this time without any splint, and had never felt any pain in the part. He had simply left his leg alone, and a gradual anchylosis had taken place.

The anchylosis appeared to be as perfect as it was possible to conceive, and was the cause of little or no inconvenience.

Remarks.—The cases which I have just quoted of anchylosis of the knee after disease, but without any evidence of suppuration, are undeniably interesting; for such examples are not so common as to be unworthy of record. They form an intermediate link of no mean value in the chain of cases or conditions which I am now illustrating, and teach us some points of practice which should be recollected.

In the first case—although the record is somewhat meagre—there is little doubt that synovitis was the disease which resulted from the injury, and that the anchylosis was the direct result of inflammation of the synovial membrane. Effusion into the joint was the immediate consequence of the injury to which the joint had been subjected, and when this subsided the anchylosis gradually came on. The leg had been placed in splints from the first, the severity of the symptoms rendering such a practice necessary. The anchylosis was very complete, and seemed bony.

In the second case the disease apparently had commenced in the bone; it was at the first articular ostitis, the clinical point indicating this condition being pain that had been present for several months before any swelling appeared. When I saw the boy, both bones and synovial membranes were clearly involved, the former being expanded and the latter thickened, the disease in the synovial membrane being secondary to the disease in the epiphyses, the inflammation from the latter having spread to the former and set up the mischief. It is under these circumstances that an unfavourable prognosis as regards the ultimate integrity of the joint is always to be given, for it is a rare thing for inflammation to spread from the bones to the synovial membrane without the articular cartilages becoming involved—without their undergoing granular degeneration, and their ultimate absorption taking place, although it may be without suppuration. In the present case it is clear such a result ensued, for a good and complete anchylosis of the joint subsequently took place, leaving the boy with a useful limb. What became of the interarticular fibro-cartilage is an interesting point for speculation.

In Cases 3 and 4 the same results took place, and probably through the same processes. Excellent limbs were secured in both.

In Cases 5 and 6 a different process probably existed, although the same result was ultimately secured. In it a so-called rheumatic fever settling in the joint was the origin of the disease. It was clearly not in the substance of the bone that it commenced, nor was it solely in the synovial membrane, for these so-called rheumatic cases appear to have their origin in the fibrous capsule or periosteal covering of the articular extremities of the bones. In fact, they seem to depend upon an articular periostitis, the inflammation spreading rapidly from the periosteum covering the epiphyses to the synovial membrane itself (which may be looked upon as an extension of the same), and causing a rapid disintegration, if not suppuration, of the articular cartilages. In the case related the latter event was fortunately warded off, although the former took place, a complete anchylosis of the joint subsequently ensuing, leaving a useful limb.

In the last case several points of interest should be noticed. In the first place, the disease from the first to the last was clearly one of articular ostitis; local pain without swelling of the joint was the earliest symptom, and this lasted for many months, associated with lameness, before any enlargement of the bones was noticed. There was never any effusion into the joint, nor was there for many months any difficulty in moving the joint; indeed, the report states that when first seen the movements of the joint were perfect, and when discharged—after all signs of disease had passed away—the only local indication of disease was a crackling of the joint on forced flexion. As years passed away, however, the joint became gradually stiff, and when the patient was seen in five years' time complete anchylosis had been established. In this case it is clear that owing to the articular ostitis the nutrition of the articular cartilages became affected, and their granular degeneration subsequently took place, their complete disappearance doubtless eventually resulting before the anchylosis was established. This case more nearly approaches the many cases I have related of anchylosis of the hip-joint after articular ostitis than any of the others, and is one of great interest.

LIGATURE OF THE EXTERNAL ILIAC ARTERY FOR FEMORAL ANEURISM.

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A West Indian negro, named F. W., aged 34 years, was admitted into the Medical College Hospital on September 10, 1869, with a femoral aneurism of the left thigh.

He was a tall, well-made, active, muscular, and healthy-looking man, a native of Barbadoes, the earlier part of whose life had been spent at sea; he had been several years in India, and served for seven years in the Lahore Light Horse, subsequently as a rough rider, and last of all as a barman in one of the taverns in the Lall Bazar.

He gives the following history of his case:—About three years ago he sprained his toes in falling from his horse, but he does not in any way attribute his disease to that accident. Six or seven months ago, he and another man were lifting a weight of about 200 lbs., when he felt something give way in his left thigh, just at the site where the tumour now is, but no notice was taken of it, and the sensation passed away. About three weeks ago, he observed a slight swelling, and he admits that for perhaps three weeks before that, he had felt a sense of uneasiness in the spot. This swelling gradually increased till he could feel it pulsate, and about eight days before admission he began to feel numbness in the limb. There had been more or less pain from the commencement of the swelling, but it increased to such an extent, and the limb became so painful, accompanied with fever, that he was confined to bed; at last he applied for relief at the Hospital.

He had been poulticing the swelling and taking medicines, but, as he said, to no purpose. On admission he was weak and feverish, the bowels were confined. The aneurismal tumour was situated in the middle third of the anterior aspect of the left thigh. It was ovoid, fusiform, and its apex within half an inch of the profunda. The diameter of the tumour was about that of a fowl's-egg—indeed, the size and shape of it was very much what would be produced by placing a body of the size of an egg under the integument. The pulsations were very strong, and there was a loud bruit synchronous with the pulsation. It was very tender to the touch, and, from his description, evidently increasing rapidly. Pressure on the femoral above the tumour completely commanded the pulsation.

He was put to bed, and perfect rest enjoined. The limb was bandaged, and some aperient medicine ordered. A belladonna plaster relieved the pain in the tumour, and a sedative draught gave him rest at night. He was restless and feverish during the first two or three days after admission; but simple treatment and rest relieved him. The pain and swelling in the leg abated, and in all respects he was much better. During the first three days, the tumour diminished in size and impulse.

On the 15th, I found him worse; the tumour had increased considerably without any apparent reason, for he had not left his bed. I decided, in consultation with my colleagues, to place a ligature on the external iliac artery, as the disease extended too high up the thigh to give any reasonable hope of success from ligature of the superficial femoral; and as to the common femoral, I prefer ligature of the external iliac as a safer operation. Accordingly, at 8.30 a.m., September 15, the artery was tied in the following manner, under the influence of chloroform. At the junction of the inner and middle thirds of a line drawn from the anterior superior spine of the ilium to the symphysis pubis, and at about half an inch above Poupart's ligament, I commenced an incision which extended for about four inches parallel to the ligament, slightly curved and terminating a little above and about two inches from the anterior superior spine of the ilium. The first incision divided the skin and part of the superficial fascia; on a director I completed the division of the fascia, and next I divided to the same extent the aponeurosis of the external oblique. The superficial epigastric vein was divided with the fascia, and required a ligature, but no arterial branch was wounded. The internal oblique and transversalis and the fascia transversalis having been divided, the peritoneum, with the intestines, was next carefully separated.

It bulged forwards, but was kept out of the way by Professor Partridge, who also pressed the spermatic cord aside, and kept the wound dilated with his finger and a copper spatula. The contents of the pelvis were pushed aside until the artery came into view, lying on the psoas muscle. The internal epigastric artery came very plainly into view; it was large, being quite as big as an ordinary quill. Dividing the sheath, and being very careful not to include anything but the artery in the ligature, I passed the aneurism needle from the inner side of the vessel, and tied the ligature firmly, leaving both ends to hang out of the wound. Pulsation ceased in the tumour, which appeared immediately to shrink in size. In a few minutes later, it increased again to its original size, but without pulsation. Not a drop of blood was lost after the superficial epigastric vein was tied. The operation was almost as bloodless as though it had been done on the dead body, and I confess I was surprised at the ease with which the various steps of it were accomplished. The peritoneum separated more readily than it does in the dead subject, and the artery, being distended with blood, looked larger. The iliac vein was not the least in the way, the sheath was most readily divided, and the ligature easily passed, though the day was dull and cloudy, and the light consequently not very good. The lips of the wound were next brought together with wire sutures, and it was dressed with the carbolic oil dressing. It was remarked by all that before he was removed from the table, the temperature of the limb had fallen considerably. About ten minutes after being removed into his ward, he had quite recovered from the effects of the chloroform, and was complaining of pain in the left side of the scrotum and left testicle, and of pains in the left iliac region shooting down the left thigh. I fear the genital branch of the genito-crural nerve has been included in the ligature. 3.30 p.m.: Has had considerable pain in the scrotum, all down the inner side of the left thigh and leg, and up the left side of the trunk; pulse 100. He is restless and uneasy. Has had two half-drachm doses of liq. opii sed., which have given some relief. The limb has been wrapped in cotton and flannel. To the touch it feels now quite as warm as the sound limb, but the thermometer makes it two degrees cooler, 95° to 97°. In the axilla the temperature is 100°. Repeat the opiate with a saline draught at night.

16th.—8 a.m.: He is better; had some good sleep, and the pain in the scrotum and thigh is much less. But below the knee he has a sense of great pain, although, when touched there, it feels benumbed. He was feverish during the night, and complains of griping pains now. The wound looks well, but from about the ligature a quantity of sero-sanguinolent fluid ran out; this, no doubt, is from the sub-peritoneal areolar tissue. He has had altogether, since the operation, 30 drops of liq. opii at 10 a.m., 25 drops at 1 p.m., 2 grains of opium at 4 p.m., 2 grains of ditto at 7 p.m. The temperature of the limb has been as follows:—4 p.m. of 15th—axilla 101·4°; right ham, 100·2°; left ham, 97·8°. 10 p.m. of 15th—Axilla, 102·0°: right ham, 101·6°; left ham, 100·6°. 3 a.m. of 16th—Axilla, 101·8°; right ham, 99·6°; left ham, 98·8°. 9 a.m. of 16th—Axilla, 101·9°; right ham, 101°; left ham, 99°. The foot, as well as the leg and thigh, feels warm. There is some tenderness about the wound. The bowels are to be relieved by an enema of tepid water, soap, and oil. The tumour is perfectly quiet and free from pulsation. It is apparently smaller than it was.

17th.—He is doing well; had a restless night, having been disturbed by starting pains about the wound. Pain in the foot and toes, and what he calls a sniving pain across the shin bone. His pulse is now 112. His tongue coated. Temperature in axilla, 100·8°; right ham, 98·2°; left ham, 98°. There is slight tympanitis. The enema acted freely yesterday. No pain in the thigh now; but there is still numbness in the left foot. Yesterday evening at 7 p.m., his temperature was in axilla, 103°; right ham, 101·3°; left ham, 100°. The edges of the wound looked puffed and swollen. There is rather a profuse sero-purulent discharge from about the ligature. Washed out the wound, especially about the ligature, with a solution of carbolic acid 3j. to water Oj. He has had no opium since yesterday. Has taken beef-tea, milk, and sago. Let him have a dose of castor oil. It was thought that faint pulsations could be felt in the left posterior tibial artery yesterday evening. The pain due to the genito-crural nerve has all passed away, but he complains of a pain in the loins, and also in the stomach.

18th.—8.30 a.m.: He is doing well. Pulse 92. No fever. Perspired freely last night. Tongue still coated. Bowels acted freely after the oil. Has some appetite. Temperature in axilla, 99°; left ham, 98°; right ham, 97°; left toes, 94·5°; right toes, 97·8°. The only pain now is in the leg and ankle. The temperature at 4 p.m. yesterday was—axilla, 102°; left ham, 99·1°; right ham, 99·4°; left toes, 93°; right toes, 95·8°. The foot and leg are enveloped in cotton and flannel. The pulsation of the posterior tibial is fainter to-day. About 5ij. of thin purulent discharge came from about the ligature to-day. Washed out the cavity with the carbolic acid solution. There is neither pain nor tenderness in the tumour, which is quite quiescent.

19th.—He looks well; says that his sleep was disturbed by starting pains in the wound. There is a tolerably free thin purulent discharge from about the ligature. The cavity was again washed out with the carbolic acid solution. The ligature on the epigastric vein came away. The wound is uniting, excepting about the ligature. His pulse is now 92. Tongue still coated; bowels acted freely. Takes his food fairly. Pain diminished; numbness in foot less; says that the general feeling of the limb is still one of numbness, but that this is decreasing. Temperature at 4 p.m. yesterday: Axilla, 100·2°; left ham, 97·6°; right ham, 97·8°; left toes, 94·2°; right toes, 97·2°. This morning. Axilla, 99°; left ham, 97°; right ham, 97°; left toes, 91·8°; right toes, 94·4°. He may have a mutton chop and some wine.

20th.—He looks well; bowels moved twice yesterday; tongue still coated; no fever yesterday or last night. Temperature at 5 a.m. to-day was—Axilla, 99·8°; left ham, 97·2°; right ham, 97·4°; right toes, 96°; left toes, 96°. At 4 p.m. yesterday, it was—Axilla, 100·2°; left ham, 97°; right ham, 97·8°; left toes, 95°; right toes, 95·2°. His pulse this morning is 96. Still some pain in the ankle and shin. Has occasional starting pain in the wound. About three drachms of pus came from the wound to-day. The aneurismal tumour is becoming smaller and more consolidated, no tenderness on pressure. Takes his food fairly. May have solid food and two measures of port wine daily.

21st.—Pulse 92. Tongue still rather coated. Had very little sleep last night, notwithstanding three one-grain opium pills. Pain in the leg diminishing. Toes still feel somewhat benumbed. Temperature, 4 p.m. yesterday and 7 a.m. to-day respectively: Axilla, 99·8°, 99·2°; left ham, 97°, 96·9°; right ham, 97·5°, 96·5°; left toes, 96°, 94·6°; right toes, 96·6°, 94·8°. The sutures are separating and the wound is granulating healthily. He takes food well and is in good spirits.

22nd.—Is doing well. Bowels open. Discharge healthy. Pulse 92. Says both legs feel much the same now, but there is still some numbness in the left foot. Temperature at 7 a.m. to-day and 4 p.m. yesterday respectively:—Axilla, 98·4°, 97·7°; left ham, 96·8°, 96°; right ham, 96·8°, 95·7°; right toes, 94°, 94·3°; left toes, 94°, 94·4°. There can be no doubt that the anastomotic circulation is established. The aneurismal tumour is gradually shrinking.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

STRANGULATED FEMORAL HERNIA—OPERATION AFTER EIGHTY-FIVE HOURS—DEATH.

(Under the care of Mr. CHRISTOPHER HEATH.)

For the notes of this and the succeeding case we are indebted to the House-Surgeon, Mr. R. S. Smith.

Mary Ann S., aged 67, was brought to the Hospital at noon on September 7, 1869. For some years she had had a tumour in the right groin, but three days before admission this had become suddenly larger, the change being accompanied with pain and vomiting. She was seen by a Surgeon's assistant, who attempted to reduce the swelling, but without effect, and, stercoraceous vomiting coming on on the 7th, she was sent at once to the Hospital.

On admission, a hard oval tumour, the size of a small hen's egg, was found in the right groin, patient complaining of severe pain in that region. Taxis under chloroform having failed, Mr. Heath was sent for. Mr. Heath operated at 5.30 p.m.—about eighty-five hours after the first signs of strangulation—opening the sac. The bowel was very dark, felt soft, and lacked its natural lustre. Two grains of opium were given at once in a pill, and a grain ordered to be taken every four hours afterwards. Beef-tea, milk, and ice to constitute the sole food.

An hour and a half after the operation the woman passed a

loose dark-coloured motion. She slept fairly during the night. By the next morning the skin had become quite yellow.

September 9.—Patient passed a good night. Complaining this morning of more pain in the abdomen; but there is no tympanitis, nor does she lie with the legs drawn up. Temperature 100·2°; pulse 94; respiration 26. Hot flannels ordered for abdomen. To take four ounces of wine in the day. By the evening the temperature had risen one degree, the pulse being lowered to 72, and noted as dicrotous. To continue the opium pill night and morning.

She passed another fair night, but seemed drowsy and low in the morning. Another loose motion was passed. The temperature kept up to 101·4°, and the pain in the abdomen became more diffused. The House-Surgeon was called to draw off nearly a pint of very dark urine, and he found a large black bleb near the wound on removing the fomentation. Brandy was substituted for the wine, and ammonia and chloric ether given. At 6.30 p.m. the patient burst suddenly into a cold sweat, and, with anxious pale countenance, livid lips, struggling respiration, and hardly perceptible pulse, she slowly sank, spite of free stimulation, and died at 2.30 a.m. on September 11, the skin becoming extremely yellow just before death.

At the autopsy, the intestine at the seat of strangulation was found very black and quite soft and pulpy for the extent of half an inch, but there was no perforation of the bowel. There were signs of acute peritonitis for several inches around the wound. The liver was large, hob-nailed, and engorged with bile; the gall-bladder distended. No notable disease of kidneys.

STRANGULATED FEMORAL HERNIA—OPERATION AFTER TWENTY-FIVE HOURS FOLLOWED BY OBSTINATE VOMITING—RECOVERY.

(Under the care of Mr. CHRISTOPHER HEATH.)

Louisa P., a widow, aged 64, a strong, healthy-looking woman, was admitted on September 11, at 11.30 a.m., complaining of great pain in the left groin, with general abdominal tenderness and vomiting, and on examination a hernial swelling the size of a hen's egg was found in the left femoral region. The woman said that she had always enjoyed excellent health, but that she had noticed a lump in the groin for more than sixteen years, at some times larger than at others, but never causing sickness or other trouble. About noon on the day before admission, after no special straining, she began to suffer from pain in the lower part of the abdomen, and to be sick. A Surgeon endeavoured to reduce the hernia on the same evening, but without success, and, stercoraceous vomiting coming on next day, she was brought to the Hospital.

As the parts were very red and tender, no further taxis was attempted, but Mr. C. Heath was at once sent for. At one o'clock, Mr. Heath, failing to return the bowel by taxis under chloroform, cut down upon the inner side of the neck of the sac, divided Gimbernat's ligament, and, this not sufficing, opened the sac and broke down some adhesions. The bowel was very congested and dark, but was shining and of good consistence. A considerable quantity of brownish fluid escaped from the sac. Two silver sutures were inserted in the wound, the middle of which was left open to allow of the escape of fluid, and the usual pad and bandage applied over all. A pill containing two grains of opium was given at once, and a one-grain pill ordered for every fourth hour. Diet: Beef-tea, milk, and wine four ounces.

She passed a fair night after the operation, but complained next morning of much pain and tenderness over the abdomen. The temperature was 99°, and the pulse 94, irregular. Linseed-meal poultices, containing laudanum, were kept applied to the abdomen. Towards evening, obstinate retching came on, and lasted through the night, not checked by iced brandy, soda-water, or iced champagne.

September 13.—Ordered at 10 a.m. a simple enema, with a mustard poultice to the epigastrium. The enema brought nothing away. In the afternoon, Mr. Heath prescribed:—℞ Acidi hydrocy. dil. ♏ iij., mist. salin. efferv. f.℥ j., 4tis horis. After two doses of this had been given without any apparent effect, the patient vomiting frequently large quantities of dark greenish-brown sour-smelling fluid, the House-Surgeon ordered:—℞ Creasoti ♏ iij., bismuthi trisnitr. gr. x., 4tis horis. 10 p.m.: Pulse 114; temperature 99·2°; still vomiting.

14th.—Little, if any, better this morning; sick all through the night, the vomited matter being of the same character, not stercoraceous. Pulse 120; temperature 99°. A grain of opium placed on the back of her tongue. No food to be given by the mouth. To have injections of strong beef-tea O ss., with brandy ʒ ss., every three hours. In the afternoon Mr. Heath saw the patient, and directed an enema of barley-water, with two ounces of castor-oil, to be given at once. The nutritive enemata to be continued, and plenty of ice to suck. 5 p.m.: The sickness continuing, Dr. Ringer was called to the case, and he prescribed—℞ Hydrarg. c. cretâ gr. ss.; sacchari q. s. Ft. pulv. To be taken every quarter of an hour four times, then every half-hour, then every hour. This seemed to do some good, by prolonging the intervals between the vomiting, but at 7.20 p.m it was given up, and, by Dr. Ringer's advice, Vin. ipecac. ♏ j., aquæ f.ʒ j. was ordered to be taken every quarter of an hour. Under this treatment the patient passed two hours without being sick—a marked improvement—and half an hour afterwards slept for fifteen minutes. This plan was continued up to 1 a.m. (15th), the sickness being much relieved. At this time the House-Surgeon, finding the temperature 97·6°, the pulse 108 and very feeble, and the patient seeming to be almost exhausted, stopped the vin. ipecac. and ordered brandy f.ʒ ij., in liq. calcis f.ʒ iv., to be given every half-hour for three times, and then every hour, the nutritive enemata being continued.

15th.—11 a.m.: Has been sick only three times during the night, and has slept about two hours. Temperature 97·4°; pulse 100, fuller, and stronger. Patient seems much better this morning. The wound is very sloughy, and there is an erysipelatous blush about it; tenderness of abdomen continues, but patient has never yet drawn up her legs; she lies quite supine. To have the wound syringed out with carbolic acid lotion, and linseed-meal poultices applied; to continue brandy f.ʒ j. in liq. calcis f.ʒ ij., every hour, and enemata of brandy f.ʒ ij., and beef-tea f.ʒ ij., every four hours. Bowels open four times during the night. 10.30 p.m.: She has continued better all day; retches occasionally, but has not vomited; pulse 106; temperature 97·6°.

16th.—Has passed a good night; no sickness; less pain and tenderness in abdomen. Same treatment continued.

17th.—Slept four hours last night; was not sick; feels stronger this morning. To have three oysters, mutton-broth, and brandy f.ʒ iv. during the day. The redness about the wound is less; it is dressed with carbolic acid lotion and poulticed.

From this date the patient made an uninterrupted recovery, and by October 16 she was able to sit up with the wound quite healed.

THE MIDDLESEX HOSPITAL.

STRANGULATED FEMORAL HERNIA IN A MAN—OPERATION AFTER FIFTY-SIX HOURS—RECOVERY.

(Under the care of Mr. C. H. MOORE.)

We are indebted to the Senior House-Surgeon, Mr. R. H. Lucas, for the notes of this case.

W. D., a healthy man, aged 50, a coachman, was admitted into the male accident ward on the evening of November 23, 1869, with symptoms of strangulated hernia. He stated that for ten months past he had been ruptured, a swelling appearing in the left groin at frequent intervals; but as he had always been able to reduce it himself he had never worn a truss. Two days before admission, however, the bowel coming down with some slight exertion, patient found himself unable to reduce it. In the course of the day the swelling began to increase, and nausea and vomiting set in. There was no action of the bowels, and considerable pain and tenderness about the abdomen made him seek Surgical aid. Taxis, with and without chloroform, failing, he was sent to the Hospital fifty-six hours after the first symptom of strangulation.

On admission, the man looked very worn and suffering, complaining of pain and tenderness across the abdomen, and also in the hernial tumour. This was larger than a hen's egg, situated just upon Poupart's ligament on the left side, feeling firm and rather doughy, with no impulse nor fluctuation. The tongue was thickly coated, and the man complained of thirst, and frequently retched.

Mr. Moore was at once sent for, and he operated without delay. When the sac was opened a couple of ounces of dark blood-stained serum gushed out, and a large quantity of omentum was found concealing a small knuckle of intestine, tightly nipped. Gimbernat's ligament—the seat of constriction—was divided, and the bowel, which did not seem to have suffered materially, returned, and then, a tight ligature being applied about the omentum, the greater part of this was cut away, the wound closed, and covered with carbolic oil under a pad and bandage.

Patient passed a fair night, but next morning was found

lying with knees drawn up complaining of abdominal tenderness, especially in left iliac region. No more vomiting, but tongue furred, and bowels not yet opened. Ordered milk diet, linseed poultices to abdomen, and a pill of pulv. opii. gr. j., with hydrarg. chlor. gr. ij., to be taken every sixth hour.

November 25.—The abdominal tenderness was much diminished, but there was considerable swelling and redness about the wound. The sutures were removed, and a poultice applied. The lips of the wound had nearly united.

26th.—The swelling persisting, the wound was slightly opened up, and some confined bloody serum released. There was, as yet, no action of the bowels, and the tongue remained thickly furred. Tinct. opii to be applied under the poultice, and pil. calomel. c. opio to be taken twice a day. Diet restricted to milk O j., and strong beef-tea O ij.

During the next week the patient was free from any sign of general peritonitis, but a constant discharge of offensive pus from the deep parts of the wound showed that suppuration of the sac was going on. The ligature put about the omentum came away on the sixth day, the pus assuming a healthier appearance shortly afterwards, and, since then, progress towards recovery has been uninterrupted.

The bowels remained quite torpid until December 6 (13th day), when they were cleared out by a simple enema, the motions of good colour and consistence. On the same day Mr. Moore made a counter opening on the outer side of the swelling, which afterwards discharged healthy pus from both apertures. When we saw the patient on December 8, he seemed nearly well, save for the slight suppuration which continued at the seat of operation.

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Medical Times and Gazette.

SATURDAY, JANUARY 1, 1870.

1870.

We are beginning a new year, itself the last of a decade of years. If ever in the career of a journal it may be permitted to offer congratulations to its readers and writers on its success, it is when setting out with unimpaired strength and unflagging spirit after the completion of such a stage on the road of time. It is now eighteen years since the *Medical Times and Gazette* started to "coach" the Profession of Medicine in all that pertains to its science, laws, interests, and dignity. In its pages were, and are still, to be found the practical experience, ripe learning, and sage decorum of its elder parent, the *Medical Gazette*, with the vigour and freshness, and we hope none of the failings, of its younger, the *Medical Times*. Looking at our thirty-six volumes as they lie before us, we modestly murmur—

> "The force of genius could no further go:
> To make this one, she joined the other two."

We flatter ourselves our opinion must be unanimously defined as *de fide* by an Œcumenical Council of Medicine—we do not mean the General Medical Council—with acclamation.

To speak seriously, if the past of our journal is one of which we and the whole Profession of Medicine may be honestly proud—and we do not fear criticism—we have given our readers the best pledge that our maturity shall not belie our growth. As the years roll on we gather fresh strength from new and unexpected sources. Fresh allies flock to our standard. New contributors are ever ready to give us their aid, and our old friends who have borne the burden and heat of the day with us are not wanting to help us reap the harvest of our success. We hope that both new and old allies, readers, and writers will continue to place in us the confidence we have so long enjoyed, and we can assure them that the same principles of independence, even-handed justice, appreciation of all that is useful and good in Medical science, from whatever source it comes, and readiness to contribute to the reception and advance of truth, whether it be new or old, which have hitherto guided us, shall actuate and animate the *Medical Times and Gazette* of the seventies.

PROMOTION IN THE ARMY MEDICAL DEPARTMENT.

Since it has become generally known that Mr. Childers's retirement scheme for the naval and marine forces has advanced so far on its course as only to require its official recognition by the Treasury and the royal assent to convert it into law, the necessity for the introduction of a similar plan into the army, more particularly into its non-purchase and scientific branches, in order to produce movement in the long stagnant stream of promotion, has become still more urgent. In no branch of the army has the slowness of promotion in all grades been latterly more keenly felt and sorely complained of than in the Medical Department, and we trust that something may soon be done to remedy or remove the causes of dissatisfaction.

The Warrant of 1858, while it undeniably conferred many immediate benefits upon the Department, contained within itself the germs of less favourable influences, the effects of which in the retardation of promotion have now for some years been increasingly apparent. In former times promotion to the Inspectorial ranks was a mere matter of seniority and of good digestion; the Medical officer who held on long enough was sure in the long run to attain the higher ranks, from which a salutary rule, abolished by the Warrant of 1858, establishing the system of promotion by selection, ordained that he should as a matter of course retire, after a tenure of office for a certain fixed period.

The result of the new system is that several Medical officers of comparatively short service have been, on account of distinguished merit and acquirements, promoted while still young men to the Inspectorial ranks, from which they cannot be compelled to retire until they shall have attained the age of 65 years, while others, less fortunate, must retire at 55 without having attained the higher ranks. The obstructive effects of this arrangement would be removed if the period for compulsory retirement from the Inspectorial ranks—both included—were to be fixed at either the expiration of fifteen years' tenure of office or attainment of the age of 65 years, according as either event may first occur. In order to remove the hardship in the case of Deputy Inspectors-General who may not have attained the higher rank before the expiration of fifteen years in the lower, they should be permitted to retire on the same terms as Inspectors-General of Hospitals. It would be well, in fact, to do away with the distinctive titles of Inspectors and Deputy Inspectors-General of Hospitals, and to include both under the name "Inspectors of Hospitals," precedence and rates of pay being regulated according to length of service in that rank.

The Department being thus "tapped at the top," the circulation from below upwards would be set fairly agoing, but would be materially accelerated in the lower ranks by an

improved scale of retirement, towards which we would suggest that after a certain period of full-pay service, say fifteen years, retirement should be optional, at a shilling a day for each year of service, as long ago suggested, we believe, by Sir Andrew Smith; and, further, that, according to the circumstances of individual cases, this retiring allowance may, if desired, be commuted into a lump sum, by which means many Medical officers would be enabled to enter the civil ranks of the Profession.

The above proposals, or others of similar tenor, have been frequently addressed to us by correspondents; and from the facts that the last promotion from the list of Assistant-Surgeons—that of Assistant-Surgeon F. J. Shortt—did not take place until that officer had completed fourteen years and nearly five months' service, and that, at the present rate of promotion, others of nearly as long service have the prospect before them of spending several months more in the lower rank, we repeat our opinion that something must be done, and that quickly.

No better period than the commencement of the new year can be fixed upon for turning over a new leaf in both public and private affairs, and we sincerely hope that 1870 may bring with it some such measures as we have suggested for the establishment of a healthy circulation in the system of promotion in the Army Medical Department.

PATENT MEDICINES.

A VERY great deal of patent medicine of one sort or other is taken by the public. Many of these medicines consist of remedies which are very valuable in themselves, and which are, moreover, presented in an elegant and available form. The mischief of all of them is that they are often taken in cases where they are not required, and where they do more or less injury. The administration of a powerful medicine is an affair of skill and judgment, and the Medical man himself, despite all his care for the welfare of his patient, sometimes gives medicines injudiciously. Patent medicines, by a necessity of their nature, are especially liable to be badly administered. The commercial side of such a medicine is in itself a grave danger. Suppose, by some *bizarre* social arrangement, the Medical Practitioner could only make a charge for his Professional services when he administered calomel to his patients, and suppose that the magnitude of the fee depended upon the magnitude of the dose, under such social conditions even a magnanimous Profession would be prone to administer calomel in cases where it should have been abstained from. Such a state of things would represent the conditions under which almost every patent medicine is dealt out to the public. On looking through the printed directions which accompany patent medicines, one feature is very prominent in almost every instance—viz., the absence of instructions when to abstain from the use of the remedy. When you should take the pill or the powder is set forth very profusely—most anxious is the vendor of the medicine that no one who could profit by it should be without it, but very little care does he take that no one should have it who does not want it. In short, vendors of patent medicines are traders and not Physicians. Their business it is to sell their wares, and, as they would doubtless urge, it is not their business to hinder persons from buying who do not need.

We propose to supplement the vendor's bill of directions when to use his patent medicine by a report of its chemical composition. The first of a series of such reports appears in another part of to-day's paper, and is devoted to Steedman's Soothing Powders, and we propose following it up by reports on the more prominent modern patent medicines, especially such as are intended for infants and young children.

On reference to the report, it will be seen that Steedman's soothing powders have the virtues and vices of their class. The active remedy is calomel, a Steedman's powder consisting of a variable quantity of calomel from six-tenths of a grain up to a little more than one grain, mixed with two to three times its weight of some inert organic substance, and with (apparently) just the minutest quantity of opium. Calomel is an invaluable remedy in many infantile diseases; we have nothing to say against the form in which it is presented, only we should like to have it given with greater precision. In such cases as require treatment with calomel we should prefer that the dose should be made to depend upon the condition of the patient rather than upon accident—the chance whether the *Steedman* happens to be a big one or a little one.

The large bill of directions which encloses every packet of the powders comes from the tradesman rather than from the Physician, being designed on the principle of providing that none who require a "Steedman" should fail to buy. Reading through the bill, we learn that whenever a baby or child up to nine or ten years of age is indisposed, he should take a Steedman. Not one word is said or even hinted as to the kind of cases wherein to give a Steedman is to damage or even to kill the little sufferer.

Among the many thousand babies and young children who have taken Steedman's during the last forty years, there are whole multitudes that have been benefited by them. The voices of these relieved children speak in the persons of Messrs. Carter, Tout, Furner, Stuckbery, Higgs, and James Daniel Garret, whose letters commendatory lie in the house of the proprietor, and copies of which envelope every packet of the medicine. The howls of the maltreated, together with warnings when to avoid Steedman's, are not the business of the proprietors.

Whether the latter are to be regarded as public benefactors, will to some extent be determined by the opinion which is formed as to the advantages or otherwise of administering calomel in an indiscriminate manner. Calomel at twopence a grain is profitable to the vendor, who in this instance has achieved a commercial success, and is said to have built a church.

THE WEEK.

TOPICS OF THE DAY.

WE understand that a motion is likely to be brought forward at the next meeting of the Council of the Royal College of Surgeons to the effect that members of the Court of Examiners of the College shall not during their period of office hold seats in the Council. Whatever of good there may be in such a proposition—although it might be difficult to prove that it would produce unmixed good results—it is clear that if the motion be carried it can only at present be an expression of opinion. The Court of Examiners cannot be entirely separated from the Council whilst the present Charter is the law of the College.

The jury empanelled to inquire into the cause of the death of the Welsh fasting-girl found "that deceased had died from the want of proper food and nourishment." On this they were unanimous. Twelve out of the fifteen jurymen also found "that the father had neglected his parental duty, and was guilty of manslaughter." It is clear that no exception can be taken to the first part of the verdict, and perhaps but few would disagree with the second. But we cannot think that, by blaming the girl's parents alone, the public mind will be relieved of the disagreeable impression left by this unhappy story. Allowing that the girl's father was a party to her deception, does that exonerate four trained nurses who permitted a human being to sink from inanition at the end of an eight days' fast, not only without using force to make her take food and drink, but (according to their own statements) without even once offering her any? Does it relieve the Medical and lay committee of all responsibility, who, as if they equally believed the possibility of the alleged miracle, allowed the girl to die without raising a finger to save her? If the duty of obeying orders may be held to exonerate the

nurses from all blame, the onus falls only the more heavily on the shoulders of those under whose orders they acted. The whole story reads as if every person who came in contact with the child had a lurking but firm belief that it was really possible her story might be true. The father and mother (ignorant people, be it remembered) professed, or found it convenient to profess, the same belief, and we really do not see on what principle of justice they can be singled out to bear the blame. It is not by any means shown that the father and mother had themselves supplied her with food previously to the watching. The girl's brothers and sisters had free access to her room, and were probably in league with her and her agents in the deception. The fact is that the appointment of watchers by a committee of clergy, gentry, and Medical Practitioners, was an assertion on their part that the girl's story was within the range of possibility, and the watching was carried out not on the hypothesis of her deceit, but on the hypothesis of her truth. The girl is now known to have been gradually sinking for at least two days before she died with all the symptoms of starvation. Is it credible that one of those nurses or one of her Professional and other visitors believed that she was dying from fasting, and yet never once even mentioned food to her? The only charitable conclusion we can arrive at is that they were all more or less under the glamour of the supposed miracle, and did not know that the girl was *bonâ fide* allowing them to starve her to death. To call the proceedings of these credulous people a scientific experiment and to say that the inquiry was warrantable on Medical grounds is to confound science with superstition and flatly to contradict all the teachings of physiology. We cannot find, from the evidence published in the *Western Mail* given at the inquest, that one single precaution was taken to avert the result. The girl was not even weighed daily to estimate the effects of privation. It is true that, in certain instructions drawn up for the guidance of the nurses, "serious symptoms of exhaustion" are spoken of as possibly "supervening;" in case of such an accident "the nearest Medical Practitioner" was "to act according to his judgment." But there is no common-sense direction that watching must be stopped and food given at the first moment the girl showed signs of failing. It is clear to our minds that all were tainted with the belief that they were dealing with a case which was not under the ordinary laws which regulate organic life—a conclusion which, if it exonerate them morally, is by no means creditable to their understandings. It is only fair to the Medical and Surgical staff of Guy's Hospital to say that they were in no way responsible for this ill-advised watching. A letter from the Senior Physician has appeared in the *Times* disclaiming for himself and the staff all connexion with the inquiry.

The meetings for the election of officers in the Pathological and Obstetrical Societies take place on Tuesday and Wednesday, January 4 and 5. The gentlemen proposed for election to office in the Pathological Society, who have not held the same offices before, are Dr. Edwards Crisp and Mr. Gay as Vice-Presidents, and Drs. Cayley and Hilton Fagge and Messrs. Couper, Croft, George Lawson, Pick, Potts, and William Squire as Members of Council. Dr. Quain continues to hold the Presidency, and the remaining names on the balloting-paper are those of gentlemen who filled the same posts last year. There are more changes proposed in the executive of the Obstetrical Society. Dr. Holman, of Reigate, and Dr. Gustavus Murray are proposed as Vice-Presidents, Dr. Braxton Hicks as Treasurer, and Dr. William Playfair as Honorary Secretary. Dr. John Jones Phillips is recommended as Librarian, and Messrs. J. B. Curgenven, George Gaskoin, Griffith of Wrexham, Dr. Edward Head, Mr. W. E. Image of Bury St. Edmunds, Dr. W. R. Rogers, Dr. A. W. Williams, and Dr. A. Wiltshire are proposed as new Members of the Council. Dr. Graily Hewitt continues to preside, and the remaining gentlemen recommended by the Council have filled the same offices last year.

John William Wells, described as a chemist practising as a Surgeon at No. 37, Poland-street, Oxford-street, has been charged before Mr. Tyrwhitt, the magistrate at Marlborough-street, with feloniously using a certain instrument with intent to procure miscarriage. A young woman, named Anne Jesse Eles, applied to Mr. Henry Chandler, the Surgeon of Berners-street, on December 22, and informed him that on the previous day the prisoner had performed the operation on her. Mr. Chandler went to the prisoner, and made him refund the £3 2s. which the girl had paid him, thus procuring from him an acknowledgment of the offence; but as the girl was ill and getting worse, he handed her case over to Dr. Septimus Gibbon, the Medical Officer of Health for the Holborn District. It appears that the girl was suffering from some affection of the lungs as well as from local injury. Dr. Frederick Tothill, Surgeon to the C division of police, confirmed Dr. Gibbon's evidence that the girl was seriously ill, and Mr. Tyrwhitt proceeded to 51, Marlborough-street, where the girl was, to take her evidence. She deposed that Wells had offered to cure her of being in the family way for £5. She gave him £3. The prisoner was eventually remanded and bail refused, on the ground that the Act provides that, whether a woman is with child or not, any attempt to procure abortion is a felony. It is much to be feared that the crime of procuring abortion is on the increase amongst us, and we heartily rejoice when the offence is brought home to the scoundrels who practise it. Wells is not a registered Medical Practitioner.

The election for the office of Lord Rector of the Aberdeen University has terminated in a tie between Mr. Grant Duff (the Rector for the past three years) and Sir William Stirling Maxwell. Two of the four nations voted for each. The decision therefore remains with the Duke of Richmond, the Chancellor of the University, who must give his casting-vote within thirty days.

A correspondent calls our attention to the circumstances under which the death of one soldier and the injury of four others belonging to the 20th Regiment took place at Pieter Maritzburg, in Natal. The men were struck with lightning when on parade. Our correspondent blames the commanding officer of the regiment for exposing his men to the chances of a thunderstorm, which is known to be often destructive in that part of the world, and which commonly occurs at the time of the day chosen for the parade of the men. Other charges of unnecessarily exposing the men of the regiment to the vicissitudes of weather are also made. It would be well if some inquiry were instituted by the home authorities into the matter.

We especially commend an appeal, which we publish in another column, made by the officers of the Medical Benevolent Fund, on behalf of that excellent charity, to the favourable consideration of our readers.

THE ALEXANDER MEMORIAL PRIZE.

We hear that up to the 30th ult.—the 31st being the last day—three essays have been sent in for competition for this prize, the value of which is £50 and a gold medal of £10, the subject being the relative prevalence of diseases of the heart and great vessels in the army, as compared with the civil population, their causes and means of prevention. Mr. Alexander, late Director-General of the Army Medical Department, left a legacy for the purpose of instituting a prize of the above value for competition, every three years, among executive Medical officers of the army, the subject being selected alternately from the realms of Medicine, Surgery, and Pathology. A few weeks ago a Medical contemporary, in noticing this subject, in the exuberance of its loyalty and gallantry, untempered by historical accuracy, designated the prize as the Alexandra Memorial Prize!

PHYSIOLOGY IN PUBLIC SCHOOLS.

We are glad to hear that Marlborough College has set the example of introducing the study of physiology into our public schools. As all teaching to be effective must be tested by examination, the class of physiology at Marlborough College has just been examined. Dr. Burney Yeo, of King's College, was the examiner. No fewer than fifty-two boys sent in answers to the following questions :—

1. Compare, briefly and generally, the respiratory organs of a fish and a bee with those of man. What is the essential nature of the process of respiration ?

2. What are arteries, veins, and blood-corpuscles ? What is the *pulse* ?

3. Compare the heart of an ox with the heart of a frog.

4. What is the iris ? What are its uses ?

The examination was entirely voluntary.

DEATH FROM CHLOROFORM.

On Wednesday last, December 29, at the Middlesex Hospital, a young man died on the operating table from the effects of chloroform. He was twenty-six years old, a gardener, and in good health, save for an abscess on the outer side of the hip, which had existed some months in connexion with diseased bone, the result apparently of a kick received seven years previously. A month ago the abscess had been opened in the same Hospital, in order to reach the diseased bone, and on that occasion the patient had suffered a good deal from subsequent sickness, but had taken chloroform without any untoward symptom. Mr. De Morgan intended on the present occasion to explore the still discharging sinus, and probably insert a drainage-tube. Chloroform was administered by Mr. Osman Vincent, the chloroformist to the Hospital, on folded lint, and all went smoothly until about five minutes after the commencement of the operation, when the man suddenly ceased to breathe. The operation was at once suspended, the tongue drawn forward, and artificial respiration commenced after Sylvester's method, whilst a galvanic battery, which is always kept in readiness in the theatre, was brought out. The artificial respiration was continued for more than half an hour, and the poles of the battery applied to various places, as over the heart, at the heart and neck, and over the diaphragm on either side. The right jugular vein was also opened, and fluid black blood flowed freely, but all efforts failed to restore any vital movements after the first cessation of breathing. When artificial respiration was commenced, the left pupil was observed to be twice the size of the right. After a time they became equal, but the heart never beat, nor were there any spasmodic efforts at respiration. The man was married, and leaves a wife and two young children. It is many years since a similar accident happened in this Hospital. Chloroform is usually administered here with Clover's apparatus. Only a drachm had been given on this occasion when the man died. At the autopsy made next day, twenty-four hours after death, besides general congestion of the viscera, the heart was found to be the seat of somewhat recent endocarditis, shown by roughening of the mitral and aortic valves and thickening of the chordæ tendineæ. The substance of the wall of the left ventricle was also found to be extensively diseased, the striæ being hardly visible in some parts through the large amount of granular degeneration. The rigor mortis was very slight.

AN IMPORTANT INQUEST.

Dr. Wybrants held a very important inquest last week at Oakhill on a man of the name of Sly who had died under the care of Mr. Major, an unqualified Practitioner. Mr. Major had formerly been assistant to Mr. Cartner, and on the death of that gentleman still continued to hold the Surgeoncy of a club of which Sly was a member, the name of Mr. Cartner being still, it is said, retained on the door of the house in which Mr. Major continued to reside. Mr. Major saw the deceased twice, and brought medicine for him. The summing up of the coroner will explain fully the grounds upon which he acted in holding the inquest. He said that the proceeding was brought about in consequence of the deceased not having been attended by a duly qualified Medical Practitioner. There was no doubt or suspicion as to the cause of the death of the deceased, but the law must be abided by. Deceased had died from natural causes, but unless the cause of death was certified by a registered Practitioner, an inquest must be held, and that would be the case in every such instance in which Mr. Major was engaged. They would be all liable to have an inquest on their bodies, however unnecessary it might seem to them, and hurtful to the feelings of their friends. Mr. Major was no doubt a very active and energetic young man, and we should be glad to shake hands with him and recognise him as one of the Profession when he became qualified. There were no fewer than nineteen corporate bodies ready to receive him. There was no excuse, then, for him, and since Mr. Cartner's death he might have obtained his qualification. The policeman stated that he understood "Dr. Major" had been attending deceased, and did not know that he was not properly qualified. It was true, said the Coroner, that in this free country a man might employ any person, whether qualified or not, but if not registered he had no power of signing certificates of death or acting as Surgeon to a club. The jury returned a verdict of death from natural causes. This inquiry is undoubtedly one of great importance. It is to be regretted that Mr. Major is, as we suppose, a Medical student, but by his conduct he infringed the law as much as if he had been an herbalist or a bone-setter. It seems remarkable that Mr. Major could have obtained the Surgeoncy of a club, and that he could sign a certificate of death as a qualified Practitioner; for though, in the report of the case contained in the *Skipton Mallet Journal*, it is not stated that this was the case, we gather from the remarks of the Coroner that it was so. Whenever a registrar receives a certificate with this ominous remark, "Died without Medical attendance," the law does not empower him to reject such a certificate, and, in fact, recognises it. But Dr. Wybrants has done well in determining to hold an inquest in every case in which the deceased person did not receive that proper Medical attendance which is in the reach of even the poorest. It would be well if power were given to the district registrars to refuse such certificates, and when they were presented to him to make it incumbent upon him to give notice to the Coroner or the public health officer of the district. Dr. Wybrants is entitled to the commendation of all for the determined attitude he assumed on this occasion.

FROM ABROAD. — M. ANDRAL ON THE RELATION OF THE CONSTITUENTS OF THE BLOOD TO TEMPERATURE.

It is pleasant to meet again with the honoured name of Andral as a contributor to science after a retirement so prolonged as to seem final. At a recent meeting of the Académie des Sciences he communicated a paper relating to the class of investigations with which his name was so long associated. It is entitled "On the Relations of the Variations of Temperature in Man to the Variations of the Quantity of some of the Constituent Principles of the Blood and Urine."

1. As to the fibrine of the blood, it may be laid down as a general fact that when the blood contains more than four-thousandths of this the temperature rises. Another fact is that the degrees of the temperature and the amount of the fibrine increase in a direct proportion to each other. Thus, of all diseases which are attended with an increase of fibrine, pneumonia is the one in which such excess is greatest, and of all the phlegmasias it is the one attended with highest temperature. Thus, of 85 cases, in 13 only was the temperature found below 39° C.; in 44 it was between 39° and

40°, in 26 between 40° and 41°, and in 2 rose to 41·2°. In acute pleurisy, in which there is always less fibrine than in pneumonia, the temperature only in a single case reached 41°, and usually oscillated between 38·5° and 39·5°. In acute capillary bronchitis, in which the fibrine is still less in quantity, the temperature has never risen beyond 39°. In acute articular rheumatism even, the disease in which, after pneumonia, fibrine is found in largest quantity, the maximum temperature observed has been 40·5°. Still, this general rule has its exceptions, for in erysipelas, in which there have not been found more than seven-thousandths of fibrine, the temperature has risen to 41·8°; and in other phlegmasias 40° have been observed with only four-thousandths of fibrine. Still, there are high amounts of fibrine never met with without corresponding rise in temperature—*e.g.*, the figure 10 is never seen without the temperature exceeding 40°. As to the question whether this relationship is a mere coincidence or the result of cause and effect, the reply is easy; for there is a large class of diseases, the pyrexiæ, in which the fibrine remains within its physiological limits, or may even descend below these, and yet the temperature is as high, and perhaps higher, than in phlegmasiæ. It is, in fact, that in pyrexiæ the maxima of temperature have been found, reaching as high as 42·4° in typhoid fever and 42° in the invasion fever of small-pox, in the hot stage of ague, and in acute glanders. There is no increase of fibrine in eruptive fevers, and yet the temperature rises to from 39° even to 42°. From all this it is to be concluded that the increase of fibrine and of temperature are two facts which in certain diseases are produced at the same time without any dependence of one on the other. So little have the two facts the relation of cause and effect that the increase of temperature is carried to its highest degree in those morbid conditions, one of the characters of which is a tendency to the diminution of the plastic element of the blood.

2. In regard to the quantity of globules, numerous facts prove that even a very considerable diminution of this does not cause the temperature to descend below the inferior limit of the physiological condition. Sometimes it approaches it, and sometimes it rises towards the superior limit, or even goes a little above it. In a woman exhausted by hæmorrhage, and whose blood only contained twenty-one parts of globules, the temperature was maintained at 37°. In chlorosis the same thing happens, for however much the globules may have diminished, the temperature is not lower in this any more than in any other form of anæmia, and is in general maintained above the physiological mean. A chlorotic patient, whose globules were reduced to 38 per 1000 of blood, kept a temperature of 37·9°. Of twenty cases, in which the proportion of globules varied from 38 to 117 per 1000, the temperature varied from 37° to 38·4°. The maxima of normal temperature and the commencement of morbid temperature, so often met with in chlorosis, explain the occurrence of the febrile-like heats frequently complained of, and justify to a certain extent the term chlorotic fever that has been given them.

3. When the albumen of the blood, in place of being all employed for the purposes of nutrition, escapes in part by the urine, theory would lead us to expect a diminution of temperature; and the facts observed, if they were more numerous, would probably establish this conclusion. Of seven cases of albuminuria a diminution of temperature was found in five, and its increase in two was explained by intercurrent inflammations. Other facts show that it is only after a certain time that the insufficiency of albuminoid matters produces this effect on the temperature. Thus, in convalescents who have been on low diet for several days, the temperature does not become lowered to the extent that might have been expected, this being, in most of the cases examined, 37° or 37·5°. In fact, it is astonishing to observe how the temperature is kept up in the subjects of cancer of the stomach, who daily vomit the largest portion of their food. Still, the moment does arrive at which the temperature, for a long time kept up in spite o almost complete absence of reparatory substances, suddenly diminishes, thus descending in the twenty-four hours from 37° to 35°. These facts are quite in accordance with the results of Chossat's experiments on inanition.

4. The question has been frequently agitated, whether the quantity of urea contained in the urine is increased in febrile disease. It is very difficult to furnish a reply in the absence of any exact account of the normal proportion of this substance. The 30 per 1000 given by Berzelius is evidently too high, and M. Andral is disposed to put it at from 10 to, at the highest, 15 per 1000. In the absence of such a standard, M. Andral has preferred giving a comparative examination of the amount of urea in patients whose temperature was normal, with that of others having a high temperature. In fifty-three analyses of urine belonging to patients of the first category, in eight only there were found more than 12 per 1000 of urea. In the forty-five others, taken from patients of the most varied ailments, only agreeing in the absence of fever, the maximum was 12 and the minimum 4 per 1000. In the same subject the amount varied very considerably at intervals of only a few days. Comparing these results with those derived from patients having fever, the amount of urea became increased and exhibited much more constancy, and, for the most part, there was a correspondence between the proportion of urea and the degree of temperature. Intermittent fever is one of the morbid conditions attended with the greatest rise in temperature, and in twenty-three analyses of the urine the urea was found to vary between 13 and 32 per 1000. In pneumonia it oscillated between 20 and 29, while in pleurisy, with its less temperature, there were but from 14 to 18 per 1000. In acute rheumatism it was found in the same subjects that while during the fever the urea amounted to from 31 to 18, when this abated it diminished to from 14 to 16, and when it had disappeared to from 3 to 6 per 1000. The same was observed in the analyses made on the urine of the same subject in typhoid fever. The fever of phthisis, with its lower temperature than in phlegmasiæ, gives rise also to less augmentation of urea, this usually being from 8 to 12. In some cases, in spite of the fever, it was lowered in quantity to 6 or even 4. The radical debility of the constitution, the prolonged insufficiency of food, and the daily loss by expectoration, sweating, and diarrhœa, explain why, alone of all febrile diseases, pulmonary tubercle may cause increase of temperature without always increasing the urea or even preventing its diminution. Cases of an inverse order are more difficult to explain—viz., those in which, with a normal temperature, there is an accidental increase of urea to the proportion found in febrile affections. The most various affections may present this anomaly, which, in fact, has not its dependence upon them, but upon some individual peculiarity in the patient. It is remarkable, however, that in the only three cases of cirrhosis of the liver which M. Andral has seen, he found the amount of urea increased.

Dr. Lankester, Medical Officer of Health, has made a report to the Vestry of St. James's, Westminster, in which he states that inquiries have been made as to whether they possess any disinfecting apparatus in the parish, and suggesting that several contiguous parishes might join in erecting a common disinfecting apparatus, such as the 23rd clause of the Sanitary Act of 1866 permits every vestry to erect in the parish. He strongly recommends that some place should be established where linen, clothes, and household articles may be exposed to a temperature sufficient to destroy all contagion, and says that such a disinfecting chamber could be erected without difficulty in the stoneyard of the workhouse, into which steam from the baths and washhouses might be laid on for disinfecting clothes, and which might be open to the use of the whole parish. He also calls attention to the provisions of the Sanitary Act, whereby it is rendered illegal to sell furniture, clothing, or other articles from a room where there has been infectious disease, or to let a room where any person has had an infectious disease. No action was taken by the vestry in the matter.

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
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I.—ACUTE RHEUMATISM.

The use of the thermometer has been revived amongst us with such good results in the diagnosis, the prognosis, and even in the treatment of disease, that clinical memoranda with diagrams of temperature may be of some assistance to those students and Practitioners who have not had opportunities for making observations for themselves. Of course the thermometer only acts as a helper to the special sense of touch, and as a mode of accurately registering those minute differences of temperature which most people are incapable of perceiving by the touch of the hand.

And although many acute diseases seem to have cycles of temperature of their own, sufficiently constant to enable us to recognise their nature by the thermometer alone, yet this instrument should always be used in connexion with careful observations of the pulse, the respiration, the secretions, and the media with which the patient is surrounded. Every disease, in fact, must be diagnosed and treated after a full review of all its symptoms.

It will be convenient to follow the example of Hirtz in France and some of the German observers, and to divide the temperature of acute disease into three periods, the ascending, the stationary, and the descending. Of these the ascending period reaches from the commencement of morbid heat to the point at which it attains its maximum; and this differs considerably in various diseases. For instance, the ascending period in ague may be only from two to three hours, whilst in typhoid fever it may extend over the first week, the temperature rising a little every evening, and falling a little the next morning, but in such a manner that the temperature of each successive morning is somewhat higher than that of the preceding one.

In some diseases, however, the ascending period is more irregular, the elevation of temperature being gradual on the whole, but marked by sudden elevations followed by equally sudden falls.

The second or stationary period is much more variable in extent. The temperature may diminish and rise again, or show fluctuations under the influence of remedies, or of excessive discharges, or of complications. Usually the evening temperature is still higher than the morning, and we must view with anxiety any interruption to this rule. Hirtz remarks, with great truth, that there is a certain relation between the ascending and the stationary periods; if one is short the other generally is short also, and *vice versâ*, and if the ascending period is marked by sudden elevations and sudden falls, the stationary will show considerable morning and evening oscillations. To this, however, there are exceptions.

In the descending period defervescence may occur in three ways:—

1. By crisis, where, in the space of twelve to thirty-six hours, the temperature falls nearly 3° Fahr. or more, decreasing both from evening to morning and from morning to evening.
2. By lysis, where the fall takes place with regularity in more than two or three days.
3. In the way which is most common in acute rheumatism—the subject of this paper—the temperature falling in an oscillating manner, making occasional ascents.

Complications must be looked for in the descending period, and, when they occur, the temperature may rise, and remain high. Defervescence may be the evidence not of recovery but of collapse, and is then accompanied by extreme frequency and smallness of the pulse.

In convalescence after prolonged pyrexia the temperature is for a time often below the normal, and this apparently when no lowering remedies have been used.

With these preliminary remarks, we proceed to the consideration of acute rheumatism. It is not very often that cases are admitted into Hospital within the first few days of acute rheumatism.

Case 1 is an example from private practice, first seen on the third day of the disease. The maximum point was here attained on the fifth morning, which is rather early for rheumatism. From this point the stationary period is diagnostic of this disease, the temperature sinking irregularly, and rising again often above 102°, until the nineteenth day, when gradual defervescence set in, attended with similar irregularities; and the evening temperature did not reach the normal point until the thirty-second day.

The average time for the continuance of the ascending period is somewhat difficult to fix, owing to the fact that the removal of a patient in acute rheumatism to the Hospital will almost invariably cause a considerable rise in temperature, and this even when the removal takes place in the second week or later; in Case 2 even on the twenty-second day. On the first evening after such a patient's admission to the Hospital, the thermometer will very frequently mark 104°. Wünderlich considers that the true explanation of this is that the good nursing of the Hospital causes the immediate diminution of temperature. This may be so to a great extent; but this accession of temperature will also occur after the removal of a person to the Hospital, who, having been a servant in a private family, has been previously treated by the same Physician, and under precisely the same conditions of nursing. Judging, however, from private as well as Hospital patients, the ascending period most usually occupies a week. It may, however, be longer; and cases have been observed in which the maximum was reached as early as on the third day.

The second or stationary period is of very variable extent. Case 5 is an example of the peculiar irregularity so frequent in this period. Taking the evening of the eighth day as the probable acme, this second period extended over nine days, and the temperature just exceeded 103° on five evenings. We may remark, too, an occasional increase of temperature from evening to morning unusual in many other acute diseases. In some few cases this stage of the disease only lasts two or three days; more usually it may extend from seven to fourteen days. The evening temperature may exceed the morning by 3° Fahr.

The descending period is far more indefinite. From the commencement of this stage the evening temperature may touch the normal point in a week; more frequently it does not reach this point for ten or twelve days, and, in some cases, a certain amount of evening exacerbation will occur during several successive weeks. This latter condition is met with chiefly in patients who have had several attacks of acute rheumatism, and perhaps specially where the disease is hereditary.

Case 2 was treated without any medicine. The patient was a girl, aged 15, suffering from her second attack. She was not admitted until the twenty-second day, but the descending period seemed to commence the next day. During the two following days the evening exacerbations were considerable, and then the subsidence took place with fair regularity.

More often this period is marked by more continuous irregularities, of which Case 6 is a good example. Here subsidence commenced on the seventeenth day, and proceeded with very trifling irregularity until the twenty-fourth day, but then, without the occurrence of any complication that could be discovered, the temperature rose, and continued for nine days higher than it had been during the preceding week.

More rarely defervescence may be so rapid as to seem to be by crisis, and, in favourable cases, the irregularities mentioned above are absent, and the declension is gradual, and free from evening exacerbation. The irregularities that may occur in the second and third periods of acute rheumatism are met with in no other disease at all similar.

Does the thermometer help us in the recognition of cardiac complications? Certainly not, unless these complications are of considerable severity. Case 5 had pericarditis from the first, but the thermometric scale would not tell us so. It is a matter of common clinical experience, that in those cases, happily somewhat exceptional, in which pericarditis or endocarditis commences whilst the patient is under treatment, the temperature is hardly, if at all, raised, unless the extent of the complication is excessive. Pericarditis may, however, cause a sudden elevation of temperature to 104° in a few hours, and even 109° may be reached. Case 4 is an example of intense pericarditis with acute delirium, and here the whole surface of the heart was thickly covered with lymph. In this case the temperature was sufficiently near 105° to make a fatal prognosis probable. Wünderlich believes that the descending period may be indefinitely prolonged, and be especially attended with irregularity, in cases in which cardiac lesions of no great severity have occurred. He thinks also that aortic lesion causes far greater disturbance of temperature than mitral.

During the stationary and descending periods, however, any increase of temperature, that is maintained for more than one day, should be noted, and complications both of heart and lungs carefully sought for.

Death may occur in acute rheumatism under various conditions. It may take place from acute heart disease, of which Case 4 is an example. The fatal event may depend on a rheumatic meningitis. Case 3 is an illustration of death from the gradual formation of clot in the pulmonary artery; and this condition, which was easily recognised for three days before death, increased day by day without interruption, whilst the patient was taking large doses of potash and ammonia. Cases also may succumb from the alkaline treatment being pressed too far, and the only post-mortem appearance will be fluidity of the blood. Further on, when the disease has ceased to be acute, the patient may die of other complications.

The three first modes of death are generally preceded by a considerable rise of temperature, and the thermometer in rheumatic meningitis will often touch or even exceed 105°. Indeed, the occurrence of so high a temperature must lead to the expectation of a fatal termination, although it is not invariably a sign of approaching death. The cases, in which an excessive alkalinity and fluidity of the blood lead to a fatal termination are happily too rare to enable us to make a general rule for them, but in one case observed the symptoms, thermometric and otherwise, were those of collapse. And this leads to the value of the thermometer in the prognosis of acute rheumatism. It has just been said that a temperature of 105° necessitates a grave prognosis. A case, however, occurred last year in the Bristol Infirmary in which this temperature was reached during an attack of acute rheumatism with some pericarditis, and the patient seemed almost moribund, but recovered under the liberal use of bark and ammonia. Such cases are reported from time to time in the journals.

The persistence of a temperature above 102° for ten or twelve days will generally be the sign of a protracted convalescence. The continued evening elevation of temperature even of one degree during convalescence is a proof that the rheumatic condition is not over; and, after the normal point has been reached for several successive evenings, the occurrence of a slight elevation of the temperature will often be the first physical sign of a relapse, perhaps two or even three days before the return of any articular pain or swelling.

In acute rheumatism a high temperature generally coincides with a high pulse. In Case 3 the pulse kept at about 120, in Case 4 at from 120 to 132. This is not always the case. An evening temperature of 103° may coincide with a pulse of 84 and 90; a temperature of 101° with a pulse of 60. After a long attack of acute rheumatism, a temperature that has fallen to the normal point may be accompanied by a rapid pulse, as is seen in the convalescence of many exhausting diseases.

The relation of temperature with the acidity of the urine in this disease is not constant. The general rule will be that alkalinity of urine under treatment will be coincident with a relief of symptoms, and a diminution of temperature at any rate to 99°. But this is by no means always the case. The urine may become alkaline several days before the pain and articular swelling are materially diminished, and in Case 5 the urine was alkaline on the tenth and eleventh days of the disease, with an evening temperature of 102° and 103° respectively, and this is not very unusual.

A remarkable point in acute rheumatism is that temperature seems to bear no relation to perspiration. A temperature of 103°, and even of 104⅘°, often coexists with very copious perspiration. A high temperature is generally found also when the eruption of sudamina is intense.

As connected with the subject of discharges, the effect of the blistering treatment on the temperature should be noted. If under this treatment the temperature has fallen, the fall has generally seemed to be temporary only. Very frequently the most marked relief to pain which blisters afford will be accompanied by no diminution of temperature. In a case lately noted the evening temperature was 104⅕° before and after blistering. The thermometer seems to point out that the treatment by blisters is not curative, however valuable it may be as a means of relieving pain.

Pain may be absent with a temperature exceeding 101° or 102°, whilst in subacute rheumatism pain may be severe with a normal temperature. Constipation in this, as in other diseases, will often keep the temperature high.

Case 7 is an illustration of subacute rheumatism in which the symptoms were slight throughout. These cases often drag on a lengthened course, and the patients, not feeling very ill, will ask to be discharged some time before the evening temperature is normal. In this case the descending period is marked by thermometric signs of a relapse, persisting only for a few days. This form of rheumatism differs from acute rheumatism in intensity alone. The morning temperature in subacute rheumatism may be normal, whilst the evening exceeds this point by two or three degrees.

A *résumé* of the tabulated cases is subjoined:—

Case 1.—Emma W., aged 21. Acute rheumatism. Treatment: Alkalies and blisters. Recovery.

Case 2.—Mary Anne S., aged 15. Acute rheumatism. Descending period. No treatment. Recovery.

Case 3.—Ann C., aged 21. Acute rheumatism. Treatment: Alkalies and blisters. Death eighteenth day. Clot in pulmonary artery.

Case 4.—Charles M., aged 12. Acute rheumatism. Pericarditis. Treatment: Alkalies, digitalis, and sedatives. Death fifteenth day. Large amount of lymph on the pericardium.

Case 5.—James S., aged 18. Acute rheumatism. Pericarditis. Treatment: Alkalies and blisters. Recovery.

Case 6.—John A., age 28. Acute rheumatism. Treatment: Alkalies, blisters, and opium. Recovery.

Case 7.—Charles J., aged 34. Subacute rheumatism. Treatment: Alkalies and blisters. Recovery.

[We regret that in the lithograph which accompanies this paper the word "pericardi*t*is" has been twice put as "pericardi*b*is." The error was discovered too late for rectification. —Ed. *M. T. and G.*]

THE EXAMINATIONS FOR THE DEGREE OF M.D. IN PARIS.

We have been favoured by Dr. Priestley with the following extract from a letter in which a very estimable English Physician, domiciled in France, describes the nature of the ordeal he had to undergo in order to obtain the full French qualification of M.D.:—

"You will be glad to hear that I got through my examinations yesterday, and am now within about three or four weeks of having my diploma as Doctor of Medicine of the University of France. There remains now nothing to be done but the presenting and defending a thesis, which, so far as the examination is concerned, is almost a mere formality. Yesterday, however, was a very stiff searching ordeal. At eight o'clock I repaired to the Ecole de Médecine, where I was at once shown into a room where a fine wood fire was blazing. In the middle of the room was a table covered with green cloth. I was seated in one of three chairs at that table, and almost immediately the other candidate of the day came in, and was placed in another chair. The central chair was forthwith occupied by an official, who handed me a paper and handed another to my fellow-candidate, M. Le C———, an interne des Hôpitaux. This contained the title of the essay we were to write—time allowed till half-past ten. The official told us that it was his duty to prevent us from assisting one another, or consulting notes or books. My subject was "Œdème douloureux des femmes en couches." I gave a complete account of the pathology of the affection, the diagnosis, prognosis, treatment, mode of termination, and sequelæ, was half through my revising, pointing, etc., when the announcement was made that time was up, so I had to leave my paper and retire. We were told that our papers were at once to be placed before the "jurie," and that we were to repair at half-past twelve to the Hôtel-Dieu to learn the result, and proceed to the clinical examinations if the written was satisfactory. Accordingly at half-past twelve I repaired to the Hôtel-Dieu, and, on mounting the steps, met my fellow-candidate, from whom I received the pleasing intelligence that we had both passed the *écrit*. We were then ushered into the *salle des professeurs*, where we signed a paper, and received each two cards. On each card was written the name of the ward and the number of the bed of a patient to be examined—an account of the case drawn up to be read by the candidate in the amphitheatre in public. The first case I was taken to was one which had just come in. It was my Surgical case—a very simple one—a fractured fibula and a bruised ankle. The other was a complex Medical case, and altogether a difficult one to make sure of, the difficulty being increased by the lad being somewhat delirious, and there being no one to give me any information as to the previous history of the patient, or the duration of the existing illness. I took down the facts and signs as well as I could, and concluded by giving no absolute diagnosis, but stating that it was one of three things [tuberculous ?] meningitis, typhus fever, or typhoid fever. I said that the absence of abdominal symptoms and of *taches rosées lenticulaires* made it very improbable that it

would turn out typhoid fever. I was just finishing up my paper on the case when I was summoned into the public theatre where the three judges were sitting at a table on a platform—my fellow-candidate on a chair opposite to them, and an empty chair remaining for me, which I had no sooner taken than Pajot, the *Professeur d'Accouchements*, opened fire on me. There was an audience of forty or fifty on the benches.

"M. Pajot began by saying that as the *salle d'accouchements* was temporarily closed, there was no obstetric patient for me to examine, so he must just examine me on some practical points. He then took me over a great many subjects in midwifery, the subjects on which he most questioned me being—1. The use of chloroform in natural labour, in operative midwifery, and in puerperal convulsions; 2. The use of the forceps; and 3. Cephalotripsy. This examination was very discursive. The Surgical examiner, Professor Gosselin (Professor of Clinical Surgery at La Charité), came next. He was very brief, and adhered closely to my report. When I read it, he said the diagnosis was correct, and asked me three or four questions about the manner of treating broken legs. Then came the Examiner in Medicine, Professor Michel Peter. He was very minute and searching, and as I knew him very well, I expected to be let off the most easily by him; but it was quite the other way. He searched me out at every turn, but in a most gentlemanly spirit. He kept close to the case, and the differential diagnosis of the three affections I had named. He said my description of the case was excellent; but he differed from me in respect of diagnosis. He considered, for reasons he stated, that it was a case of meningitis, but admitted it might turn out to be typhus or typhoid fever. I said that, as the pulse was feeble and irregular, I would give stimulants, and, for reasons stated, apply pounded ice in bags to the head and spine, but would not take any blood. He said that a small bleeding at intervals—say 250 grammes at intervals of ten hours—was the proper way to combat the *phénomènes cérébro-spinaux;* but he also approved of my stimulants by the mouth and the ice applied externally. Each examiner took me and my fellow-candidate for twenty minutes each, and then we were taken up by another examiner. When the examinations were ended, the amphitheatre was cleared of the listeners, and the candidates were ordered to retire to await the verdict. We had not to wait long. In a few minutes it was intimated to us that we had both passed. Thus ended an affair which has been much on my mind for a long time. From the searching character of the examination, and the whole being conducted in a foreign tongue, you can easily understand how glad I was when the tension and suspense of the day was over."

ANALYSES OF PATENT MEDICINES.—No. 1.

STEEDMAN'S SOOTHING POWDERS.

This patent medicine is now very much in vogue, as any one may ascertain by making a tour of the druggists' shops and asking for teething powders.

Four packets of Steedman's Soothing Powders were purchased by the writer of this notice. One packet was got at a druggist's in Regent-street, another at a shop a little south of Westminster-bridge, and two more in the neighbourhood of the Elephant and Castle.

The packets are wrapped in marbled paper and labelled "Steedman's Soothing Powders, for Children cutting their Teeth. Price 1s. 1½d." On cutting open the marbled paper I found a sheet of paper covered with letters recommendatory of the powders, and with a long extract from one of Dr. Ramsbotham's lectures on dentition, and with directions for taking the soothing powders:—

"Steedman's Soothing Powders, for Children Cutting their Teeth. The good effects of these powders during the period of teething have now had forty years' experience, during which time thousands of children have been relieved annually from all those distressing symptoms which children suffer while cutting their teeth—viz., feverish heats, fits, convulsions, sickness of stomach and debility, accompanied with relaxation of the bowels, and pale and green motions, or inflammation of the gums.

"Steedman's soothing powders have now had forty years' experience, during which time thousands of children have been relieved annually from all those distressing symptoms mentioned by Dr. Ramsbotham in the above lecture; and the striking superiority both in the health and strength of those children who have taken the soothing powders during the period of teething, has induced the proprietor to make this real blessing to children more generally useful by this advertisement.

"*Directions for taking Steedman's Soothing Powders.*—When the child is about six months old, if any of the symptoms mentioned exist, one powder to be given every night in a little moist sugar, until healthy motions are obtained, or the urgent symptoms abate; half a powder from three to six months, and a third of a powder from one to three months. The best plan with very young infants is to make the powder, when mixed with the sugar, into a paste with a drop of water, put it on the end of the forefinger, and place it on the back part of the tongue, when the child will have no power to spit it out, and it must go down; and unless the whole powder gets into the stomach it cannot have the proper effect. If the infant is in perfect health, and the motions are of a natural yellow colour, the medicine will not be necessary. But at all times when the stools are pale and unnatural, one powder must be given every or every other night, at the discretion of the nurse or mother. As the child advances in years, the same dose (one powder only, every night) must be repeated, and no more, as it will always be found sufficient for the healthy regulation of the constitution. These powders will be found serviceable to children after the period of teething is finished, and one may be taken with advantage for three or four nights successively at any time when the child complains of being poorly, accompanied with loss of appetite and debility, even to the age of nine or ten years. Prepared by J. Steedman, Walworth, Surrey, and sold in packets only, at 1s. 1½d. each, by all chemists and medicine venders in the kingdom. N.B.—It is particularly to be observed that no other medicine be given while using these powders."

This sheet of paper enclosed some other papers containing advertisements of other kinds of medicine by the same author, and the very diminutive bundle of eight powders which are contained in the centre of each packet. Each powder is wrapped in a small piece of white paper on which is printed a caution to observe the words "John Steedman," etc., and the following:—

"Dose. From one to three months, the third of a powder; from three to six months, half a powder; from six months and above that age, one powder only, and no more; for further particulars read the large bill of directions."

Evidently, therefore, the inventor of the powders considered them to be potent (or at any rate desired them to be regarded as being potent). Before making a chemical examination it struck me that it might be well to weigh the powders in order to ascertain what degree of care was bestowed on the division of this medicine. I have very carefully weighed each one of the thirty-two powders contained in the four packets, and the following are the results:—

Packet I. (*Regent-street*).		*Packet III.* (*near Elephant and Castle*).	
1	2·81 grains.	1	2·63 grains.
2	2·37 ,,	2	2·27 ,,
3	2·50 ,,	3	2·33 ,,
4	2·61 ,,	4	2·43 ,,
5	2·66 ,,	5	3·27 ,,
6	3·00 ,,	6	2·34 ,,
7	2·72 ,,	7	2·33 ,,
8	2·59 ,,	8	2·69 ,,
Mean.	2·66 ,,	Mean.	2·53 ,,
Packet II. (*near Westminster-bridge*).		*Packet IV.* (*near Elephant and Castle*).	
1	3·70 grains.	1	2·60 grains.
2	2·66 ,,	2	2·94 ,,
3	3·06 ,,	3	2·46 ,,
4	2·93 ,,	4	2·84 ,,
5	2·46 ,,	5	2·78 ,,
6	3·08 ,,	6	2·78 ,,
7	3·02 ,,	7	2·46 ,,
8	2·69 ,,	8	2·86 ,,
Mean.	2·95 ,,	Mean.	2·715 ,,

From these weighings it follows that when the British baby takes a "Steedman" it sometimes gets as little as two grains and a quarter, and sometimes as much as three grains and three-quarters, or rather it would get these quantities if requisite care were taken to give the entire powder. What the extent of variation may be in dividing the dose into thirds or halves, as recommended by the printed directions, may be left to the imagination of our readers.

On submitting the powders to chemical analysis the following results were obtained :—

	Percentage composition of Steedman's powders.
Calomel	27·20
Ash	0·06
Organic matter	72·74
	100·00

The organic matter appeared to contain a trace of opium, and to consist mainly of inert substances; 28 out of the 72·74 parts of organic matter was soluble in boiling water, leaving a brownish gum bitter to the taste, and the remainder of the organic matter was insoluble in water.

REVIEWS.

The Life and Letters of Faraday. By Dr. Bence Jones, Secretary to the Royal Institution. In 2 vols. 8vo. Longmans.

"To write a life of Faraday," says the author in his preface, "seemed to me at first to be a hopeless work," and we can well understand why it should be so, when even a review of Dr. Jones's volumes, to do them justice, is a task of no ordinary difficulty. Nor is this difficulty made less by the fact that the volumes before us are more like an "autobiography" than a "life." But it has this peculiar charm: it exhibits Faraday from his earliest to his last days in vivid colouring. It is rare that the earlier letters of great men are preserved with the expectation of their after-greatness, but the earliest of Faraday's were to his friend Abbott, and these were kept with religious care by their recipient, and, in our judgment, form one of the most interesting portions of Dr. Bence Jones's book. Michael Faraday was descended from a family who originally resided at Clapham, in Yorkshire, in the parish register of which, between 1708 and 1730, "Richard ffaraday" recorded the births of ten children. He is described as of Keasden, stonemason and tiler, a "separatist." It is remarkable that a strong religious feeling existed in the family for two generations previous to the birth of Michael Faraday, who it is well known was a separatist, or "Sandemanian," and was deeply imbued with the doctrines of that small, peculiar, and most exemplary sect. Faraday's father, James, who was a blacksmith, was married in 1786 to a farmer's daughter, named Margaret Hastwell, of Mallestang, near Kirby Stephen. To James and Margaret Faraday four children were born, of whom Michael was the third. Soon after his marriage James came to London, and lived at Newington, in Surrey, where Michael was born on September 22, 1791. He removed to Gilbert-street, Oxford-street, subsequently to Jacob's Well's-mews, Charles-street, Manchester-square. He joined the Sandemanian Church after he came to London. He died in Weymouth-street, Portland-place, on October 30, 1810. He was a man of strong religious impressions. Faraday's mother died in Islington in March, 1838. Michael Faraday's home was in Jacob's Well's-mews from the time he was 5 years old until he became errand-boy to Mr. Ribeau, in Blandford-street. During the eight years referred to, little is known of his life. "He himself," says Dr. Jones, "has pointed out where he played at marbles in Spanish-place, and where, at a later period, he took care of his little sister in Manchester-square. He says—'My education was of the most ordinary description, consisting of little more than the rudiments of reading, writing, and arithmetic, at a common day-school. My hours out of school were passed at home and in the streets.'" During the time he was an errand-boy, he was in the habit of taking round the newspapers on a Sunday morning, and in after-life the remembrance of his earliest occupation was often brought to his mind. One of his nieces said he rarely saw a newspaper boy without making some kind remark about him. Another niece recalls his words on one occasion—"I always feel a tenderness for those boys, because I once carried newspapers myself." The following year Faraday was bound apprentice to Mr. Ribeau as bookbinder and stationer, and it was during his apprenticeship he delighted in reading scientific works; prominent amongst these were Marcet's "Conversations in Chemistry," and the electrical treatises in the Encyclopædia Britannica. He also constructed rude electrical machines and made experiments. Watts "On the Mind," he told a friend, first made him think, and an article on "Electricity" in an encyclopædia he was employed to bind first turned his attention to that science. At this time he also occasionally attended lectures given by Mr. Tatum on Natural Philosophy at his house in Dorset-street, Fleet-street. Through Mr. Tatum Faraday made the acquaintance of Mr. Huxtable, who was then a Medical student, Mr. Benjamin Abbott, who was a confidential clerk in the City, and belonged to the Society of Friends. The first letter that is preserved of Faraday's was one to Mr. Huxtable. Through the kindness of Mr. Dance he attended four of Sir H. Davy's lectures, delivered in the spring of 1812. At this time he had so great a desire to be engaged in scientific pursuits that he wrote to Sir Joseph Banks, then President of the Royal Society. There was, of course, "no answer" to the application. It was at this time that he commenced his remarkably interesting series of letters to Abbott, who was a year and a half younger than his friend, but Abbott had been at good schools, and was well educated, and hence Faraday regarded him as the possessor of a knowledge far beyond his own. These letters are of considerable length, but we rejoice that Dr. Jones has published them in full. They are most extraordinary productions for so young a man with the antecedents of Faraday. They will be read with great interest. The most remarkable feature of these productions is their shadowing forth, as it were, the future of the great philosopher; they show the train of thought which then pervaded his mind; that he was then trying to add to his knowledge by experiment, and throwing out suggestions of a novel and almost startling kind, and gave evidence of his inventiveness and resources. But, to our mind, the most remarkable of these letters are those in which Faraday gives his views with respect to lectures and lecturers in general. In these the sketch of both was fulfilled to the very letter by himself many years afterwards in his Friday evening lectures at the Royal Institution. Those who have listened to these clear, simple, but brilliant speakings of Faraday could not fail to be astonished at the marvellous completeness with which he embodied his own ideas of early life. We have not space to proceed regularly in the account of the life of Faraday. How he became acquainted with Sir Humphry Davy by sending him reports of his lectures, how he became associated with him at the Royal Institution, and how he accompanied Sir Humphry abroad, are all well known. We may refer here, however, for a moment to his journal and letters whilst abroad with Sir Humphry, copious extracts from which are contained in the volumes before us. They form an interesting portion of their contents. Nothing can be more striking than these letters. Dr. Jones, in reference to them, says—"The feeling that bursts out in his letters to his friend Abbott from Rome, and in his last letter to his mother from Brussels, contrast most remarkably with the tone of his journal. Both are strikingly characteristic of Faraday—the journal in the absence of every word of gossip, and by the keenness of his remarks on everything that came before him; the letters by their kindness, which seems often too much to find utterance in words."

With respect to Faraday's career after joining the Royal Institution, which was one of constant inquiry and experiment, we must refer our readers to Dr. Jones's volumes for information. We do not propose to analyse his lectures and papers, or to give *in extenso* the history of his discoveries; but it may be proper to give, in a concise manner, a catalogue of them. His earlier lectures embraced a great variety of topics, but chiefly in respect to the metals. When he had been seven years the private assistant of Davy, and assistant in the laboratory and lecture-room of the Royal Institution, he began a most original and laborious investigation with Mr. James Stodart on the alloys of steel. He already had thirty-seven notices and papers in the *Quarterly Journal of Science*, and he had given his first course of lectures on chemistry at the City Philosophical Society "with great success as a speaker and experimenter." He subsequently gave enunciation to his discoveries in electricity, discoveries which placed him at once in the foremost rank of natural philosophers of this or any other time. These researches embraced his discovery of magnetic electricity, induction currents, and definite electrical decomposition; discovery of the "magnetisation of light;" the magnetic state of all matter; atmospheric magnetism. We willingly pass by his quarrel with Davy, who, in consequence evidently of some misunderstanding respecting discoveries as to the condensation of gases, opposed the admission of Faraday to the Royal Society, as it ended by his eventual admission to that body almost unanimously. It may be said, however, that during this painful quarrel Faraday conducted himself with a moderation and a candour which do him infinite honour.

(*To be continued.*)

Winter and Spring on the Shores of the Mediterranean; or, the Riviera, Mentone, Italy, Corsica, Sicily, Algeria, Spain, and Biarritz as Winter Climates. By J. Henry Bennett, M.D., M.R.C.P., late Physician-Accoucheur to the Royal Free Hospital, etc. Fourth Edition. London: John Churchill and Sons. Pp. 621.

In successive editions this work has altered so much in scope and purpose that in its new form it is to all intents and purposes a new book, and, let us add, a book at once pleasing and instructive. There is about it a kind of gentle invalid air or flavour which is perhaps more suitable to the *poitrinaires* who consult it than the impress of a more vigorous health. It consists of two portions, one which deals with Mentone and the Riviera, Dr. Bennett's chosen abode, and that which deals with the search for better winter quarters, to see if such were attainable. Now, in estimating the character of different climates we are constantly being bored with accounts of mean temperatures, rainfalls, the reading of dry-bulb and wet-bulb thermometers, and so on—data which are capable of being manipulated, and which may be read in more than one way. Dr. Bennett has wisely, therefore, supplied us with data of a totally different kind, and which, to our mind, are more convincing than figures.

Many of our readers are familiar with the effect of the first sharp autumn frost on the dahlia, how before the cold the flower seems to melt away; and what is true of this flower is true of many others, which can only exist at a given temperature, and on this fact depends that part of botanical science called geographical botany. Certain plants are known to exist chiefly between certain lines, not parallels of latitude, but of equal temperature—what are called isothermal lines—and we see something of the same kind in ascending snow-clad mountains; there, also, certain zones of vegetation are to be observed.

Mentone lies in a kind of horseshoe formed by high mountains, which shelter it from the north, north-east, and north-west; on the other side it is open to the Mediterranean and to the sun. These mountains are high enough to send the cold north winds flying far over the head of Mentone, not touching the surface of the earth till some distance out at sea. Where gullies in the mountains prevail, these cold winds pour down and do great damage. One great characteristic of Mentone is the almost total absence of such gullies and gusts. The three trees which give their character to Mentone are the lemon, the orange, and the olive. Of these the two former are extremely delicate, and their existence in groves all around Mentone is proof of the virtues of the climate. Under the most favourable circumstances—that is to say, with a dry and still atmosphere—these trees will live till a temperature of 8, 9, or 11 degrees below freezing point is reached. The fruit perishes with much less cold, especially in a moist atmosphere. At no other place along this shore of the Mediterranean do lemons grow freely as at Mentone; at Cannes they are all but unheard of, and at Nice they grow only in sheltered spots—indeed, it is not till Palermo is reached that a climate, as indicated by the vegetation, is obtained similar to that of Mentone.

Of the olive Dr. Bennett says "it is the real lord of the Mentone amphitheatre," and that it is something very unlike the miserable stunted growth of Provence—in fact, our author endeavours to get up a little enthusiasm for this useful but not beautiful tree; but its sombre foliage and awkward branches stand in the way of general admiration. These three trees give the key to the climate; their growth argues that it can never be very severe, and that they not only grow, but flourish, is a still more telling proof of its mildness.

Still, temperature is only one consideration. Let us see if anything else can be deduced from the character of the vegetation. Euphorbias in large bushes, the carob tree, and the *Pistacia Lentiscus*, are all found abundantly round Mentone. Now, these emphatically argue a warm and dry climate, and a light sandy soil; so also, though to a less extent, do the Aloe and the Prickly Pear. With a climate so warm, one would expect a change in the characters of the ferns found in the amphitheatre; but, which seems strange at first sight, they are much the same as those found in this country. The *Asplenium trichomanes*, *Asplenium Adiantum nigrum*, and the maiden-hair are among the most common; but the *Pteris aquilina*, the *Scolopendrium*, the *Polypodium*, the *Asplenium Ruta muraria*, are also found—ferns which equally prevail with us as far north as Scotland. We think the dryness of the climate is the chief cause of this similarity. In southern latitudes a region possessing an equally high temperature superadded to a moist atmosphere would be characterised by tree or shrub ferns. This peculiarity may therefore be looked on as constituting an additional proof of the dryness of the Mentonian atmosphere. Equally striking, but in another way, perhaps is the absence of any reference to the myrtle and suchlike plants.

In summer the place is exceedingly hot, and comparatively few plants can stand the heat without irrigation, for showers are few and far between, the rains being mostly like those of the tropics, coming down in tremendous masses, speedily running off the light and rocky soil, and filling the torrent-beds, so that the absurd-looking bridges, many arches spanning a mere brook, are no longer absurdities. The plants which resist the high temperature best are the Aloes and Mesembryanthemums, with their thick fleshy leaves and stems, and the hardy Geraniums and Pelargoniums. Squill and Iris are almost equally hardy in this respect, nor do the plants also found with us assume the aspect they possess in these more northern climates; they grow with wild luxuriance, forming bushes instead of being insignificant herbs. Then, again, many plants, as Carnations, Stocks, Wallflowers, with us annuals, in Mentone gardening become perennial. Camellias and azaleas do not thrive except in good artificial soil. When they do thrive the camellia becomes a tree covered with a constant succession of flowers, as is also seen round about Como. The gardens of Count Margaria at Nice are especially remarkable for these trees, but then he has taken the trouble to send all the way to Como for their appropriate mould.

But of all plants characteristic of southern climes the palm is the most telling, not the miserable *Chamærops humilis* found all along the coast, but the much more sightly date-palm (*Phœnix dactylifera*), of which abundant specimens are found in the Riviera, and at Bordighera, fifteen miles from Mentone, it forms groves of considerable size. This of course implies that no winter shelter is needed for them in that situation. Marseilles, which is in about the same latitude as Cannes, and lies considerably south of Mentone, presented to Dr. Bennett, when visited in the spring of 1869 ten days after he left Mentone, quite a striking spectacle. There were no lemon or orange trees; no palms, only the most hardy yuccas. This speaks volumes for the protection which is afforded by the Maritime Alps to what has been called the Continental Undercliff, and for the effects of this shelter in modifying climate.

There appears to be only one place which at all compares to Mentone with regard to vegetable productions—that is, Palermo, many miles further south. At Palermo orange and lemon groves are to be seen as at Mentone, but in other respects the vegetation differs. This is easily accounted for by the position of Palermo, which is situated on the north coast of Sicily. When the cold north wind blows it passes over Mentone, and, before reaching Sicily, is modified in temperature by passing over many leagues of sea, but, as it grows warmer, it becomes capable of taking up more moisture, which is by-and-by partly taken from it, precipitated by the Sicilian mountains; still Palermo, being protected by latitude, not by hills, is exposed to this moist north wind. Its climate and its vegetable productions correspond. Instead of a bright sunny sheltered coast, with dry air and sandy soil, the north coast of Sicily offers a warm and rather moist climate, and the relative values of these two different kinds of climates are well known—the one is stimulating and bracing, the other is soothing and unstimulating. The kind of cases best adapted for each climate is also pointed out by Dr. Bennett, but with that, in the meantime, we shall not concern ourselves.

Small-pox.—The Huddersfield Board of Guardians on Monday had before them the subject of the outbreak of small-pox at Marsden, of which five additional cases had been reported during the past fortnight, all the sufferers being persons who had been vaccinated. The cases, it was said, were only of a mild character, and it was at first thought not necessary to report them; but it has since been thought desirable to lay the matter before the board, and it is even proposed to revaccinate the whole district.

The Discoverer of Etherisation.—The remains of Dr. William T. G. Morton, who died suddenly in 1868, were buried in Mount Auburn Cemetery in the presence of a crowd of friends. Dr. Bowditch takes the opportunity of again placing on record the letters which were written by the Surgeons of the Massachusetts General Hospital immediately after the performance of the first operations under ether, in proof that Dr. Morton was really the sole original discoverer of this valuable boon. It is stated that "to the shame of a great and powerful nation, his family still remain without that substantial recognition due to him for one of the greatest blessings ever conferred upon humanity."—*Boston Med. and Sur. Jour.*, Nov. 18.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

REGULATION OF PROSTITUTION IN HOLLAND.

(*In a letter from a Physician.*)

"And now, dear sir, let me answer your queries as to prostitution and syphilis. You ask me—Do the laws against prostitution and syphilis work well or ill for morality? Do they really diminish venereal diseases? My opinion is no, no, no!

"There is no general law, but there are many cities which have made ordinances on prostitution. Here, in Rotterdam, there is a so-called excellent ordinance. Every woman who will prostitute herself must be inscribed by the police, and gets a book (*livrette*); when the police find a woman out who prostitutes herself, and has no book, she is taken to the police-station to be examined by the Doctor of the police.

"All the prostitutes who are inscribed are twice weekly examined—the lower class in the Hospital for syphilis by the Doctor of the Hospital, the more elegant class in their own houses by the Doctor of the police. All who are found to be syphilitic are sent to the Hospital; the elegant prostitutes can be cured at home, but are under surveillance.

"In the published Reports on prostitution and on the prostitutes and syphilis, you find everywhere spoken of a diminution of both; but how is it with clandestine prostitution and the syphilis treated not by the Doctors of the police, but by private Doctors? Almost fatal to the scheme! One benefit there certainly is—the man who will resort to prostitutes and is prudent is better off now than before, for in the public houses of vice there is less danger.

"An example of these Reports is one published this summer by Dr. Ponskoolhaas, member of a commission of our Medical society for the investigation of this subject. He inserted in our Medical journal an article on the prostitution in the Hague. The public houses diminished between the years 1857 and 1869 from 15 to 9; the surveyed rendezvous (*maisons de passe*) from 9 to 8; the yearly number of women inscribed by the police from 130 to 82—all, you see, was diminishing. How beautiful! how heaveuly! the moralist will say. But what says the Prefect of Police of the Hague on the question? At what figure do you estimate the number of clandestine prostitutes? He answers: They are not to be estimated; they are *continually increasing!*

"Further, in conclusion, let me direct attention to an article which appeared in 1868 in our Medical journal from the pen of Dr. Huet, now first Physician to the Hospital (*huitengasthuis*) in Amsterdam. He made an inquiry after prostitution in the army, because it was here more exactly known than amongst civilians. He got his information from the War Ministry. He gives a quantity of tables; but the most conclusive, I find, is that where he exhibits twenty-four cities, and gives the number of the venereal cases during some years before and after the introduction of laws on prostitution. Now, in some cities, there is an amelioration, but the total number is—Before the introduction of ordinances, 1786 cases amongst 15,913 soldiers yearly; after the introduction, 2241 in 16,810—*i.e.*, before 11·2 per cent., after 13·3 per cent. And these are official figures. Things have no better aspect when there are ordinances: it seems that there is less fear of infection, and therefore greater incontinence; and, moreover, while the number of the public brothels and public women diminishes through fear of the police, it seems that the number of clandestine women is doubled."

LIVERPOOL.

December 13.

The following case, as bearing upon the conduct due from one Medical man to another, I think deserves notice:—Frances Parry, the wife of a publican residing in Liverpool, had been ill for more than a month, although she had not kept her bed or consulted any Medical man until Monday, the 6th inst. On the afternoon of that day, however, being seized with severe vomiting, in addition to the pains in the head from which she had previously suffered, her husband called in Dr. J. W. Irvine, who saw her daily up to the Thursday following, sending her medicines and prescribing as he thought her case required. As she became much worse on that day, a speedy message was sent for Dr. Irvine, but before that gentleman could arrive the symptoms had become so much aggravated that the husband, in alarm, sent for a Medical man who resided nearer to him—Dr. E. L. Falloon. On his arrival, however, the woman was dead. Now comes the questionable part of the proceeding. Dr. Falloon is alleged to have put a number of questions as to the course of treatment to which this patient, whom he had not seen during her life, had been submitted, and then to have despatched a letter, of which the following is a copy, to the coroner:—

"12, Shaw-street, Liverpool, December 10.

"My dear Sir,—I was called yesterday to see a Mrs. Parry, of No. 1, Gregson-street, and found her dead when I arrived. It would appear that she has been suffering from neuralgia, but was up and in the bar on Saturday and Sunday, was seen by a Mr. Irvine on Monday, Tuesday, and Wednesday, who told her husband there was no danger, and ordered her a strong mixture with prussic acid and Batley's sedative. However it happened, there is no doubt the woman was poisoned. I have refused to give a certificate of death, and advised her husband to see you and act accordingly. I have the remainder of the medicine and the prescription. With every good wish,

"Yours faithfully,

"Edward L. Falloon."

Dr. Irvine, who alone, as the Practitioner who had attended the patient previously and up to the day of her death, was legally in a position to certify to its cause, gave a certificate to the effect that it resulted from inflammation of the liver and syncope. After the very decided assertion in Dr. Falloon's letter that death was due to poison, coupled with his detective-like retention of "the remainder of the medicine and the prescription," there seemed to be no alternative, however, left to the Coroner but to order a *post-mortem* examination of the body. This was made by Dr. Taylor, assisted by Dr. Falloon, Dr. Irvine being present, and as the result of it Dr. Taylor gave his opinion, couched in no doubtful terms, that the woman had died from inflammation of the liver, that the treatment adopted had been judicious, that it had no relation whatever with the death, and that the liver was in as bad a condition as had been described by Dr. Irvine during his evidence—*i.e.*, that it was almost thoroughly decayed and "rotten." During his examination Dr. Falloon admitted to the liver being diseased, though, in his opinion, not fatally so. Yet he was not prepared to say that the condition in which it was found would not cause death. Nor could he help admitting that continuous vomiting from Monday to Thursday would produce prostration, that such vomiting would be the natural result of the diseased condition of the liver which he had observed, and that syncope might probably result. He was, notwithstanding, of opinion that in this particular case death had been accelerated by overdoses of a powerful medicine.

One would naturally conclude that, before a Medical man would deliberately take steps that might involve a brother Practitioner—and one, too, of undoubted respectability and for a long time occupying important positions of public trust in the same town as himself—in a criminal proceeding of the most serious character, he would convince himself, beyond the possibility of doubt, of some gross dereliction of duty. Dr. Falloon did convince himself of all that had been done. He went to the chemist who had dispensed the medicine (which medicine, as he says, he took care to retain in his possession, and found that what had been prescribed was a dose consisting of five minims of the officinal prussic acid, with ten minims of solution of opium, to be administered in half an ounce of creosote mixture every four hours. It does not appear certain from the evidence that, previously to writing his letter to the coroner, he knew that the tablespoon in which the medicine was given was a large one—large enough, if filled, to hold a dose and a half. Yet on the strength of the prescription of a dose of prussic acid which no one will call excessive, which, indeed, many Practitioners are daily in the habit of exceeding, and which every writer on therapeutics, from Pareira downwards, would probably justify, coupled with a "peculiar glassiness" of the deceased woman's eyes, he did not hesitate to write a letter to the coroner in which were the words "There is no doubt the woman was poisoned," and which intimated in no very ambiguous terms what the poison was, by whose orders it was administered, and who was its present holder. The letter has not the mitigating circumstance of being a rash production. The woman died on the morning of the 9th, and it was not written till the following day.

The Prince of Wales has sent a present of fifteen brace of pheasants to the Charing-cross Hospital for the sick inmates.

GENERAL CORRESPONDENCE.

A FASTING MAN.

LETTER FROM DEPUTY INSPECTOR-GENERAL GORDON.

[To the Editor of the Medical Times and Gazette.]

SIR,—The case of "the Welsh fasting girl" brings to my recollection the account given by Dr. Honigberger, a German Medical Practitioner in the service of Runjeet Singh, of a Faqueer in the Panjaub who not only lived without partaking of food for a considerable time, but permitted himself to be immured underground in a well-secured vault so long that grain sown in the soil placed over it sprouted into leaf, yet at the end of the time, extending, if I mistake not, to upwards of forty days, on being submitted to certain processes, recovered and lived many years afterwards.

I regret that I can only speak from recollection. The book by Dr. Honigberger is not now in my possession. So far as I can remember, its title was "Thirty-five Years in the East," and I am inclined to think that the occurrence alluded to was said to have been certified by the late Sir Henry Lawrence. Perhaps some of your readers may be able to turn to the book, and give particulars of the case of the Faqueer in question.

I am, &c. C. A. GORDON,
Portsmouth, December 24. Deputy Inspector-General.

THE MEDICAL BENEVOLENT FUND.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Committee of the Medical Benevolent Fund earnestly crave your assistance in bringing before the Profession the great need of a number of applicants—Medical men, their widows and orphans—whom the committee are powerless to aid at present from want of funds. During the past year the calls upon the Medical Benevolent Fund have been more numerous than at any time since the commencement of the Fund in 1836. The number of cases relieved in 1869 (besides the thirty-five annuitants) is 125, as against 106, the highest number in any previous year. In this way upwards of a thousand pounds has been expended in grants varying in amount from £2 to £20.

At our meeting on Tuesday last there were nineteen applications, but unfortunately we had less than £50 at our disposal, and, as a consequence, most of these have been postponed for a month, in the hope that by that time means will be forthcoming to relieve them. Some of these cases are indeed of a most painful character. Five are widows whose husbands have recently died while still in their prime, leaving each a large family, and in only one of these is there any sort of provision, and this only a policy of insurance for £500 for a widow and ten children. Another is a widow who has for several years striven hard, with varying success, to support herself and children, but who is now obliged to succumb from failing sight and inability to obtain employment. Two others are ladies, orphans who have for some years maintained themselves and aided their respective families as governesses; but phthisis in one case, and a very painful malady in the other, have obliged them to give up their situations and to seek assistance from this Society. And such are but average specimens of the cases brought before our committee for investigation month after month; and to assist in relieving these we appeal with confidence to our brethren, some of whom have indeed given most liberally both in time and money; but still there are doubtless thousands more who have the means and the heart to assist, but who know nothing of this quietly working Benevolent Fund, and it is to these more especially that we look for help on this New Year's day.

The benevolence of the Medical Profession is universally admitted and admired; surely it will not be lacking towards those of its own body in distress, nor will its charity be denied to the widows and orphans of its own members.

Contributions will be thankfully received by either of the undersigned, and acknowledged in this journal.

CHARLES J. HARE, M.D., Treasurer,
57, Brook-street, Grosvenor-square, W.
STAMFORD FELCE, L.R.C.P.,
12, Chippenham-road, St. Peter's-park, W.
R. THORNE THORNE, M.B.,
42, Seymour-street, Portman-square, W.
} Hon. Secs.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

LETTER FROM DR. JOSEPH ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to forward you the enclosed extract from the minutes of the last meeting of the Council of the Poor-law Medical Officers' Association, together with a memorandum which was adopted by the sub-committee appointed on that occasion, relating to the proposed establishment of Dispensaries in the parish of Bethnal-green, and have to request that you will be so good as to publish the same in the next issue of your journal. I am, &c. JOSEPH ROGERS, President.

33, Dean-street, Soho, W., December 18.

Extract from the Minutes of the Meeting of Council of the Poor-law Medical Officers' Association, held December 14.

"Read a letter signed by six members of the Association, being all the district Medical officers of Bethnal-green, save one, calling the attention of the Council to the proposed rearrangement of the districts in that parish, and requesting advice and assistance to prevent the injustice the carrying out of the scheme would involve to the writers. Upon inquiry, it appeared the parish contained an estimated population of 120,000, giving an average of 17,000 to each Medical officer, the districts, however, not being equally divided. Of the seven Medical officers three only are permanently appointed, the other four being reappointed annually. The parish is divided into three districts for general relief, to each of which are attached a relieving officer and his assistant, 'a pay clerk,' moreover, being appointed to assist these officers generally. The proposal lately placed before the three permanent Medical officers was as follows—viz., to divide the parish into three Medical districts corresponding with the relief districts, to erect three dispensaries, and to attach to each one of the gentlemen referred to—the guardians to find the medicines—and they offer in the way of remuneration the following terms:—Offer 1: £200 a year, residence at Dispensary, coals, gas, allowance of £20 a year for a servant. No private practice. Offer 2: Residence at home, private practice allowed, daily attendance at Dispensary, present salary. The extra work to be compensated by provision of drugs, dispenser, and midwife. It appeared that the present salary of the Medical officers in question is £120, but this sum includes the commuted extra fees. The extra work for which the drugs, etc., are to compensate, would average 2000 cases per annum in each district. The number of cases treated by the seven Medical officers in the year ended September 29, 1868, was 10,119. The population of the proposed districts would average 40,000, or nearly three times the number prescribed in article 159 of the Consolidated Order of the Poor-law Board. The whole question thus brought before the Council having been most carefully considered, it was unanimously agreed that the proposals of the Dispensary Committee were impolitic, that they would be unjust to the Medical staff and injurious to the ratepayers and the sick poor, and it was resolved to comply with the request of the writers of the letter referred to. A committee was thereupon appointed to watch the proceedings, and to draw up a minute for publication in the Medical journals, expressing the views of the Council upon the subject."

Minute.

The sub-committee appointed to consider the above question agreed to the following memorandum:—

"Before a sweeping change of the kind suggested is made, it is advisable to consider the following propositions:—

"1. The existing Medical officers, who have been overworked and underpaid for many years, but have held to their appointments in the hope of better times, and who may now be called upon to relinquish them or private practice, have an equitable, if not a legal, claim to compensation.

"2. In the event of any alteration, the new districts should not be too large for an efficient performance of the duties by the Medical officers, so that their energies should not be unduly taxed by the ordinary and average amount of work; otherwise a break-down or serious neglect would occur whenever any epidemic or unusual amount of sickness prevails.

"3. In the interests of the sick poor and ratepayers, the remuneration should be adequate to command the permanent services of experienced Medical officers.

"It must be obvious that the proposals of the Dispensary Committee of the Bethnal-green Board do not comply with any of these conditions; for,

"1. To say the least, four of the seven Medical officers would be deprived of their appointments without compensation.

"2. The present number of Medical officers (seven) is not more than sufficient to discharge the ordinary duties, even with the Dispensaries, in this large, densely populated, and pauperised parish.

"3. Granting, however, for the sake of argument, it were possible for so small a number as three Medical officers to perform the duties now divided amongst seven, the terms offered are not such as to command the permanent services of able and experienced men; consequently the appointments would be sought after either by young and inexperienced men, who would retain them so long only as it suited their convenience, or by older men who have failed to secure the confidence of the general public. It is to be hoped, therefore, that Mr. Goschen will see fit to veto the proposal of the committee, should it be endorsed by the guardians, especially as the Poor-law Board refused to sanction a similar but much less serious proposal some three years ago, when, upon the resignation of Mr. Lyel, the guardians desired to annex his district to that of another of their Medical officers."

THE RELAPSE IN FAMINE FEVER.

Letter from Mr. A. W. Blyth.

[To the Editor of the Medical Times and Gazette.]

Sir,—I believe no explanation has hitherto been brought forward of the remarkable phenomena that mark the course of relapsing or famine fever. At such a time as this, when the present epidemic appears to be daily increasing both in extent and severity, any theory pretending to lead to the practical result of preventing the relapse demands attention, if it be not altogether unreasonable. I therefore promulgate some ideas on the subject, in the hope of seeing them disproved or proved.

All agree that, in this fever, a specific poison, somehow or other, gets into the blood, having, like other specific poisons, as those of typhus or the exanthemata, a period of incubation, a period of activity, and, lastly, a period in which, in favourable cases, the poison is eliminated or thrown off from the system. While these poisons are in the circulation they are most likely multiplied a millionfold; as this can be proved to demonstration in some, it probably occurs in all. Facts tend to show that, during the active period, some of the morbid material is being continually excreted, and also that there is a certain time, usually coinciding with some marked crisis phenomena, such as excessive purging or sweating, when it is thrown off in immense quantity and in a free state; that it is thrown off as an active poison is evident from contagion resulting when it is introduced into the system. Some may be decomposed in the act of elimination, but of this there is no proof.

In typhus, the exanthemata and others, one attack, acting in some peculiar manner on the minute elements of tissue, exhausts the susceptibility for a longer or shorter time. A patient during convalescence from scarlet fever has enough scarlatina poison hanging about his clothes and skin to infect a vast number of people; he is a source of contagion to all who have not had the disease, but he himself moves in this poison-atmosphere perfectly safe; either he does not reabsorb it, or if it be absorbed no effect results. This one attack may efficiently protect him for months, years, or a whole lifetime; but, if he get a second attack, the protection is generally permanent, though there are some cases in fever and exanthem history where, from some peculiarity of consitution, a person takes one of those fevers whenever he is exposed to the contagion. Thus Dr. Baron records the case of a Surgeon who took small-pox whenever he attended a person suffering from that disease; but, without regarding anomalous cases, the general result is, that the longer the minute elements of tissue are exposed to the action of one of these fever poisons, the more efficiently is the system protected. Reasoning from these data, it appears not improbable that when those profuse crisis phenomena occur in relapsing fever—when the skin suddenly excretes that odorous and sour perspiration—this cutaneous secretion contains a large quantity of the relapsing fever poison in a free state. The patient, exhausted by the general depression of his illness, and in many cases made still weaker by a sudden and excessive sweating, breathes an atmosphere of an intensely poisonous nature, and as fast as it is excreted by the skin so does this poison re-enter the body by perhaps the pulmonary mucous membrane; in fact, it is reabsorbed. The poison has not been long enough in the body to exert those mysterious tissue changes necessary to protect the sufferer even for a few days, and thus the seven or eight days of apparent health would be the period of incubation anew; in other words, it is a continued fever running a course of five or six days, but two distinct attacks follow each other so closely that they appear as one. In further support of this theory several facts may be brought forward:—

1. The time intervening between the first attack and relapse is not at variance with what is known concerning the duration of the latent period, which has been estimated from four to ten days. (Murchison, p. 311.)

2. Another fact in favour of this theory is that persons may have a second or third distinct attack of fever during the same epidemic. Dr. Christison had three separate attacks in fifteen months. (Murchison, p. 312.)

3. Medicines appear to have no influence in preventing the relapse. If the cause is as above imagined, they could hardly be expected to do so.

I may also mention that the relapses sometimes occurring in typhoid fever have been explained by Dr. Johnson to be most probably caused by the reabsorption of the poison by the bowel. If this could be proved, it is obvious that it would be a fact greatly in favour of these views, being strictly analogous. If this reabsorption theory be true, little can be expected from the internal administration of drugs to ward off the relapse; but there is everything to hope from the use of mechanical or chemical means to remove or decompose the poison as fast as it is eliminated. This substance, though we have neither seen nor handled it, is no immaterial essence, but it is material, and has some definite chemical composition, which chemistry may probably decompose. What particular agents will do this, experiments, carefully performed, can alone determine. The common-sense mechanical means of removing excreta ought certainly not to be neglected—such as frequent change of bedding, sponging the body with warm water, or with warm disinfectants. Then substances, such as the alkalies, might be applied externally in solution, applying these on account of their strong chemical affinities, in the hope that they may decompose and fix, as it were, the poison: good might be expected from potash, for instance. Thus Dr. Shortt, of Madras, in his cobra experiments, found the only thing out of the body that would kill, as he terms it, the cobra poison was a solution of potash. A convenient way of employing such chemical agents externally is to apply clothes dipped in warm dilute solutions of the alkali next the skin, covering these with oil-silk, and over all a blanket, the whole of the patient's body being swathed in this manner, with the exception of the face and head. But, whatever be the means employed, whether mechanical or chemical or both, they ought to be continuous during the fever stage, and especially at the crisis; for when the temperature has gone down, it is obvious they can do little good. I am, &c. A. W. Blyth.

King's College, December 4.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, December 1.

Dr. Graily Hewitt, President, in the Chair.

The following gentlemen were elected Fellows:—Mr. W. Cox, Mr. B. Duke, Mr. Hemsted, Whitchurch; Dr. Minns, Thetford; and Dr. A. Walker. Dr. Wiltshire and Dr. Selby Norton were appointed auditors for the current year.

Dr. Meadows exhibited a large Fibroid Polypus removed by the single wire écraseur. Ten days previously this tumour had been completely intra-uterine, and the os closed over it. The use of Dr. Barnes's dilating bags had not merely induced dilatation of the os, but sufficient uterine contraction to cause extrusion of the tumour, which was then easily removed. Dr. Meadows considered the bags superior in their utility to the sponge and other tents.

Dr. Wynn Williams exhibited the heart and lungs of an infant who died when fourteen days old, and who, during life, was considered to be the subject of Cyanosis. The examination after death showed a heart much larger than natural, the foramen ovale open to about one-fifth of its extent, the walls of the right ventricle much thicker than those of the left, and the aorta taking origin from the right ventricle, the pulmonary artery from the left. Referred for further examination to Dr. Williams and Dr. Junker.

Mr. J. A. Tapson exhibited a Placenta and Knotted Cord.

The child was stillborn, but its movements had been felt six days prior to its birth.

Dr. Clevelaxd exhibited an apparatus for injecting solution of perchloride of iron into the uterus for post-partum hæmorrhage. It consisted of a six-ounce native rubber bottle, to which a flexible vaginal tube, ten inches long, was accurately fitted. After expelling as much air as possible by compression the tube was introduced into a stoppered glass bottle containing about seven ounces of the iron fluid, and the injecting bottle allowed to fill itself. The latter was again compressed without removing the tube from the residual fluid, and it was found, after the second filling, that the bottle and tube were free from air. He thought, with this apparatus, there was less risk of introducing air than with Higginson's syringe.

Mr. W. Rigden communicated the statistics of the ages at which menstruation commenced in 2696 women who had applied at University College Hospital for attendance in their confinements. The mean age was 14·96 years.

Dr. Lloyd Roberts (of Manchester) exhibited drawings of a large Fibroid Polypus which he had removed by the écraseur. The tumour weighed 23¼ ounces, and had to be extracted by the forceps after the severance of its pedicle.

Dr. Tyler Smith read a paper on a case of Puerperal Fever treated by the Injection of Ammonia into the Veins, followed by recovery. The patient, a primipara, was delivered by forceps on November 1. On the 5th symptoms of puerperal fever supervened, and on the 12th she was in such imminent danger that Dr. Smith determined to try the injection of ammonia into the veins, as practised by Dr. Halford in Australia for snake-bite. The operation was performed at 7.45 p.m. A solution of one part of liq. ammoniæ to three parts of water was injected to the extent of half a drachm into one of the veins of the right forearm. As soon as two or three drops had been injected she roused, and complained of severe pain in the opposite arm. When the operation was completed there was very great pain over the whole body, with intense smarting of the right arm. This continued without abatement for several hours. The sickness ceased at 11 p.m., but the bowels were moved four times in the course of the night. Towards morning the pain subsided, and she got a little sleep. November 13: The abdomen had much diminished in size, and pulse had fallen to 100. 14th: Expressed herself as feeling better, and was quite sensible, though pale and weak. Pulse 108. Right arm at seat of puncture red and swollen, and the veins of the whole arm were distinctly mapped out. Was able to take a little food without sickness. 15th: Tongue getting natural; pulse 100; abdomen less in size. 17th: Still progressing favourably; a small ulcer had formed on the right arm at the seat of puncture. A slight relapse occurred on the 20th, but after the 22nd her improvement was uninterrupted. In commenting upon the case, Dr. Smith observed that he had never seen a patient in a similar condition recover, and, although he had as yet adopted this treatment in this case alone, so successful was the result that he had felt it incumbent upon him to bring the particulars before the Society. He would not at present offer an opinion as to whether the ammonia acted as antidote or stimulant.

Dr. Aveling would have liked a fuller account of the history of the plan of injecting medicinal fluids into the veins, as it was a method of treatment of much antiquity.

Dr. Barnes said reference to the history of venous injections did not diminish the merit of applying this method to the treatment of puerperal fever. In this disease it was often difficult to get remedies absorbed; the only hope seemed to be in direct injection into the vascular system. He then adverted to the practice of saline injections in cholera, by which many lives had been saved. At the last meeting of the Society he had stated his opinion that the injection of saline fluids and transfusion ought to be, and would be, largely extended, and in his work on obstetric operations now through the press he had advised it in certain cases of puerperal convulsions, fever, and obstinate vomiting. He doubted whether the fluid used by Dr. Smith was the best. He should prefer a fluid like Dr. Little's, made of similar specific gravity to that of the blood, adding a little ammonia and alcohol. He thought the indication was to carry the ammonia in a considerable bulk of fluid, not concentrated.

Mr. Spencer Wells said he had been much struck by Dr. Halford's reports, and last March he had injected half a drachm of liq. ammoniæ into one of the veins of the arm of a woman two days after ovariotomy. The pulse and temperature had risen to 140 and 102·8°, with the usual signs of fibrinous deposit in the heart. Scarcely more than a momentary revival followed the injection, nor more after another by Dr. Junker two hours afterwards. A large fibrinous clot was found after death filling up the left ventricle. Mr. Wells suggested that if Dr. Smith's example is followed, great care should be taken only to inject ammonia where there is an excess of fibrine in the blood; to inject it in cases of any low form of fever or blood-poisoning, where the breath exhaled is charged with ammonia and the blood is already too fluid, would be excessively dangerous.

The President observed that the Society was much indebted to Dr. Tyler Smith for bringing this interesting case forward. One swallow did not make a summer, but new facts were always deserving of attention.

Mr. T. Spencer Wells read a paper on the Complication of Pregnancy with Ovarian Disease. The author related fifteen cases of pregnancy complicated with ovarian disease which had fallen under his own observation, restricting his remarks to questions of treatment. In three cases sudden death followed spontaneous rupture of the cyst in or before the seventh month of pregnancy. In two cases pregnancy and ovarian disease went on together without interference, and lingering labours ended in the birth of stillborn children. In one case twins were born alive; but the mother had suffered greatly from distension. In one case five and in another six pregnancies had gone on, and ended normally without interference, but in the last case the cyst ruptured spontaneously in the seventh pregnancy. Five patients were tapped during pregnancy—one twice, one three times, and three once. In all five living children were born after natural labours. In one of them ovariotomy was successfully performed four months after delivery. In one case ovariotomy was performed in the fifth month of pregnancy; the uterus was emptied at the same time, and the patient recovered. In the concluding case of the series ovariotomy was performed successfully in the fourth month of pregnancy, after spontaneous rupture of the cyst and peritonitis, pregnancy proceeding without interruption. The author believed that a careful consideration of these cases would lead to the following conclusions:—1. Pregnancy and ovarian disease might go on together, and end safely both to mother and child. 2. But in a large proportion of cases, probably in nearly all where the ovarian tumour was large, there was danger of abortion, or, if the pregnancy proceeded to the full term, of lingering labour and a still-born child, and throughout the later months of pregnancy there was danger of sudden death to the mother from rupture of the cyst or rotation of its pedicle. 3. Spontaneous premature labour might not save the mother from these perils; and the induction of premature labour almost implied sacrifice of the child, with considerable risk to the mother. 4. There was no proof that tapping an ovarian cyst was more dangerous during pregnancy than at any other time. It would generally afford immediate relief to distension, and lead to the normal termination of pregnancy in the birth of a living child at a very slight risk to the mother, if proper precautions were taken to prevent the escape of ovarian fluid into the peritoneal cavity, and the entrance of air into this cavity and into the cavity of the cyst. 5. If an ovarian cyst should burst during pregnancy, removal of the cyst and complete cleansing of the peritoneal cavity might save the life of the mother, and pregnancy might go on to the full term. 6. Of three cases on record, where a pregnant uterus had been punctured during ovariotomy, the only recovery was in the one case where the uterus was emptied before the completion of the operation.

Dr. J. Braxton Hicks then read a short account of six cases, comprising eight pregnancies where pregnancy was associated with ovarian cystic disease. In none had any symptoms of danger arisen, and all were delivered of live children at full term. Dr. Hicks also mentioned that he had never seen any other case with this complication attended with untoward symptoms. He thought a collection of a larger number of cases necessary, before the necessity for the induction of premature labour could be established as a rule.

Dr. Bathurst Woodman referred to the bursting of thin-walled cysts as not uncommon where there was no complication with pregnancy, and considered that the relative frequency of a favourable or unfavourable result in such cases was an important element in the discussion of the present subject.

Dr. Playfair referred to the complication of labour with ovarian tumour, of which he had collected the details of fifty-seven cases. Of these fifty-seven thirteen had proved fatal; and this mortality was probably due to the contusion to which the tumour was subjected during the pains. Every case in which the cyst had been punctured (seven in number) had done well.

Dr. Wiltshire asked Mr. Spencer Wells if he would kindly tell the Society how he would treat cases of solid or semi-solid

ovarian tumour complicating pregnancy. Tapping, though useful enough in unilocular cysts, would in such cases be nearly useless.

Mr. Bateman, after referring to the case in which he was engaged with Mr. Wells, gave some particulars of a case of ovarian tumour obstructing labour, and necessitating craniotomy, which had occurred in his practice many years ago. About three weeks after her confinement the patient succumbed to an attack of erysipelas.

Dr. Barnes, in reply to Dr. Wiltshire, said the practical rule was, when the tumour obstructed labour, act upon the tumour so as to free the passage for the child; when this could not be done, then act upon the child.

Mr. Spencer Wells said, in reply, that he could not see why an ovarian cyst should not be tapped during labour. In the case of a multilocular cyst, probably one of the largest cysts might be emptied by tapping. If not, and the whole tumour was more or less solid, the case would then be one for careful consideration, and the question of instrumental delivery, the Cæsarian section, or ovariotomy would have to be determined by the circumstances of the case.

Dr. Hall Davis read a paper on Puerperal Convulsions, illustrated by a history of thirty-three cases. Dr. Davis commenced his paper with a statement of the various pathological conditions under which convulsions presented themselves. He viewed the disease as occurring under two types, sthenic and asthenic, and also as partaking of the characters partly of epilepsy, partly of apoplexy. He found that at least in 22 of the cases premonitory symptoms occurred—viz., emotional or other disturbance of the cerebro-spinal centres, renal mischief, eccentric local irritations (gastric, intestinal, uterine, etc.). 8 of the cases preceded labour, 17 commenced during labour, 8 followed. Obstructive difficulties in the labour were the exception. 15 of the cases occurred in primiparæ, their ages ranging from 18 to 25; 15 in multiparæ, from 25 to 47, only 1 being of the latter age. The Medical treatment pursued was as follows:—Bloodletting, followed by purging, sinapisms, or vesicants when necessary, and in two by opium, 21; chloroform, 7; purging and sinapisms, 3; opium, 1; supporting and antiseptic treatment in a case of septic origin in one—total, 33. Delivery was normal in 22; manual aid in breech births, 2; version, 2; forceps, 5; craniotomy, 1; embryotomy, 1. Results to the mothers were—Recovered perfectly 30; partial recovery, hemiplegia which had preceded the convulsions remaining, 1; died 2, 1 of asthenic peritonitis, 1 with gall-bladder distended by calculi, and in second paroxysm. Two other cases, not included in the above 33, died in their first paroxysm, not having been previously treated. In 3 cases of threatened convulsion treated prophylactically the results to the mothers were—Recovered perfectly 1; recovered partially 2, 1 with dimness of vision which had long preceded labour, 1 with hemiplegia which had existed previously. The result to the 38 children (5 being twin cases) was as follows:—28 living: of these 24 were born without operative interference, 1 by version, 1 a breech case, 3 forceps; 10 stillborn—viz., 4 head presentations without operative aid, 2 forceps, 1 breech, 1 craniotomy, 1 embryotomy, 1 induction of premature labour. In 24 cases the convulsions preceded delivery, and here the results to the children were 14 living, 10 stillborn.

OBITUARY.

THOMAS G. GEOGHEGAN, M.D., F.R.C.S.I.,

Professor of Medical Jurisprudence in the Royal College of Surgeons, Ireland.

We regret to announce the unexpected demise of the above eminent Medical jurist and Surgeon, which took place about noon on Christmas-day at his residence, Upper Merrion-street, Dublin. His carriage was at the door, and he was preparing to go out, when he suddenly expired. His elder brother had died as suddenly on that day week, and the shock had deeply affected him. Dr. Geoghegan was one of the Senior Surgeons to the City of Dublin Hospital, and Surgeon to the Hospital for Incurables, near Donnybrook. He had long filled the chair of Forensic Medicine in the College of Surgeons, was a remarkably eloquent lecturer, and enjoyed as a Medical jurist a high reputation both at home and abroad. He was the author of a very able paper on arsenical poisoning, published in the eleventh volume of the *Dublin Quarterly Journal*, and of some other contributions to various Medical journals. The post-mortem examination in Dr. Geoghegan's case revealed as the cause of death rupture of the left ventricle of the heart three-quarters of an inch in extent, and a softened condition of the whole heart. A clot weighing twelve ounces was found in the pericardium.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 23, 1869:—

Chambers, Edward William, Robert-street, N.W.
Colman, Thomas Henry, Wymondham.
Connolly, Benjamin Bloomfield, Woolwich.
Darby, John Thomas, Derby.
Davenhill, Robert Septimus, Wolverhampton.
Dutt, Russick Lull, Robert-street, N.W.
Eager, Wilson, Guildford.
Gamble, Charles Edward, Tulneck, near Leeds.
Gilhooley, Roderick Joseph, Gloucester-road, N.W.
May, Thomas, Stoke Lyne, Bicester.
Miller, Frederick Montague, Stoke Newington.
Parkinson, Charles Henry Watts, Wimborne Minster.
Parsons, Sidney, Wells, Somerset.
Roberts, Owen, Notting-hill.
Semple, Charles Edward Armand, Torrington-square.
Tothill, Thomas Henry Frederick, Parkfield, Topsham.
Turner, Henry Gunton, Oxenbourne, Petersfield.
Williamson, John Gover, Holford-square.

The following gentlemen also, on the same day, passed their First Professional Examination:—

Chinery, Charles Warner, St. Thomas's Hospital.
Eagle, Henry Frederick Charles, London Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Gamgee, Arthur.—One of the Honorary Physicians to the Royal Hospital for Sick Children, Edinburgh.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointment has been made:—Dr. William Connolly, Surgeon to the *Terror*, additional, for service in Bermuda Dockyard.

War Office.—The following appointments have been made:—12th Lancers: Surgeon Thomas Tarrant, M.D., from the Cape Mounted Riflemen, to be Surgeon, *vice* Surgeon-Major Francis Hastings Baxter, M.D., appointed to the Staff. 14th Foot: Staff Surgeon John Edward Moffatt to be Surgeon, *vice* William Henry Price, appointed to the Staff. 41st Foot: Staff Surgeon Samuel Black Roe, M.B., to be Surgeon, *vice* William Henry Yates, deceased.

Medical Department.—Surgeon-Major Francis Hastings Baxter, M.D., from 12th Lancers, to be Staff Surgeon-Major, *vice* Staff Surgeon William Boyd, superseded for being absent without leave; Surgeon William Henry Price, from 14th Foot, to be Staff Surgeon, *vice* John Edward Moffatt, appointed to the 14th Foot; Staff Surgeon Francis John Shortt to be Staff-Surgeon, *vice* Samuel Black Roe, M.B., appointed to the 41st Foot; Assistant-Surgeon Alfred Lewer, from Royal Artillery, to be Staff Assistant-Surgeon, *vice* Francis John Shortt, promoted to the Staff.

BIRTHS.

Cribb.—On December 27, at Bishop's Stortford, the wife of Henry Cribb, L.R.C.P. Lond., of a son.

Fry.—On December 24, at Wateringbury, Kent, the wife of John W. Fry, Surgeon, of a son.

Gauge.—On December 27, the wife of Frederick A. Gauge, M.D., Court street, Faversham, of a son.

Hunter.—On December 21, at Bridge House, Dartford, the wife of R. H. Hunter, M.R.C.S., of a daughter.

Leachman.—On December 21, at Petersfield, Hants, the wife of A. Warren Leachman, M.D., of a son, who survived his birth only a few hours.

MARRIAGES.

Dalgliesh—Paterson.—On November 15, at St. John's Church, Calcutta, Edward Dalgliesh, Esq., Tirhoot, son of W. M. Dalgliesh, M.D., of Masham, Yorkshire, to Jennie Gordon, youngest daughter of the late Alexander Paterson, M.D., of Bahia, Brazil.

Harwood—Askeer.—On December 21, at the parish church of St. John's, Beckermet, Cumberland, Alfred Harwood, Surgeon, Cleator, near Whitehaven, to Elizabeth (Lillie), eldest daughter of the late Rev. Joseph Askeer, of Northleach, Gloucestershire, and Whitehaven, Cumberland.

Palmer—Hayes.—On December 24, at the parish church, Bromley, John Dalton, third son of Clayton Palmer, Esq., Twickenham, to Helen, eldest daughter of George Hayes, M.D., Conduit-street, Regent-street, and Bromley, Kent.

Sedgwick—Challice.—On December 28, at Holy Trinity Church, Marylebone, William Sedgwick, Esq., of Park-place, Regent's-park, to Norah Maria, second daughter of the late John Challice, M.D., of Southwark and Great Cumberland-place, Hyde-park.

DEATHS.

Atkins, James Ramsey, M.D., at 29, Lordship-road, Stoke Newington, after protracted suffering, on December 24, aged 67.

BODINGTON, CAROLINE MARY EATON, youngest child of G. Fowler Bodington, M.D., M.R.C.P., at Sutton Coldfield, Warwickshire, on December 23, aged 2 years.

BRICKENDEN, ELIZABETH, widow of the late Thomas Brickenden, M.D., after a few days' illness, at her residence, 12, South-parade, on December 23, aged 98.

HOULTON, SARAH, widow of the late Joseph Houlton, M.D., at her residence, Blomfield-street, Westbourne-terrace, after a few days' illness, on December 25, in the 78th year of her age.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ANDOVER UNION.—Medical Officer for No. 1 District. Candidates must be qualified in accordance with the general orders of the Poor-law Board, and be registered. Applications and testimonials to Thomas Lamb, Esq., Clerk to the Union, Andover, on or before January 20, 1870. Election on the 28th inst.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Resident Medical Officer. Must be qualified and be registered. Applications and testimonials to the Medical Committee, Children's Hospital, Birmingham, on or before Monday, January 3; election on the 12th.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

CHARING-CROSS HOSPITAL (WEST STRAND).—Registrar. Must be qualified and registered. Applications and testimonials to H. Woolcott, Esq., Secretary, on or before January 19, 1870.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY.—House-Surgeon and Dispenser; must be legally qualified. Applications and testimonials to the Secretary, Mr. J. W. Fearn, Newbould-road, Chesterfield, on or before January 4, 1870.

DORKING UNION.—Medical Officer for the Upper District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. M. Smallpiece, Clerk, Guildford, on or before January 5, 1870. Election on the 6th.

GERMAN HOSPITAL, DALSTON.—Honorary Medical Officers, an Honorary Physician, and an Honorary Assistant-Surgeon. They must both be natives of Germany, or prove themselves fully conversant with the German language. Candidates must produce a diploma from a British or foreign university. Applications and testimonials to the Honorary Secretary on or before January 3, 1870.

GLOUCESTER COUNTY ASYLUM.—Junior Medical Assistant. Must possess one qualification, and be registered. Applications and testimonials to Mr. E. Toller, at the Asylum. The duties will commence about the middle of January.

MIDDLESEX HOSPITAL.—Surgical Registrar. Must be M. or F.R.C.S.E., not engaged in general practice. Applications and testimonials to the Secretary, on or before January 8, 1870.

SUNDERLAND INFIRMARY AND DISPENSARY.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

TUNBRIDGE WELLS INFIRMARY AND DISPENSARY.—Dispenser. Applications and testimonials to the House-Surgeon on or before January 1.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

VICTORIA HOSPITAL FOR SICK CHILDREN, GOUGH HOUSE, QUEEN'S-ROAD, CHELSEA.—House-Surgeon. Must be qualified and be registered. Applications and testimonials to the Secretary, on or before January 10.

WESTMINSTER HOSPITAL.—Resident House-Physician; must be qualified to practise under the Medical Registration Act of 1858. Applications and testimonials to the Secretary on or before the 23rd inst. Election on January 4, 1870.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, N.W.—Resident Surgeon and Apothecary; must be a Member of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be L.S.A. Applications and testimonials to the Dispensary House, on or before the 10th inst., on which day candidates must attend a meeting of the Board of Directors at 8.30 p.m.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Dorking Union.—Mr. C. W. Chaldicott has resigned the Upper District; area 5540; population 3257; salary £40 per annum.

Eastbourne Union.—Mr. Bransby Roberts has resigned the Second District; area 9414; population 1218; salary £75 per annum.

Lutterworth Union.—Mr. Joseph F. Ashby has resigned the First District; area 15,850; population 5011; salary £85 per annum. Also the Workhouse; salary £30 per annum.

Oakham Union.—Dr. G. M. Ashforth has resigned the Market Overton District; area 14,313; population 2427; salary £45 per annum.

APPOINTMENTS.

Abingdon Union.—Henry McK. Parkes, M.R.C.S.E., L.S.A., to the Second District and the Workhouse.

Cleobury Mortimer Union.—Henry L. Hogg, M.R.C.S.E., L.S.A., to the Second District.

Farnham Union.—Robert O. Clark, M.R.C.S.E., L.S.A., to the Seal District.

Holyhead Union.—Owen Williams, M.R.C.S.E., L.K. and Q. Coll. Phys. Ire., to the Workhouse.

St. Allan's Union.—Ridgway R. S. C. C. Lloyd, M.R.C.S.E., L.S.A., to the Third District.

Weymouth Union.—Henry Nathan, M.R.C.S.F., L.S.A., to the Weymouth District.

AN examination for Assistant-Surgeons to qualify for promotion will be held at the Medical Department of the Navy, Admiralty, Somerset-house, on January 4 and two following days, at 11 o'clock.

MISS GARRETT has passed the fourth examination for the M.D. of Paris.

ON Monday, Evan Jacob, the father of the Welsh fasting girl, surrendered himself to the coroner, Mr. Geo. Thomas, at Carmarthen, and was bound over to appear at the next assizes to take his trial for the manslaughter of his daughter, Sarah Jacob. It is supposed the case will not be investigated by the magistrates, before whom no proceedings will be taken.

MEDICAL CLUB.—The next club dinner will be held on Wednesday, the 5th inst. In future it is intended that the dinner shall take place on the first Wednesday in each month.

PRESTON MEDICAL SOCIETY.—OFFICERS FOR 1870.—*President:* W. Howitt, Esq., J.P. *Vice-Presidents:* Drs. Gilbertson, Hammond, and Spencer. *Committee:* Dr. Arminson, Mr. Rigby, and Dr. Smith. *Hon. Sec. and Treasurer:* Mr. John H. Gornall.

NORTH STAFFORDSHIRE INFIRMARY.—The new North Staffordshire Infirmary at Hartshill, Stoke-upon-Trent, has been opened. The Medical men of the district, including those of Stafford, Stone, Uttoxeter, and neighbouring towns, were invited by the Medical staff of the Infirmary to attend the first operations performed in the new building on the 23rd ult., and to inspect the arrangements of the institution. A large number of Medical men availed themselves of this invitation. At the luncheon which followed, the senior member of the staff (Mr. Folker) addressed a few words of welcome to those present, and hoped that as the Infirmary was always open to any member of the Profession, they would make a point of attending on all convenient occasions.

ELECTION OF M. GIRALDÈS.—His numerous friends in this country will be glad to learn that this able and learned Surgeon has been elected into the Académie de Medécine, wherein, indeed, he might have been expected to have had a seat long ago. The committee presented its list of candidates to supply the place of M. Lagneau in the Section of Operative Medicine in the following order:—1. M. Voillemier; 2. M. Giraldès; 3. M. le Fort; 4. M. Trélat; 5. M. Perrin; 6. M. Desormeaux. There were eighty-five voters present; and of these, at the first round of the ballot-box, M. Giraldès obtained 39 and M. Voillemier 26. At the second round, M. Giraldès obtained 54 and M. Voillemier 27.

THE FREE MEDICAL SCHOLARSHIPS OF THE ROYAL MEDICAL BENEVOLENT COLLEGE, EPSOM.—We are glad to be able to record that the appeal recently made on behalf of the fund to establish these Free Medical Scholarships for the benefit of the orphans of our Profession, who are on the foundation at Epsom, is progressing very satisfactory; and that the suggestion made by Sir James Clark, that every Medical man should contribute £1 1s., has been very generally accepted. Still there are many Medical men who have not yet given; and to them we again appeal, urging the claims of this fund, which in its application favours good work, and only assists those who are ready and willing to assist themselves. Dr. Carr, Blackheath, Dr. Ringer, 15, Cavendish-place, and Mr. John L. Propert, 100, Gloucester-place, the trustees to the fund, will be happy to receive contributions.

AMPUTATION UNDER CHLORAL.—M. Noir relates this case more as a warning than as an example for imitation, although he suggests that some of the symptoms which arose might have been due to the idiosyncrasy of the patient. The man, 64 years of age, was an inmate of the Hospital at Brionde on account of osteosarcoma of the tibia, which caused him such excessive pain that he eagerly sought for amputation. With the view of allaying his suffering, four grammes of solid hydrate of chloral were given him, which, at first inducing great agitation and much nausea, then gave rise to such deep sleep and great subsequent relief, that it was determined to employ this substance as an anæsthetic next day during the operation. Accordingly five grammes were given, and in about two hours so deep a sleep followed that he was carried to the table and amputation performed without his making a movement or uttering a cry. Replaced in bed, still asleep, his body was observed to be very cold, and his pulse, which had been 120, became filiform and uncountable. He continued in a state of alarming coma until eleven and a half hours after the chloral had been administered. He then woke up in violent delirium, with vomiting and pain in the stomach. These symptoms continued for nearly eight hours, when they dis-

appeared, leaving the patient in the extremest prostration. He was conscious, but could scarcely move or speak, and was ignorant of all that had passed. After some hours and a good night, though without sleep, all bad effects passed off.—*Gazette des Hôp.*, December 23.

A House divided against itself.—If we are rightly informed, Army Medical officers in India are likely to have a busy time of it this year, as, in addition to the elaborate system of investigation into the nature and causes of cholera lately sent out to them by the Army Sanitary Commission in this country, and which is so extensive that it may fairly be said to treat *de omnibus rebus et quibusdam aliis*, we hear that papers on the same subject, emanating from the Indian sanitary authorities, and containing one hundred and seven questions for reply, have been circulated among them. It is impossible to serve two masters; in trying to do so, frail humanity in these latter days is liable not only to hate the one, but to despise the other, and we think that it would have been better for the true interests of scientific investigation if the two authorities alluded to had combined instead of separating their forces.

Longevity of Medical Men.—The following eminent Physicians and Surgeons have died during the year, at the ages indicated—namely, Joseph Hodgson, F.R.S., late President of the Royal College of Surgeons of England, aged 81; James Wardrop, F.R.C.S., F.R.S., formerly Surgeon to George IV., 87; Peter Mark Roget, M.D. Edinburgh, F.R.C.P. London, F.R.S., 90; John Haddy James, F.R.S., late Surgeon to the Devon and Exeter Hospital, 88; Joseph C. Cookworthy, M.D. Edinburgh, of Plymouth, 79; Gilbert Wakefield Mackmurdo, F.R.C.S., F.R.S., late senior Surgeon to St. Thomas's Hospital, and Surgeon in Ordinary to Newgate, 72; Sir James Prior, R.N., Deputy-Inspector of Hospitals, 80; James Haviland, F.R.C.S., of Bridgewater, 81; William Stevens, M.D., D.C.L. Oxon., of Great Malvern, 82; Nathaniel Smith, F.R.C.S., of Clifton, 88; and William Clark, M.D., F.R.C.P., F.R.S., late Professor of Anatomy in the University of Cambridge, 81.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

We have much pleasure in publishing this week the first of a series of papers and diagrams, by Dr. Long Fox, of Bristol, on the temperature of diseases, and in announcing that similar papers shall appear each month.

Dr. Guy has favoured us with the prospectus of a course of lectures "On the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the close of the Eighteenth Century."

In the notice of the late Mr. Headland the "Fothergillian Essay" on the "Action of Medicine" was erroneously attributed to him instead of to Dr. F. Headland.

Purification of Hospitals, Dispensaries, &c.—Mr. G. Thornton, C.E., has an interesting letter in the *Bolton Guardian* of Friday last, in which he proposes to purify the air of Hospitals, etc., by means of a "fan," as used at our foundries. It is well worthy of perusal, and seems a practical measure.

Oiling a Gristly Stricture.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—With reference to this subject in your last week's journal, I beg to state that the method of applying fine oil to strictures, recommended by Mr. William Chenhalls, I have found successful in my practice, and it is one of the principles involved in the use of an instrument for the treatment of stricture, upon which, some months since, I sent a communication to the Parisian Academy of Medicine for competition for the Argenteuil prize. Clough's "catheter syringe" answers this purpose, and may be had by post for sixty-six stamps from J. Gardner and the principal instrument makers in this city, who also supply my instrument for applying dry cold to the uterus. I am, &c. William Clough, L.R.C.P.

Edinburgh, December 20.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reference to the method of "oiling a gristly stricture" adopted by Mr. Chenhalls, and described by him in the last number of your valuable journal, I venture to draw his attention to an excellent mode of effecting the same object which I have frequently found of the greatest possible service, and which, perhaps, in some cases may answer even better than his plan of using a catheter perforated at its very extremity for the purpose of bringing the oil in contact with the stricture. It is recommended in Sir H. Thompson's "Clinical Lectures on Diseases of the Urinary Organs," page 46, as well as in the last edition (the third) of his work on "The Pathology and Treatment of Stricture of the Urethra and Urinary Fistulæ," page 154, and consists in throwing half an ounce or an ounce of olive oil into the urethra by the aid of a common glass syringe. Sir Henry well observes that "in adopting the ordinary method of oiling or greasing a small catheter, no one can doubt that all the lubricating material has been removed long before it reaches the usual situation of stricture, and that the natural mucus answers the same purpose in most cases."

Lincoln, December 20. I am, &c. T. Sympson.

Obstetrician.—On the occasion to which you allude chloroform was administered to the Queen by the late Dr. Snow. See the *Medical Times and Gazette*, vol. xxvii. p. 527.

Royal Medical Benevolent College, and other correspondents on the same subject, are again reminded that the result of the recent examination in arts, etc., at the Royal College of Surgeons cannot be known for some weeks, owing to the great number of papers sent in by the 400 candidates.

Justice.—Neither the College of Surgeons nor the Society of Apothecaries can take any notice of the disgraceful circulars of Dr. Peskett and Mr. D. James.

Dr. M'L.—There is in the British Museum a manuscript of "John of Adern," giving the case of John of Gaunt as having a "clap and retention of urine." Consult Mead's "Medica Sacra."

A Provincial Student.—You will find an advertisement in the *Medical Times and Gazette* of this day giving you the desired information. The 15th and 22nd inst.

Medical Charges.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your issue of December 4 last is a letter from "A Constant Reader, etc." touching Medical charges in general practice; I carefully perused it. I also read your article on the subject in the same paper. I agree with most of what your correspondent says, but his system of supplying medicines at druggists' charges is so capable of misconstruction that I do not think it will do; further, it becomes opposition, or something very like it, if you happen to have a druggist living in your neighbourhood. We are in a transition state in the matter under discussion, but we cannot change all at once; it will take a generation or more, and charging for medicines will then be a thing of the past.

The plans I adopt are these:—To those who like to adhere to the good old customs I charge 2s. 6d. a visit for a mile and under, an extra shilling for every extra mile, and medicines at ordinary Professional rates. Where I can, in addition to the fee for the journey, I charge from 1s. to 5s. according to the means of the patient, and that includes all ordinary medicines, etc.; if I see more than one member of a family, I charge the fee in excess of the journey for each one. Servants I manage, but I always have some fee for them.

Country Practitioners will, I think, always have to dispense their own medicines unless alterations take place in the Poor-law Medical service, and dispensaries become established in all or most parishes, and are permitted to pay some of their own expenses by doing dispensing business; but that prospect is remote.

At page 662 of the same number of your periodical you speak of a more difficult subject. Time and, on the part of Medical men, management, will set Medical charges on a proper footing; but no time and no management will ever do away with a portion of the population who, on the one hand, cannot, and on the other will not pay. The Medical club system at so many pence a family a week may meet the difficulty, but I cannot feel the plan is a Professional one. I heard a Surgeon spoken of who had such a club as "Doctor Squirt, threepence a week;" really I think the sneer was just. I attend them on the parish account without orders. Our Profession, though our living, is charity also, and we must not be too greedy. Besides, as you point out in your article, these people are stepping-stones, the cannot-pay portion of them particularly so; they are grateful and speak kindly of us, but the will-not pay ones are sad drags, they rob us and abuse us both. They must, however, be taken care of when ill; it is a most unwise thing to permit a Professional neighbour to be called in to counteract your "cruelty" by his "kindness." People who are ill must be attended to, and Medical men must do it. I am, &c.

Sussex, December, 1869. A Country Practitioner.

"A Scientific Doctor," *inter alia*, writes as follows:—

"If homœopaths are practising scientific Medicine, and scientific Physicians are giving small doses of drugs for the relief of conditions which larger doses produce, the strife might fairly cease on both sides. I have often felt that the homœopathic sect would long have ceased to exist as a sect had it not been for the sentence of excommunication passed upon it. Neither so-called homœopathy nor scientific Medicine is what it was years ago. Let there be peace."

As we believe our correspondent is honest in his inquiries, we shall try to point out why the alliance is impossible. A man is either a homœopath, or he is not. If he believes in the law *similia similibus curentur*, he is bound, by a dogma which we cannot accept, to follow a line of practice with which we cannot coincide—in other words, it is useless to meet him in consultation or on any similar footing.

If a man professes to practise in accordance with the law *similia similibus*, but in reality practises as an ordinary Practitioner, or if he professes to carry out both kinds of practice simultaneously, he is a quack and a humbug, with whom no honest man would care to associate. A homœopath may be honest, and he may be also a fool, but a man who professes to practise at once in accordance with a certain dogma and in accordance with facts which plainly contradict that dogma, is simply dishonest. We have, thus far, said nothing of those homœopaths who exhibit high dilutions, as nowadays some repudiate the practice. Of these men, who still form the majority of homœopaths, we can only say that they are either knaves or fools, and with neither category is it pleasant to associate. Some homœopathic Practitioners are men whom in private we may meet and converse with. If we differ, we agree to differ. Still they are men whom, in spite of their views, we may respect—they are honest; but for the most part homœopaths are quacks of the purest dye, many of them having passed examinations under false colours; there are others who, after passing, have become homœopaths for the mere purpose of turning a *dishonest* penny—in short, men with whom we can have nothing to do.

Dermatologist.—Full particulars will shortly appear of the programme of the course of lectures "On Dermatology," by Professor Wilson, commencing on Monday, the 31st instant. Three lectures a week will be delivered. An application to the President will no doubt obtain for you admission to the course, although "*not a Member.*"

Kingston-on-Thames.—The Medical Officer of the Teddington District of the Kingston Union, Mr. Clement, had lately a complaint made against him for neglect of duty. It appeared that an old man named Stuchberry was seized with apoplexy on a Wednesday, on which day Mr. Clement saw him; said he regretted he could do nothing; that the case was hopeless. The man lingered until the following Monday; but Mr. Clement did not see him again, notwithstanding the issue of a peremptory order for so doing. Mr. Clement, however, it was stated, had entered on the "sheet" that he had visited the man also on Friday. Under these circumstances, a complaint was made to the board of guardians, who took the case into their consideration at their last two meetings. After considerable discussion, and the reading of a letter from Mr. Clement, the following resolution was carried by eight against five:—

"That Mr. Clement, in his letter dated December 20, 1869, having admitted a discrepancy between his official return of visiting in the case of Thos. Stuchberry, his written statement thereon, and the deposition of Stuchberry, jun., before the board; and the said letter containing expressions which this board feels would derogate from its position and usefulness in the administration of relief to the destitute poor, should it suffer them to pass unnoticed, and quite at variance with the considerate and fair spirit in which the board seeks at all times to treat its officers; and Mr. Clement having in the year 1868 made an erroneous entry in an official return, which, with his conduct thereon, received the censure of the Poor-law Board, this board feels it a duty respectfully to refer the present correspondence, together with this resolution, to the Poor-law Board for their judgment."

Mr. Clement, we think, should have visited the patient even if his case appeared hopeless.

COMMUNICATIONS have been received from—

Dr. E. Long Fox; Mr. A. Harwood; Dr. Arthur Gamgee; Dr. H. P. Rieton; Dr. G. Johnson; Dr. G. F. Bodington; Dr. W. Warn; Mr. Sydney Jones; Mr. T. Stokes; Mr. R. W. Stewart; Dr. Moriarty; Dr. Rogeas; Dr. W. Woodward; Dr. E. G. Wake; Dr. T. Downie; Dr. E. Mackey; Dr. Lory Marsh; Mr. J. H. Gornall; Mr. W. J. Taeutlea; Mr. J. M. Taylor; Mr. J. W. Fearn; Mr. J. B. Curgenven; Mr. Haynes Walton; Mr. J. Chatto; Sir J. Y. Simpson, Bart.; Inspector-General Gonnox.

BOOKS RECEIVED—

Lister's Introductory Lecture—St. Louis Medical and Surgical Journal, No. 6, new series—California Medical Gazette (December)—Medical Temperance Journal, No. 2—Braithwaite's Retrospect (July to December).—Dr. Pick's French Etymological Dictionary—Vogel's Practical Treatise on the Diseases of Children—Flint's Physiology of Man.

NEWSPAPERS RECEIVED—

Western Mail—Bolton Guardian—Medical Press and Circular—Staffordshire Advertiser.

VITAL STATISTICS OF LONDON.

Week ending Saturday, December 25, 1869.

BIRTHS.

Births of Boys, 993; Girls, 950; Total, 1943.
Average of 10 corresponding weeks, 1859-68, 1687·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	705	652	1357
Average of the ten years 1858-67	711·8	714·9	1426·7
Average corrected to increased population	...	...	1569
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	1	4	11	1	12	3	3	...
North	618210	1	7	35	1	13	14	...	...
Central	378058	...	2	9	2	5	2	...	...
East	571158	2	4	30	1	15	10	3	...
South	773175	1	11	38	2	20	9	8	...
Total	2803989	5	31	123	7	65	38	14	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·488 in.
Mean temperature	38·2
Highest point of thermometer	52·5
Lowest point of thermometer	29·0
Mean dew-point temperature	33·9
General direction of wind	N.N.E., N., & W.S.W.
Whole amount of rain in the week	0·86

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 25, 1869, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Dec. 25.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Dec. 25.	Temperature of Air (Fahr.). Highest during the Week.	Temperature of Air (Fahr.). Lowest during the Week.	Temperature of Air (Fahr.). Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	1943	1462	1357	52·5	29·0	38·2	0·86	87
Bristol (City)	169423	36·1	93	76	*93	46·2	29·6	38·0	1·09	110
Birmingham (Boro')	360846	46·1	242	175	179	45·6	29·4	38·0	1·02	103
Liverpool (Boro')	509052	99·7	330	295	242	44·2	27·5	36·5	0·30	30
Manchester (City)	370892	82·7	237	210	*209	44·0	29·0	37·5	0·17	17
Salford (Borough)	119350	23·1	71	60	56	44·6	28·8	37·7	0·20	20
Sheffield (Borough)	239752	10·5	172	126	137	45·0	29·9	38·0	0·59	60
Bradford (Borough)	138522	21·0	66	71	43	55·2	32·3	39·3	0·88	89
Leeds (Borough)	253110	11·7	177	129	105	57·0	30·0	40·2	1·17	118
Hull (Borough)	126682	35·6	63	59	57	...	...	...	...	...
Newcastle-on-Tyne, &c.	130503	24·5	82	69	57	51·0	30·0	37·1	0·80	81
Edinburgh (City)	178002	40·2	109	86	92	...	...	...	0·10	10
Glasgow (City)	458937	90·6	332	268	316	45·2	22·7	35·4	0·48	48
Dublin (City, etc.†)	320762	32·9	133	158	152	59·0	28·5	36·5	0·08	8
Total of 14 large Towns	6546587	35·5	1050	3244	3095	59·0	22·7	37·7	0·60	61
Paris (City)	1889842	...	...	...	989 Week ending Dec. 18.	...	...	...	...	...
						Week ending Dec. 18.				
Vienna (City)	605200	...	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·488 in. The barometrical reading increased from 29·15 in. at 1 p.m. on Sunday, Dec. 19, to 29·85 in. on Friday, Dec. 24.

The general direction of the wind was N.N.E., N., and W.S.W.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

January 1. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.

Royal Institution, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

3. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Coles will exhibit an Instrument for the Treatment of Femoral Anemrism by Pressure. Mr. Marshall, "On a Case of Vesicular Mole." Dr. Routh, "On the Treatment and Prevention of Scarlet Fever."

4. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. General Meeting for Election of Officers.

Royal Institution, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

5. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society, 7 p.m.: Special Council Meeting. 8 p.m.: Annual Meeting. Dr. F. Daly, "On the Early Use of the Long Forceps." Dr. A. E. Sansom, "On the Sulpho-carbolates in the Treatment of certain Diseases of Children." 9 p.m.: President's Address.

6. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Anniversary. President's Address, Election of Officers, and Conversazione.

Royal Institution, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

7. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Medical Society of London, 8 p.m. Meeting of Council.

WARNING TO THE MEDICAL PROFESSION.

Remarks on a Case of Poisoning by so-called Chlorodyne,

By Dr. J. COLLIS BROWNE.

"In page 510 of the *Medical Press and Circular* for 16th June, 1869, a case is reported of Poisoning by Chlorodyne. On perusing the statement, I found it remarked that 'the symptoms were markedly those of poisoning from morphia, the pupils being contracted;' and further, I read the confession that the Chlorodyne was made from the ordinary published formula, containing four grains of morphia to the ounce.

"So much for the assumption of a name to a sophisticated compound. That the case (a poor woman) died from poisoning by morphia I do not doubt for a moment, but that she died from '*chlorodyne*' I most emphatically deny, and, moreover, assert that it is a gross libel to say so. The preparation that I discovered, and coined the word 'Chlorodyne' specifically to denote, NEVER CONTRACTS THE PUPIL; and if those who, with such curious discretion, employ imitations would only use a little discrimination, and learn to watch the true effects of remedia, they would long since have become acquainted with this fact, and discovered that by sanctioning the use of the word 'Chlorodyne' to spurious preparations they were deluding themselves and those around them. To call two things by the same name, having opposite effects, cannot consistently be a sound procedure in therapeutics, still less in logic.

"So much for my strictures on this case of poisoning from morphia, *alias* so-called chlorodyne! And while commenting on the above case, I would further warn the Profession against the patronage of a formula for making Chlorodyne given by Mr. Peter Squire in his 'Companion to the British Pharmacopœia,' wherein he states, under the head of 'Liq. Chloroformi Comp.,' that the formula so given 'has been represented to the author as the composition of the popular medicine called Chlorodyne.' Whatever the representation Mr. Squire may have received on the matter, I can only assert that I repudiate his authority, and most emphatically deny his statement, for I have never published the formula for Chlorodyne, and certainly never communicated it to him. By tolerating the use of the word 'CHLORODYNE' to other than its legitimate use carries with it a low estimate of the value of nomenclature; and its intent, if otherwise, there ends all security to Physician and patient: the one prescribes a remedy that would save, while the patient gets a medicine, under a similar name, having distinctly opposite effects, and the case results in a manner the reverse of that intended. Liq. Chloroformi Comp. is one thing; Chlorodyne is totally distinct. Purity of drugs and honesty in dispensing are most important, otherwise confusion and disaster follow."

See Leading Article "Pharmaceutical Journal," August 1st, 1869, page 49. Extract as follows:—

"The Designation of Medicines and the Use of Secret Remedies.

"Now, referring to a case respecting which there has recently been some correspondence in the Medical Journals, there is no doubt, we believe, that the name 'Chlorodyne' was first applied by Dr. J. Collis Browne to the medicine prepared and sold under that name by Mr. Davenport; and we are not aware, although medicines differing from this in composition are sold under the same name, that preference is given to any of those over '*the Original one*,' while the latter is that by the use of which the reputation of Chlorodyne has been established. If, therefore, Chlorodyne is prescribed without anything to indicate which sort is intended, it seems right to use DAVENPORT'S. This would be acting in accordance with the rule we have referred to, and it would also accord, we believe, with the practice in the best Dispensing Establishments."

Frailties of the Faculty.

Extract from "Chemist and Druggist," Aug. 14th, 1869, pages 597-8.

"First of all there is the 'secret medicine' dispute. We read in an advertisement issued by a well-known publishing firm that a certain formula for the preparation of Chlorodyne was introduced into the work advertised 'for the use of those who think it degrading to prescribe secret medicines.' This sentence—whether the irony is intentional or not we can hardly say—does express exactly the state of feeling entertained by many in the Profession on this subject. They do not question the excellence of Chlorodyne, for example, as a remedy for many cases which they meet with, and they would gladly prescribe it, and, indeed, do so sometimes, if they think they will not be found out by their Medical brethren; but all the time they feel they are doing something degrading and disgraceful. Now, unprofessionals are perfectly willing to leave the selection of remedies to those whose experience has fitted them to choose with the best judgment; but, gentlemen, in the name of honesty and common sense, do not delay or avoid curing us if you can help it, just because you have imbibed some silly whim about the dignity of your calling. You do not deny the right of any one, doctor or not, to prepare a special medicine; nor can you give any reason why the inventor should not keep his formula a secret if he chooses. Besides, after all, what is there that is not a secret medicine to you? You know as much of Chlorodyne as you do of apomorphia, or, to express our meaning more distinctly, we ask whether the chemical formula of quinine gives you a key to the medicinal properties of the alkaloid."

The Sole Manufacturer of Dr. Collis Browne's Chlorodyne is

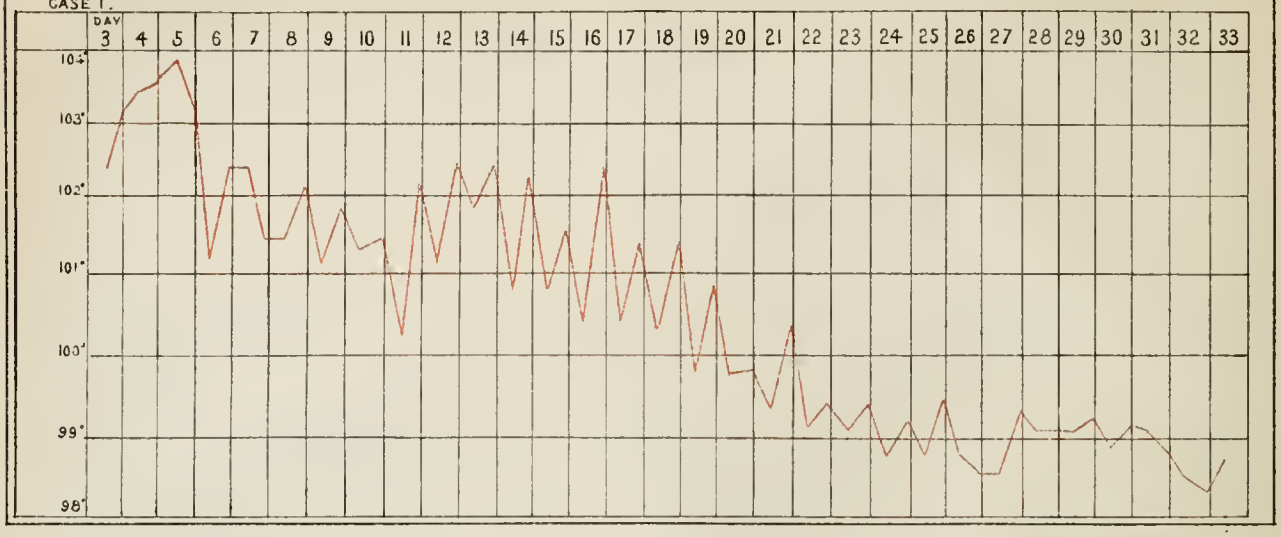
J. T. DAVENPORT,

33, Great Russell-street, Bloomsbury-square,

who alone received the Recipe, and who is the only authorised maker.

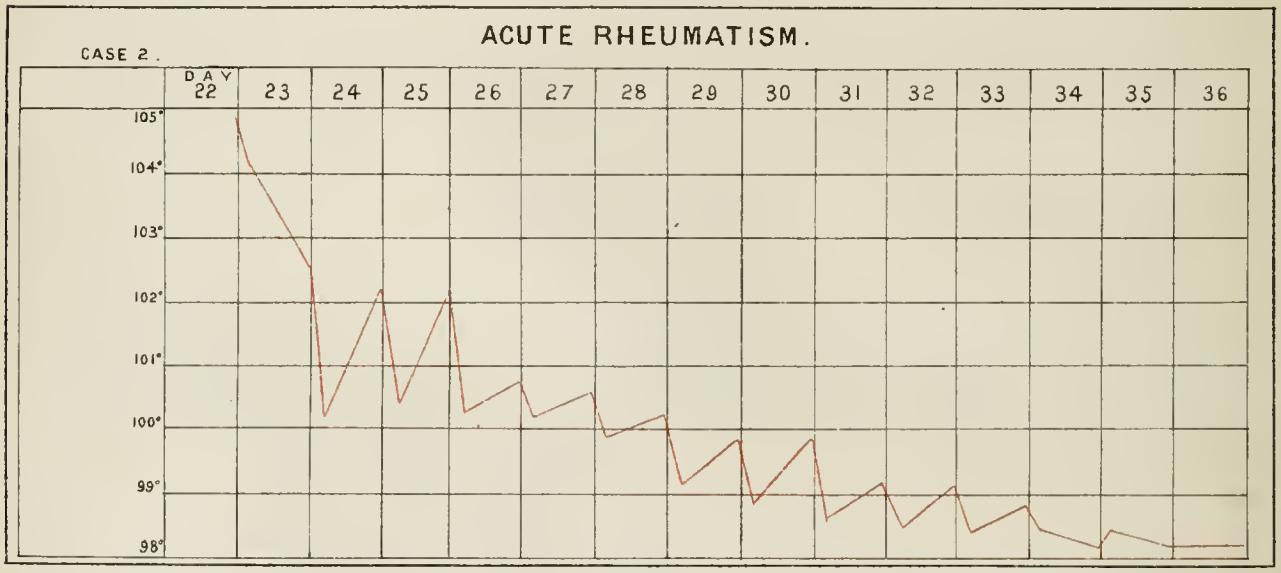
ACUTE RHEUMATISM.

CASE 1.



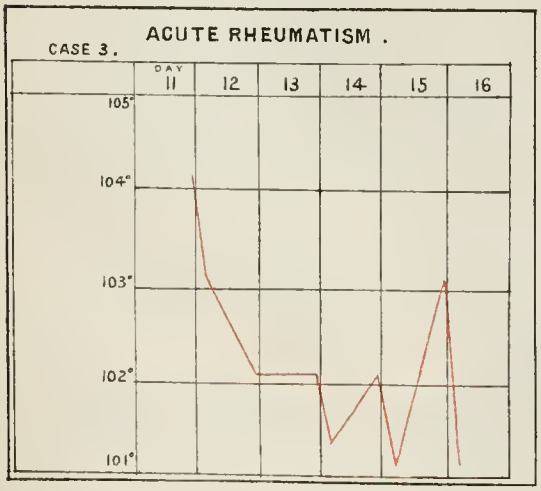
ACUTE RHEUMATISM.

CASE 2.



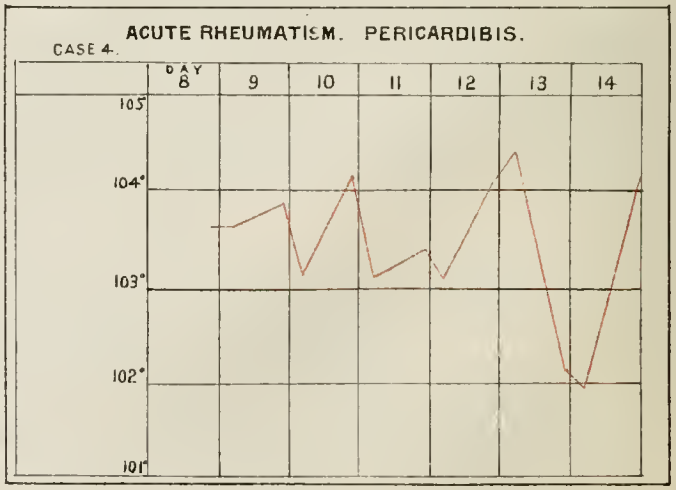
ACUTE RHEUMATISM.

CASE 3.



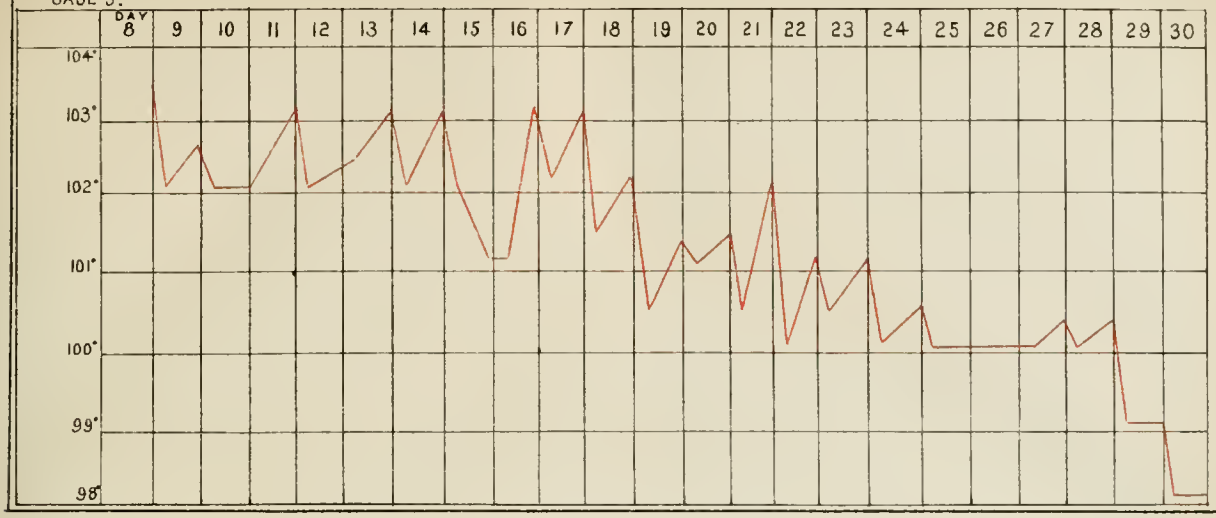
ACUTE RHEUMATISM. PERICARDIBIS.

CASE 4.



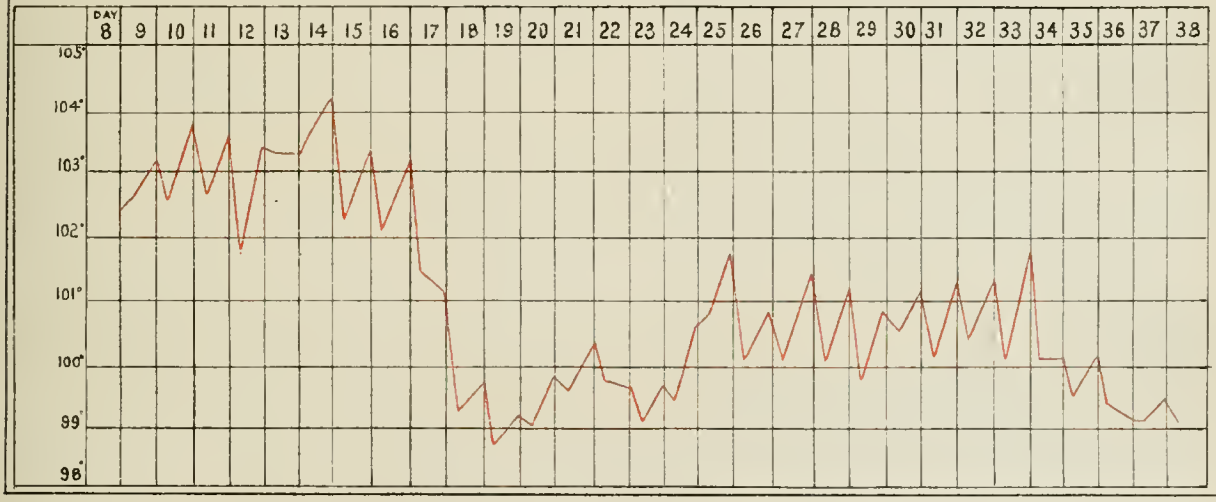
ACUTE RHEUMATISM. PERICARDIBIS.

CASE 5.



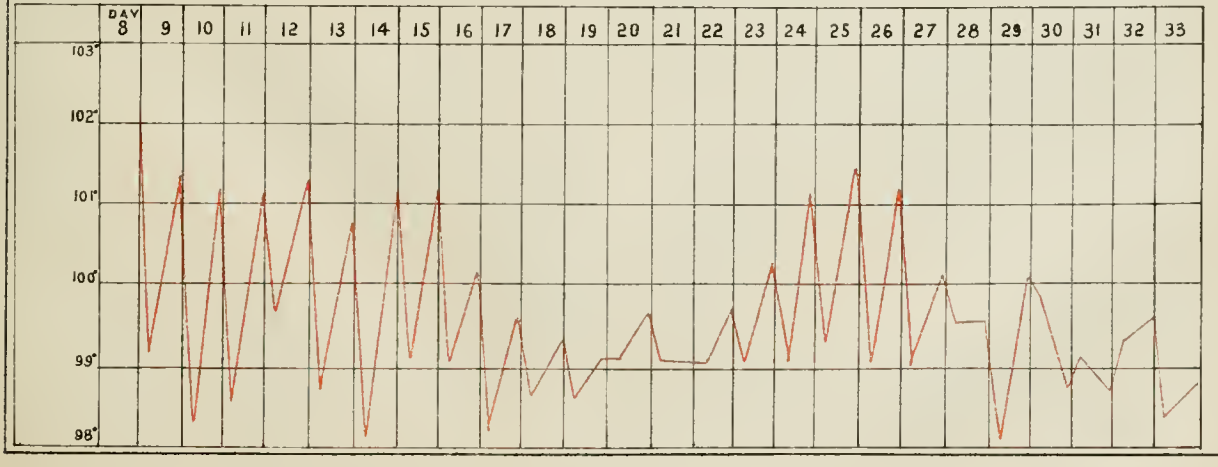
ACUTE RHEUMATISM.

CASE 6.



SUBACUTE RHEUMATISM.

CASE 7.



ORIGINAL LECTURES.

ON APHASIA, CONSEQUENT ON EMBOLISM OF THE LEFT ARTERIA FOSSÆ SYLVII.

By Dr. NIEMEYER,
Professor of Clinical Medicine in the University of Tübingen.

I.

Right Hemiplegia, with Perfect Aphasia, depending on Embolism of the Artery of the Left Sylvian Fissure—Insufficiency of the Mitral Valve — Death from Profuse Hæmorrhage Nineteen Weeks after the Occurrence of Embolism.

Friedrike S., 16 years old, born in Urach, was admitted an in-patient on February 3, 1869.

Previous History.—The patient herself is not capable of giving any account of the origin and course of her disease. From the communications of her friends and a letter from the Doctor who attended her the following history has been elicited :—

She springs from a perfectly healthy family. Her father, 76 years of age, is still mentally and bodily sound ; her mother died two years ago from cancer of the breast ; her brothers and sisters have good health. In her infancy she was delicate and pale, but without manifesting any other symptom of disease. In 1862 she had acute rheumatism, which lasted four weeks, affected many joints, and was accompanied with palpitation of the heart. After the lapse of twelve months from the time of her apparently complete recovery she had another attack of the same disease ; symptoms of chest affection also came on, but disappeared together with the rheumatism. From that time the patient is said to have been in perfect health until the commencement of her present illness, excepting that she was pale, and soon got tired out by exertion.

On December 5 last a rigor came on, and recurred on the following day. It is not possible to ascertain by what other morbid phenomena these rigors were accompanied, but this is certain—that, on the 7th, the patient was still doing her work, and that, on the evening of the same day, she went to bed with no particular complaint. It appears that, during the night, for the purpose of micturition, she left her cold bed-room, and went into the warmer room of her father, but was afterwards unable to return to her own bed. When searched for on the next morning she was found lying on the floor in her night-dress, unconscious, and stiff from cold. Having been carried into a warmer room and put to bed, she vomited several times, and her temperature rose considerably. After the application of leeches and ice to the head her consciousness returned, but it was noticed that the patient had lost her speech, that the mouth was drawn towards the left side, and that the upper and lower extremities on the right side were in a completely paralysed condition. On the next day she was much disposed to sleep. Later on she became restless, red in the face, very thirsty, and, as far as could be made out by her gesticulations, seemed to suffer great pain in the left half of her head. The Medical man who attended her noticed that she was very feverish. In this condition she remained about six weeks ; then the fever left her, she could sleep again, and her appetite returned ; the headache seemed also to have left her, but the paralysis of the right extremities and the loss of speech continued unchanged.

Present Condition (February 4, 1869).—The skin and visible mucous membranes of the patient, who is not well developed for her age, are conspicuously pale ; the adipose layer thin, muscles poor, pulse small, 132 per minute ; the temperature as appreciated by the hand seems slightly elevated, but when carefully measured in the rectum shows 39° C. (102·2° Fahr.). The right angle of the mouth is lower than the left, which is drawn somewhat upwards ; the right nostril is narrower than the left. When ordered to put out her tongue, she can do it, but the tip of the tongue deviates towards the right. Frowning is accomplished equally well on the two sides. Both eyes can be perfectly closed, and can be moved in all directions, nor is any alteration perceptible in the action of either pupil. The right arm and leg, over which the patient has no control whatever, remain in any position in which they are placed ; when raised, they fall down as soon as let go. The fingers are somewhat flexed, but by means of the induced current all the muscles of the paralysed extremities may be made to contract without difficulty.

An examination of the chest shows no abnormal condition of the lungs, except that the anterior margins around the heart are somewhat retracted, in consequence of which the cardiac dulness is too extended ; the heart's impulse is diffused and moderately increased in intensity, and the apex is to be felt a little outside the mammillary line. At the apex a loud systolic murmur is audible, and the second sound is indistinct. The sounds from the tricuspid, aortic, and pulmonary valves are clear, the latter a little louder than is usual.

On examining the abdominal organs an increased resistance is found in the left hypochondrium, and some enlargement of the spleen is indicated by percussion, the dulness extending considerably beyond the lower border of the ribs. The contour of the enlarged organ cannot be made out by palpation, on account of the great degree of tension of the abdominal walls. The lower border of the liver extends a little beyond the margin of the ribs. The stomach and intestines exhibit no morbid conditions ; the appetite is fair ; bowels regular ; urine of a light yellow colour, excreted in sufficient quantity, and without difficulty, and containing no albumen.

The most prominent symptom, apart from the hemiplegia, is that the patient does not reply to questions put to her, although she gives one the idea that she understands what is said. If the queries are of such a nature as can be replied to by "yes" or "no," then she nods or shakes her head as indications of assent or dissent. If asked to repeat a word, she produces only the vowel sound "a" after considerable difficulty, whatever word may have been mentioned to her. When told to write her name on a slate, she does so with the left hand in such a manner as any one unaccustomed to write in this way would write with the left hand.

Clinical Remarks.—According to the history and the present state of the patient, the case is, without doubt, one of disease of the brain. A careful analysis of the most prominent morbid phenomena will show that they can, with absolute certainty, be referred to disturbance of brain function. You are familiar with the course we pursue in discussions on diseases of the brain, you likewise know that we adhere to that course in almost a pedantic way, and you must often have been convinced of its practical value. To-day, as on former occasions, we shall, therefore, first endeavour to answer this question, "Have we to do with a localised disease or a diffused affection of the brain ?" If we come to the conclusion that the disease is localised, the second question will be, "What is the seat of the localisation ?" The third question we shall have to answer is, "What is the nature of the disease ?"

There are cases of brain disease in which the most acute and experienced observer is unable to give a decided answer to any of these questions ; on the other hand, we meet with instances in which they may all be answered without difficulty. To this latter class belongs the case under our consideration.

The first symptoms connected with the brain observed in this patient were those of *diffused disturbance in the circulation or nutrition of the cortical substance of both hemispheres. The patient was found lying on the floor in a state of complete insensibility.* Experience teaches us that alterations of the circulation or nutrition, limited to the cortical substance of one hemisphere only, produce no signs of alteration or diminution of psychical function. This fact, however, by no means warrants the conclusion that a healthy condition of the cortex of one hemisphere is sufficient for the normal display of psychical acts ; it is much more probable that by unilateral disease of the cortical substance intelligence becomes impaired, yet not to such a degree as to enable us to demonstrate the difference. Thus, an individual who has lost the power of vision in one eye, or of hearing on one side, by no means gives one the impression of being blind or deaf ; and sometimes a careful examination is necessary in order to discover that he sees or hears less perfectly than a healthy person. We have not at our command any accurate means by which we may estimate the integrity of psychical energy or the weakening of the same. Experience, on the other hand, teaches us that any grave changes in the circulation or nutrition of the grey matter of both hemispheres—parts which we are fully justified in considering as the organs of consciousness—are connected with impairment or loss of consciousness.

Primary and independent diseases of the cortex of such an extent as was manifested in our patient at the commencement of her illness, are indisputably rare, and occur only in those forms of brain affection which are generally considered mental diseases. Secondary changes of the texture of the cortex accompany the common purulent form of meningitis of the convexity. More frequent than textural diseases are diffused changes in the circulation within the grey matter, as anæmia, which originates in compression of the capillaries in

such cases of disease within the skull where the capacity of the latter is diminished. Each nerve requires a constant supply of oxygenised blood, in order that it may preserve its normal irritability; at the same moment when this supply is cut off the irritability ceases. A compression of the capillaries annihilates the function of the cortical substance as completely as do the gravest textural diseases of the latter. I may remind you of the complete loss of consciousness which results from deep depression of the roof of the skull, from copious hæmorrhage within the skull, and from abundant effusion of serum within the ventricles.

In our case no change of texture has taken place, but a change in the circulation within the grey matter has occurred. This statement we may make with perfect safety, because the sudden onset and still more the sudden discontinuance of the loss of consciousness exclude the existence of any grave textural change in the cortical substance.

Of the proximate cause of this diffused change of the circulation in the cortex nothing can be learnt from the symptoms hitherto discussed. Besides the evidence of *diffused brain disorder* the case before us exhibits very decided "local symptoms" (Heerdsymptome [Griesinger])—*i.e.*, such phenomena as warrant us in concluding that a circumscribed spot in the brain has experienced a lesion, and that the functions of this spot have been interrupted. The most valuable of such "local symptoms" are anæsthesiæ and paralyses, hyperæsthesiæ, neuralgiæ, and convulsions, when limited to one side or to the district of any single cerebral nerve. The paralysis of the right facial nerve, of the right hypoglossal, and of both right extremities, which were present in our case, render the existence of a local disease beyond all question; and we shall not err if we assume that the bilateral anæmia of the cortical substance of the hemispheres was connected with this local disease.

(To be continued.)

ORIGINAL COMMUNICATIONS.

A CASE OF

SEVERE CHOREA DURING PREGNANCY SUCCESSFULLY TREATED WITH HYDRATE OF CHLORAL.

By JAMES RUSSELL, M.D., F.R.C.P.,
Physician to the Birmingham General Hospital.

The following case exhibits very strikingly the beneficial influence of chloral in controlling the movements of severe chorea, and in affording the patient the benefit of prolonged sleep. As is well known, the more severe forms of chorea, attended as they are by violent movements, continued without intermission through several days, and sometimes by a considerable amount of mental excitement, threaten the life of the patient through the exhaustion they induce; and the great aim of treatment is to obtain rest for the sufferer by sleep, and thus to afford the opportunity of recruiting the wasted strength.

For effecting this purpose inhalation of chloroform, so far as my experience extends, offers by far the most certain and effective means—far more certain and effective than opium—besides being free from some disadvantages which attend the operation of the last-mentioned medicine. In the present case, the failure of opium, which was administered through one day, contrasted strongly with the success of the chloral. But the utility of chloroform is limited in chorea; for obvious reasons its inhalation cannot be continued for a sufficiently lengthened period to produce a permanent effect upon the disease, and the patient frequently awakens as violently agitated as ever. Chloral, therefore, promises to be a valuable substitute, by maintaining a continued evolution of chloroform in moderate quantity within the blood. Its action was most strikingly manifested in the present case, and, should the result be confirmed by further experience, chloral will prove of most valuable assistance in the management of these difficult and distressing cases.

There is, however, another point of view from which the present case obtains considerable interest. Clinical facts appear to demonstrate that a physical change in the tissue of some portion of the brain is at the foundation of chorea; but beyond this supposed physical change the powerful influence exerted by emotion over the course of the disease demands attention, and to this fact must be added the asserted agency of intense mental impressions, and especially of fright, in its production, and also the acceptance by many observers of distant irritation as a cause of chorea, particularly when seated in the generative organs or in the alimentary canal. I do not now enter into the discussion of the evidence upon which these opinions rest, but I would observe, with reference to them, that, so far as they are accepted, they seem to point to a probable change in the minute arteries of particular portions of the brain, effected by contraction of their circular fibres, as a means by which the supposed effects may be produced, employing for this purpose the analogy offered by the usual explanation of the epileptic fit; I must, however, add that they by no means negative the independent evidence which exists in favour of the presence of some physical change in the brain as the substratum of the whole.

Now in my present case, in addition to such a condition of the blood as would favour the deposit of fibrin in the minute arteries, according to Dr. Hughlings-Jackson's suggestion, we have also a "source of remote irritation," according to the other hypothesis, in the impregnated uterus; and on the other hand we observe that an agent which would exert a direct action in controlling arterial spasm, and which does actually check an epileptic paroxysm, rapidly removes all the severe developments of the chorea and reduces the case to the ordinary mild type, though it does not remove any of its essential characters.

It would not be safe to do more than make this suggestion in connexion with my present case; but the analogy which it affords, as well as other considerations, point to chloral as probably affording a useful remedy in those cases of epilepsy in which the status epilepticus is set up, and keeps the patient under the influence of a succession of fits. Puerperal convulsions and certain cases of the convulsions of children also fall into this category, and would probably be advantageously treated by chloral, which might be administered after an inhalation of chloroform in order to maintain its effects.

E. M., aged 21, a healthy vigorous-looking young woman, was admitted into the Birmingham General Hospital on October 29. She was nearly five months advanced in pregnancy with her first child. Choreic movements developed themselves from an unusually early period of gestation, almost from the beginning. It was asserted by her husband that she exhibited some irregular movements of the hands before marriage, but this assertion the patient most positively negatives. For the last three weeks, and especially for the last fortnight, the movements have become very violent, so that she was quite unable to stand, and was confined to her bed. They commenced in the left arm, and subsequently became general. Her eyes were "set," and the globes often "worked." She had difficulty in opening her mouth, and the masseters were observed to twitch. She quite lost the power of articulating, though she retained that of swallowing. Her sleep also was very much disturbed. She had never suffered from rheumatism, though a sister had been laid up with rheumatic fever. Her heart was healthy, her urine was free from albumen.

At admission she presented a very aggravated form of chorea, the limbs and trunk being tossed at intervals with frightful violence; articulation was practically extinguished, but she swallowed fairly; the pupils were contractile and of medium size; her mind was clear, but she was exceedingly emotional.

Full doses of bromide of potassium failed entirely, and her first night in the Hospital was passed with only an hour and a half of sleep. At noon, on October 30, Dr. Welch, our House-Physician, administered the hydrate of chloral, and during the ensuing twenty-four hours she took seven doses, the first two of ten grains, the succeeding ones of fifteen. The first two doses procured some sleep, but after the third the sleep became more continuous, lasting successively for three, five, and three hours and a half. Whilst she was awake, the movements, though occasionally violent, were much lessened, and she spoke distinctly; she was also able to protrude her tongue; she took liquid food.

Thirty grains of chloral at 6 p.m. on the 31st were followed by two hours' sleep, but pain, seated apparently in the uterus, kept her awake during the remainder of the night; the movements returned in the morning with much violence, chiefly in the trunk and extremities, speech was again interrupted, and she became much excited. Nutritive enemata were now ordered on November 1, each containing six grains of quinine, with cod-liver oil; and two doses of tincture of opium, of thirty and forty minims respectively, were also administered by the rectum, the chloral being suspended. Although she was quiet during November 1, the smallest excitement threw her into instant convulsion, and during the night, though feeling a great desire to sleep, she was unable to close her eyes. The uterine pain subsided.

On November 2, after twenty grains of chloral at noon, she slept with little intermission till 9 p.m., when the dose was repeated, and she slept through the whole night; she told us next morning that she had enjoyed more sleep during that night than she had through the entire preceding month. She was almost perfectly quiet; her pupils were of medium size and contractile. Pulse was 104. She laughed and was in good spirits, but complained of inability to chew. She again took two doses at 5 and 9 p.m. of November 3, and slept from the former of these hours until 2 a.m., with one interval of an hour and a half. We found her in the morning perfectly quiet, though a little fidgety, and her speech completely restored.

The same treatment on the evening of the 4th procured ten hours of nearly continuous sleep, and the sleep continued through most of the following day. She now began to feed herself. The following night (of the 5th) the remedy nearly failed to give sleep; but on the 6th a single dose was perfectly successful. On the 7th no chloral was given; the night was sleepless. A single dose on the evening of the 8th gave sleep through the entire night, and next morning she carried liquid food to her mouth, talked well, and protruded her tongue perfectly.

The chloral was discontinued on November 10. She had begun to walk, though in a very imperfect manner until November 25. She took every four hours fifteen minims of the tincture of hemp; she steadily improved in walking, and had good nights. From the 18th she began to sit up, and from December 3 spent a considerable part of the day out of bed, walking with fair facility, talking naturally, and presenting only the usual characters of a mild attack of the disease. She had emaciated partly, but otherwise was in good health. She left the Hospital on December 10, presenting only the symptoms of a mild attack of her disease.

INTRA-ABDOMINAL FIBROID TUMOUR ATTACHED TO THE RECTUS MUSCLE SUCCESSFULLY REMOVED.

By BAKER BROWN, Esq., F.R.C.S. Exam.,
Surgeon to the London Surgical Home for Diseases and Accidents of Women.
(Communicated by Dr. Beigel.)

Mrs. Q., of Vigo, in Spain, aged 36, married, has had three children, the youngest three years old. Fourteen months ago the tumour, then the size of a walnut, was observed, and some time afterwards an ineffectual attempt was made by the patient's Medical attendant, a Spanish Surgeon, to remove it by a crucial incision, dissecting back the flaps, after which it rapidly increased. On the recommendation of a former patient of mine at Vigo, she came over to this country to have it removed by me if I thought it advisable, and was placed under the Medical care of my friend Dr. Fraser. During my temporary absence from town, two eminent Surgeons and two or three Physicians in London were consulted, who all diagnosed the tumour as fibroid growing from the abdominal parietes, but, with the exception of Dr. Charles Murray, considered its removal as too dangerous to attempt. On my return to town I examined the case very carefully, without previously hearing the opinions of those who had already seen it. I found a tumour midway between umbilicus and pubes, about the size of a fœtal head of seven months, the lower edge of it but very little removed from the bladder when distended, movable within the cavity of the abdomen, but firmly attached to the parietes. My opinion was that it was growing from the abdominal parietes, of a fibroid nature, and that, as it was increasing rapidly, it would soon complicate the bowels, and, unless removed, terminate the patient's life in one or two years. I confess I certainly saw great difficulty in the way, but did not consider the operation an impossibility, and expressed my willingness to operate with the full consent of all parties concerned. It may here be remarked that the attempt to extract the tumour to which reference has been made only rendered the abdominal adhesions more firm. The operation was delayed a day or two on account of a cold from which the patient suffered, which a warm bath, however, much relieved, and another Surgeon's opinion was taken which was also unfavourable to the operation. On October 20, 1869, I proceeded to operate, assisted by Drs. Routh, Fraser, Holt Dunn, and Archer, chloroform being administered by Dr. Neale.

The patient was placed in the way usual for ovariotomy; the bladder was emptied; I then passed the catheter up to its fundus, and it was found that the lower edge of the tumour came down to within an inch of the bladder. I therefore carefully dissected down through considerable fat within this small space, until I could get my finger under the edge of the tumour, which was found to be quite free from adhesions to the intestines, although they were pressed upon by the tumour, but the base of the tumour adhered to the parietes and rectus muscle, from which it grew, the latter adhesions being so firm that it was quite impossible to detach them. I therefore carried out my original intention of cutting through the parietes about two inches from the centre by two elliptic incisions, meeting just near umbilicus. On the left side I came to a part of the rectus muscle which surrounded the side of the tumour; this I cut through. It was also found that a large piece of the omentum was adherent to the upper edge of the tumour; this, to the size of six inches by four, was clamped and burnt off by actual cautery. The tumour was then removed, and the wound closed by silver sutures. But one artery required tying. The operation occupied half an hour, during which time the patient was kept well under chloroform. She rallied well from its effects and had no sickness, was fed per rectum with beef-tea, and allowed to drink barley-water and toast-water. Altogether passed a good night, but was somewhat distressed by a return of the cough and bronchitic symptoms.

21st.—8 a.m: Is much the same; no sickness nor tenderness of abdomen; has passed water several times in small quantities during the night; ordered a mixture of phosphoric acid and tinct. camph. co. for cough, which became somewhat relieved. 9 p.m.: Not quite so well; bronchitis has considerably increased; neither tenderness nor sickness; has taken a little tea by mouth. Ordered a mixture of sulphurous acid.

22nd.—10 a.m.: Doing well, with the exception of the bronchitic symptoms, which continue unabated; was disturbed during the night by rattling of mucus and constant cough. Ordered to continue the medicine. Afternoon: Very much worse in every way; bronchitic symptoms increased; later in the day had a little sleep, and rallied. 9 p.m.: Slight tenderness of abdomen, and dulness in one spot at the lower edge of the incision. Lowest suture removed and probe introduced, some fœtid pus being thus set free. A piece of elastic catheter was then introduced into the opening and kept there to drain off the pus.

23rd.—2 a.m.: Is much worse; frequent vomiting; abdomen tympanitic and tender. 7.15 a.m.: Much the same. Ordered five grains of quinine to be taken in port wine, afterwards in champagne, and a hot linseed poultice to be applied over all the abdomen. 8.30 a.m.: Is still about the same. Ordered egg and quinine to be added to the beef-tea as an injection. 11 p.m.: Much vomiting; pulse 112, soft.

24th.—10 a.m.: Very much better. Has passed a good night; slept six hours, three at one time; skin moist; a small quantity of very offensive pus discharged from the opening. 10 p.m.: Not quite so well; has taken but little nourishment; injections of beef-tea continued.

25th.—10 a.m.: Is very much better; has passed a good night, and taken plenty of nourishment. First indication of healthy pus. Ordered a mixture of phosphoric acid and bark. 9 p.m.: Large quantity of healthy pus discharged, still slightly offensive, but not so bad as before; pulse 100. Ordered to continue the mixture.

26th.—10 a.m.: Not passed so good a night; cough very troublesome; expectorated a large quantity of mucus. Notwithstanding cough and considerable rattling, has had four or five hours' sleep. Bowels rather relaxed, deep dark brown evacuations; the swelling of the abdomen has not increased; bronchitic symptoms abating. The menstrual period has continued the last two or three days.

27th.—Is greatly improving; bronchitic symptoms very much better. From this time the patient rapidly recovered, the wound being assisted by strapping the abdomen every morning and evening with adhesive straps spread on leather. It healed in the fourth week, and by good and free living the patient was enabled to leave London, on December 10, for Vigo, where she arrived after four days safely and well.

The tumour, which weighed twenty ounces, has been examined microscopically, when its structure was found to be of a fibroid kind, exhibiting no other appearances than those usually found in growths of that structure.

LIGATURE OF THE EXTERNAL ILIAC ARTERY FOR FEMORAL ANEURISM.

By J. FAYRER, M.D., F.R.S.E., C.S.I.,
Professor of Surgery, Medical College, and Senior Surgeon of the Medical College Hospital, Calcutta.

(*Concluded from page* 8.)

September 23.—Does not look quite so well to-day. Pulse 96. Complains of pain in the tumour and along the course of the femoral artery, and also in the left testicle. The discharge is healthy and decreasing in quantity. I found that, notwithstanding the strictest prohibition, he has been getting out of bed to go to the night chair. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98·1°, 98·4°; left ham, 97·1°, 95·4°; right ham 96·1°, 95°; left toes, 96°, 93°; right toes, 95°, 92°. He says that the left leg now feels to him warmer than the right. There is still some numbness in the foot and ankle, and along the shin. He has been cautioned not to get out of bed again. He had some brandy yesterday in addition to his wine. This did not agree with him, and is prohibited.

24th.—Tongue clean; slept well; pulse 88; wound healthy. Still has pain in the tumour and along the course of the femoral artery, but rather less than it was. He had no opium either yesterday or to-day. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·4°, 99°; left ham, 97·4°, 96·4°; right ham, 97·4°, 97·4°; left toes, 93·5°, 91°; right toes, 93·6°, 89°. He says he has an odd sensation as though the toe nails of his left foot were loose.

25th.—Pulse 96, but no fever. Wound looks very healthy, and the discharge very slight. There is less numbness in the foot. The tumour and the femoral artery are less painful than they were. Temperature the same as yesterday. He says he feels very well.

26th—Feels well; slept well; tongue clean; bowels open. Pulse 86. Very little pain in the wound. The leg feels better, but is still rather numb about the foot. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98°, 98·4°; left ham, 96·4°, 96·4°; right ham, 94·8°, 95·3°; left toes, 96°, 91°; right toes, 94°, 87·6°. Thus the affected limb keeps at a higher temperature now than the sound one.

27th.—Looks well; tongue clean; bowels regular; pulse 88; wound healthy; discharge diminishing. There is still some numbness in the foot and toes. There is very slight pain in the tumour, which is gradually shrinking in size. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98·8°, 97·8°; left ham, 97·2°, 96·4°; right ham, 96·8°, 95°; left toes, 93·8°, 91·4°; right toes, 93·4°, 90·5°. The affected limb thus maintains a higher temperature than the other. The cotton packing of the foot and limb may now be discontinued. The flannel bandage may be continued as a support to the limb.

28th.—Doing well; still some numbness in the foot; wound looks healthy; no pulsation can be felt in either tibial. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98°, 98·6°; left ham, 96·1°, 96·5°; right ham, 96·1°, 96·2°; left toes, 91·7°, 92°; right toes, 91·2°, 91·3°.

29th.—Says he has more pain in the foot and toes and shin of the affected limb, and that it is of a burning character; otherwise all seems to be going on as well as usual. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·2°, 98·6°; left ham, 97·2°, 96·6°; right ham, 97·1°, 96·2°; left toes, 95°, 93°; right toes, 95·6°, 92·4°. He attributes the pain in the leg and foot to removal of the cotton. Let it be re-applied.

30th.—Tongue clean; pulse 92. Leg feels much the same as yesterday; bowels open; slept well; tumour still slightly painful. The ligature on the iliac artery came away to-day—it was loose in the wound. It separated, therefore, on the fifteenth day. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·6°, 98·2°; left ham, 98·5°, 96·3°; right ham, 97·7°, 96·4°; left toes, 96·7°, 95°; right toes, 95°, 94·4°. The temperature is now nearly equalised in both limbs.

October 1.—He is doing well, the wound is rapidly healing, and the discharge diminishing. I may remark that the healing of the wound has been somewhat delayed by the skin having ulcerated at the points of suture. It is now rapidly closing in with healthy granulations. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·2°, 98°; left ham, 98·2°, 96·5°; right ham, 97·2°, 96°; left toes, 96·4°, 95°; right toes, 95·4°, 96·4°. The affected limb is still a degree warmer than the other. There is still a little numbness in the toes, instep, and foot. Tumour still slightly painful. Pulse 88.

2nd.—Pulse 88; did not sleep well; suffered from griping pains in the bowels, and pain in the wound from 6 p.m. to 4 a.m. The leg, he says, "felt as though it were on fire." This was relieved when the bandage and cotton were removed. The wound looks well, but not so florid as yesterday. The discharge of a dirty yellow colour. Bowels acted twice in the night. He had a sedative draught. The pain has now passed off, but there is still some in the leg and foot. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·8°, 98·2°; left ham, 98·4°, 95·6°; right ham, 98·6°, 96·2°; left toes, 94·8°, 90·6°; right toes, 95°, 92°. The temperature of the affected has fallen again below that of the sound limb. His tongue foul, and bowels probably out of order. A dose of ol. ricini ordered.

3rd.—He feels better; slept well; pulse 88. Only slight pains with numbness in the foot. No pain in the tumour, which is certainly much smaller. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98·4°, 97·8°; left ham, 96°, 95·4°; right ham, 96·1°, 96·5°; left toes, 93·4°, 86·8°; right toes, 94°, 87°.

4th.—Doing well; slept well; no pain. Pulse 88. Foot still rather numb. The wound looks very healthy; it is rapidly closing in. Temperature at 4 p.m. yesterday and this morning respectively: Axilla 99°, 99°; left ham, 96·6°, 95·7°; right ham, 96·8°, 95·7°; left toes, 91·8°, 90°; right toes, 92°, 88°. The temperature of the limbs is again nearly equalised.

5th.—Doing well; slept well; tongue cleaning. No pain in the leg; still some numbness in the toes. No pain in the tumour, which has not changed during the last two days. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 99·5°, 98·4°; left ham, 98°, 93°; right ham, 98·2°, 92·4°; left toes, 95°, 91·1°; right toes, 95·3°, 90·3°.

6th.—Tongue cleaning; no pain in the limb; still some numbness in the toes; no pain in the tumour or in the wound. It is three weeks to-day since the operation was performed.

7th.—He is doing well; slept well; no pain, but some numbness in the toes, and a feeling of soreness across the instep. The wound is healing rapidly. Temperature at 4 p.m. yesterday and to-day respectively: Axilla, 99·4°, 98·2°; left ham, 96·8°, 94·4°; right ham, 97°, 94·5°; left toes, 95°, 87·8°; right toes, 96·5°, 89·2°.

8th.—The night was very stormy and wet; the weather has affected him, and he has much pain in consequence. Tongue clean. Pulse 94. Temperature at 4 p.m. yesterday and this morning respectively: Axilla, 98·4°, 98·6°; left ham, 97·2°, 96·5°; right ham, 97·6°, 96·2°; left toes, 93·4°, 93°; right toes, 93·8°, 93·4°. The temperature of the limbs is thus about equal. The wound is closing rapidly.

10th.—Doing well; no pain; still some numbness in the toes. Temperature this morning: Axilla, 99°; left ham, 94·4°; right ham, 93°; left toes, 91·8°; right toes, 92·5°. Pulse 96. Eats and sleeps well.

11th.—Doing very well. Sat up in a chair, and walked a little yesterday; slept well. Pulse 84. Had pain in the testicle after walking. Temperature this morning: Axilla, 99·2°; left ham, 95·6°; right ham, 95·8°; left toes, 91·6°; right toes, 91·6°. The temperature of the limbs is now equalised. Wound all but healed.

12th.—Walked into the next ward. Pulse 88. Temperature: Axilla, 98°; left ham, 96°; right ham, 96·4°; left toes, 91°; right toes, 91·4°. Still some numbness in the toes.

15th.—I have not seen him for two days. He has been doing well; general health very good. The temperature of the limbs equal. He walks about freely. The tumour has almost disappeared.

21st.—Temperature of the limbs equal; he walks with ease. There is a point of the wound still unhealed, but otherwise he is quite well, and is very anxious to leave the Hospital.

24th.—He is very well, walks about the ward freely. His strength is rapidly returning. There is still a vestige of the tumour remaining, but it gives him no pain. He says that in walking there is still a little numbness in the toes, but he feels quite well, and fit for his work.

26th.—We could not persuade him to remain any longer. He left yesterday, apparently quite cured. No pulsation could be felt in either of the tibials of the affected limb; a slight thickening only indicates the site of the former aneurismal tumour. The temperature, size, and strength of the legs are equal. There is no tendency at present to hernia at the seat of the wound.

He was admitted on September 10. The artery was tied

September 15. The ligature came away September 30. Discharged cured, October 25.

November 16.—I heard of him to day that he had resumed his occupation and is quite well.

SCIATICA: ITS IMMEDIATE RELIEF AND RAPID CURE BY HYPODERMIC INJECTION OF MORPHIA.(a)

By HENRY LAWSON, M.D.,
Assistant-Physician to St. Mary's Hospital.

(*Continued from Vol. II.* 1869, *page* 681.)

Causes of Sciatica.(b)

As yet we have no very precise knowledge on this head. We know enough, however, to establish the provisional statement that the exciting circumstance is generally either exposure to cold and wet or extreme exertion of the limb, and that these are in many, but by no means in all, cases preceded by general innutrition of the tissues or by severe mental labour or intense nervous shock. It has been urged that, from the position of the nerve, it is pressed upon in sitting, and that hence prolonged sitting is to be regarded as a cause. I cannot imagine that this notion is urged in seriousness; it is so palpably without foundation and so manifestly in opposition to the facts both of anatomy and disease. Firstly, the sciatic nerve is certainly not so placed that in the sitting position it receives any unusual degree of pressure. Secondly, we do not find among women, who admittedly are more habituated to sedentary life than men, that sciatica is more frequent than in the latter; indeed, it is, as I have stated, just the opposite. How the pressure doctrine would affect cranial neuralgias I should not care to speculate, but if the notion have anything in its favour, the chimney-pot hat, which presses so unpleasantly on the frontal region, ought to prove a fertile cause; yet I fear facts are against it.

Excessive sexual indulgence is often said to be provocative of sciatica, and the connexion between the vascular apparatus of the reproductive apparatus and the lumbar plexus is adduced in explanation, but I must say that I think it is "not proven." I have given careful attention to this point, and have made it a subject of special inquiry, but without eliciting anything in its support. It would be absurd to deny that unusual exercise of the generative organs must tend to diminish the general force of the body,(c) and that, when persisted in for any length of time, it must considerably debilitate the system, and thus perhaps conduce to a diseased state of some part of the body (the nerve-ends or others) by depriving it of the pabulum by which it is enabled to maintain its normal standard. But when we have said so much I think we have admitted all that can justly be asserted. The history of most cases, so far as we can gather it, is opposed to the view that excessive sexual indulgence is a cause of sciatica, and for this reason alone I reject the hypothesis. We cannot be too careful in drawing positive conclusions from data which may be evoked in support of a multitude of conflicting theories. There are a very large number of human beings who are addicted to certain definite habits, as excessive smoking, drinking, or copulating, and these at some period of their lives fall under our care as patients; but in such cases to educe the cause of the ailment on the *post-hoc* principle would be, I fear, a process not calculated to add much to our knowledge of disease. Such a method is really little better than guess-work. As Mr. Paget ably pointed out in his introductory address this session to the Clinical Society, the study of coincidences, as pursued by Mr. Darwin, is a grand field of Medical research, but such coincidences as those to which I refer were not, I apprehend, those which he had in his mind.

In regard to mental anxiety, shock, and intemperance as causes, my opinion is the same as that I have already expressed. They may all lead up to sciatica, just as they may lead up to any other affection of the body, but not as direct or immediate factors in the production of this disease. They primarily affect the digestive system, and then it is the old story of the "Belly and the members." They tend to diminish the force-productiveness of every tissue, and then some accident (some cause we do not yet know of) occurs, and, like the last straw on the camel's back, determines the particular tissue which is to yield. And in regard to intemperance I would remark *en passant* that the drinkers of tea and beer, who are much more subject to gastric catarrh than spirit drinkers, are also the more likely subjects of sciatica.

In concluding this section, I must confess that I *think* there are only two direct causes of sciatica: exposure of the limbs to cold, and over-exertion, especially the former. It may be that ere long we shall learn more upon this point, but, so far as I have been able to ascertain, these are really the only *immediate* circumstances which bring on attacks of sciatic pain. Cold may produce sciatica, either in the form of dry cold or wet cold. That is to say, that the exposure of the thighs for hours to cold air, particularly draughts, or to cold produced by the slow evaporation from clothes saturated with wet, is very likely to bring on the disease. Indeed, this is the history of nine-tenths of the cases we meet, whether in private or Hospital practice, the remaining tenth being due, we may say roughly, to over-exertion of the muscles; and, if we look to the occupations of sciatica-patients, we shall find that the affection is found generally among sailors, cabmen, 'bus-conductors, pedestrians *par excellence* (who have fallen into low health), men who take much horse-exercise, waiters, City men who ride into and out of town on omnibuses, potboys, and suchlike. But in all these, so far as I am acquainted with the history of the patients, the immediate cause, the most striking circumstance which preceded the pain by a comparatively short interval, is cold or over-exertion of the limb.(d)

Diagnosis.

It may, perhaps, strike some of my readers that the diagnosis of sciatica is so simple a matter that it hardly deserves even a passing notice. I feel, however, that it is not always so easy a task to be able to say in a certain case that sciatica is or is not the disease present, and yet how important a point it is! I know of a case of sciatica—and of sciatica quite uncomplicated—where some of the first Physicians and Surgeons in England came to totally different conclusions in diagnosis, the Physicians asserting that the case was sciatica, and the Surgeons—with one notable exception—contending that the disease was one essentially of a Surgical nature. Fortunately for the patient, the Physicians carried the day. The difficulty which presents itself in diagnosis is this one—that the only leading symptom is pain. But while a difficulty it is also an advantage; for, if all the other evidence is negative, we are tolerably sure of the disease we recognise. It is the establishment of the negative evidence which renders the diagnosis a matter of some trouble, and requiring considerable care. For, as the pain in a supposed case may possibly proceed from certain changes which do not at first strike the eye, it is necessary to make a very careful examination of the patient before we form our opinion. If we could always find pain along the line of the nerve and discover tenderness there on pressure, our course would be simple. But in recent cases particularly, this is not so. The patient may express rather vaguely the direction of the pain, and the tenderness may be, and probably is, absent.

The pain, then, may be due to any of a multitude of diseases. Firstly, it may be owing to some injury to the thigh from external violence, and if so, its origin will soon be determined. Secondly, it may come from hip-joint or knee-joint disease generally, or from rheumatism affecting either of those articulations. Thirdly, there may be disease or injury of the spine or spinal cord. Fourthly, it may be connected with aneurism of some of the iliac or other large vessels, or with some abdominal tumour which presses on the plexus of nerves within the trunk. Fifthly, it may be a vague syphilitic pain; and, sixthly,

(a) It may be as well to state that in advocating the method of treatment described in the following article I lay no claim whatever to originality. I merely give the results of my experience of a remedy which is as simple as it is effective. The application of the syringe to the hypodermic method we owe, I suppose, to Hunter and Wood. The hypodermic administration of morphia in sciatica was urged by Dr. Blakiston in these pages nearly fifteen years ago. It is too much the custom now-a-days to father upon a writer the discovery of a remedy or plan which he has merely taken secondhand from another, but which he may have been more successful than his predecessor in popularising; and writers themselves too frequently encourage the mistaken inference. This has happened so often of late that one almost despairs of that moral regeneration in Medical writers which leads to the discrimination between reticence and candour.

(b) I have intentionally omitted reference to the existence of a bowel overloaded with fæces, as such a case does not come within the category of sciatica.

(c) This is the more readily intelligible if the doctrine of pangenesis be admitted. In constant demand for semen, and therefore draught of gemmules, those parts which from anterior circumstances can least afford to supply those gemmules will be the first to suffer. This, however, is at best only a speculation.

(d) I have had a few cases in which the pedal of the sewing-machine was accused of producing the pain. The fact is of interest; but as the cases were those of milliners, who now nearly all use the machine, it is impossible to lay much stress on the charge in so small a number of instances from so large a class.

it may be the consequence of disease of the sacro-iliac synchondrosis, an affection extremely rare, but which is nevertheless to be met with occasionally in acrobats.

It is by a process of analysis by which we successively exclude all the above-mentioned diseases that we arrive at the conclusion that sciatica is present; and it will be well in all cases to make such an examination as shall justify us in putting them aside. It need not take long, if it be pursued systematically. The general history of the patient's previous health will soon determine whether we have got either syphilis or rheumatism(e) to deal with. Hip-joint disease is more likely than anything else—in its early phases—to be confounded with sciatica, and though I have not seen a case of hip-joint-disease treated for sciatica, I have met with two cases of the converse. The distinction is almost too well known to require notice. Let the patient be placed on his back; then, grasping the foot of the affected limb firmly, thrust the limb upwards against the joints (both of knee and hip), the thigh and leg being kept extended; if this causes a deep penetrating pain, be assured there is something more or something else than sciatica present. Next turn the patient on the unaffected side, and, with the little-finger-side of the closed fist, strike a few sharp blows on the head of the bone, and if this is complained of as causing deep pain it is equally certain that there is more wrong than is involved in sciatica. If these operations are unheeded by the patient, we may leave the idea of hip- or knee-joint disease out of the question. The problem now is to find whether the column or cord is morbid, or whether there is abnormal internal pressure. Suppose we take the latter first. If the pressure be caused by aneurism or any solid tumour of the soft parts, its recognition in the early stages may not be easy. The bruit(f) in the one case, and the result of palpation and manipulation in the other, will afford some help, but the probability is that in these early stages the pressure would be too slight to give rise to any pain which could be regarded as sciatic pain. Should the tumour, however, have reached a size which would tend to make it compress the nerves, we should have paralyses displaying themselves; and we should find so considerable an amount of venous engorgement in the limb as at once to excite our suspicions, besides, of course, the other well-marked indications of such morbid states. Assuming, then, the absence of these appearances and symptoms, we should be justified in concluding that internal pressure was not the cause of the pain.(g)

Injury or disease of the spine or cord might at first be confounded with sciatica, but only at first sight. The existence of extreme tenderness over the vertebræ and of pain in the back, or the presence of grave and characteristic nervous symptoms, as paralysis, formication, spasm of muscles, hyperæsthesia, and so forth, afford sufficient landmarks for our guidance. The absence of all the foregoing indications, then, would leave us nothing to mislead our diagnosis save that rare disease to which I have referred — viz., *sacro-iliac synchondrositis*. In this affection the seat of pain, and markedly the seat of tenderness, are very nearly the same as in some cases of sciatica, but here we should have an absence of tenderness in the lower part of the course of the sciatic nerve, and the progress of the case would decide our opinion. If inflammation of the sacro-iliac synchondrosis were going on, it would soon end either in resolution or suppuration, and in either case we should very speedily learn that we had not to do with sciatica.

But supposing we have made such an inquiry as justifies us in excluding all the conditions to which I have above referred, then do I think—so far as my knowledge of the disease now extends—that we need have no hesitation in pronouncing the case to be one of sciatica pure and simple. But should we have been unable to exclude the evidence of those other conditions, or should we have neglected to make so careful an investigation as that I have briefly sketched out, I am certain that it would be premature, as it might be also dangerous, to pronounce a definitive opinion.

(To be continued.)

(e) I need hardly remind the reader that by rheumatism I mean chronic rheumatism, and that I imply the existence of distinct enlargements in the joints and a decidedly abnormal state of the urine (which in true sciatica uncomplicated by severe digestive disorder is not present). Nor need I mention the fact that the "rheumatics" of popular parlance, and indeed of a few of our Professional brethren, is too often either sciatica or brachialgia.

(f) It is to be questioned how far the mere presence of bruit is to be regarded as indicative of vascular constriction and enlargement. The recent ingenious experiments of Heynsius and Harting are of great interest in this respect.

(g) I have omitted mention of retained fæces, which is sometimes alleged to cause pain in the limbs, as I fancy its recognition is palpable. I have also omitted a possible difficulty—that presented by a sharp bony growth projecting from the bed on which the nerve rests. Such a growth might produce irritation of the nerve, and yet might be impossible of recognition at the outset. The progress of the case under treatment would probably afford some clue.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

CASE OF PALSIES OF SEVERAL CRANIAL NERVES, INCLUDING THE NERVES TO THE LARYNX, ALL ON THE LEFT SIDE—WEAKNESS OF THE LIMBS OF THE RIGHT SIDE.

(Under the care of Dr. HUGHLINGS-JACKSON and Dr. MORELL MACKENZIE.)

The following case has many points of interest, but we note it chiefly as an illustration of the use of the laryngoscope in cases of disease of the nervous system. We have previously published cases with the same object (December 15, 1866), and in those cases, as in this one, the laryngoscopical examinations were made by Dr. Mackenzie. The probability is that the patient is suffering from syphilitic disease involving nerves leaving the pons and medulla on the left side, and encroaching on that side of the pons. Without the laryngoscope the aphonia might be taken as some evidence of syphilis, but Dr. Mackenzie finds that the larynx, like the face, is suffering from paralysis of some of its muscles, and not from local structural changes. The diagnosis, or rather the inference, of syphilis rests on existence of numerous palsies of cranial nerves. The fact that these palsies are all on one side does not negative that inference, but may make some suspect that the disease is malignant.

For the following notes we have to thank Mr. G. Ernest Herman:—

James D., aged 28, was admitted October 26, 1869, under the care of Dr. Hughlings-Jackson, who sought the co-operation of Dr. Morell Mackenzie in the investigation of the case. The patient had had a "sore throat" four years ago; it lasted two months. Excepting this, there was no other historical evidence of syphilis, but the patient said he had had a "running" two years ago. Probably he had a chancre then, as there is now a scar on the upper part of the glans where it joins the prepuce. There are no nodes on his shins, and there are no nodules to be felt in his testes.

About a month after his admission he had a rash, but it was obviously urticarious, and not syphilitic.

There is no enlargement of the spleen nor of the liver. The urine contains neither albumen nor sugar. The patient seems fairly healthy, and takes food well.

He had had thickness of speech three months, and during the last two months had had numbness of the right arm and leg, and had been unable to do his work. It seems, however, that there was a sudden ingravescence; the decided palsy of the limbs seems to have come on in one night, as he went to bed as well as usual, and next morning could not walk downstairs. On November 20 Dr. Hughlings-Jackson dictated notes, which are embodied in the following report along with subsequent observations, by himself and Mr. Herman, so as to give the patient's present condition. *Smell:* The patient's sense of smell was believed to be blunted, but was not lost. He had never had discharge from the nose. *Sight:* The pupils were not abnormally small, but the right was a trifle smaller than the left. There was complete palsy of the left sixth nerve, but of no other ocular nerve-trunk. It was observed, however, when the patient was examined by the ophthalmoscope, that the *right* eye oscillated a little. The fundus in each eye was normal. *Fifth Nerve:* The left temporal and masseter muscles are seen to be slightly wasted, and the left masseter acts less vigorously when the patient is told to "grind his teeth." There was diminished sensation of the same side of the face. There is diminution of taste on the left side of the tongue. Mr. Herman made the interesting observation that the left side of the tongue is furred, but not the right side. People who have tender teeth are often obliged to eat on one side, and then there is unilateral furring. This patient has no tender teeth, but he eats on the right side, doubtless because his masticatory muscles and cheek are paralysed on the left. *Face:* The whole of the superficial muscles supplied by the

left portio dura nerve were weakened, but not completely paralysed. *Ear:* He could hear the watch apparently well on each side, but he said that he could hear it better on the right side. He had never had any discharge from either of the ears. Mr. Charles A. Howard examined the ears, but the patient's replies were contradictory. Mr. Howard, however, reported that there was no Eustachian obstruction and no apparent tympanic disease. It was remarked that on the introduction of the Eustachian catheter on the right side, a good deal of sneezing, snifting, etc., was produced. No uneasiness was produced by its introduction on the left side. *Tongue:* The tongue in protrusion turned to the left side, and there was wrinkling of the outer half of this side. By voluntary effort he could turn it further to the right than to the left. *Palate:* When saying "Ah," the spatula holding down the tongue, the curtain of the palate, in rising, puckered a little to the right of the median line. *Larynx:* Dr. Mackenzie reported that the mucous membrane of the larynx was healthy, and there was no alteration in the form of its various parts; but both the abductor and adductors of the left vocal cord were paralysed, so that the cord neither approached to the median line on attempted phonation, nor was thrown outwards in inspiration, but remained in an intermediate position under all circumstances. In consequence of this inability to close the glottis, there was of course aphonia and an inability to cough in the usual manner. The object of the latter act was effected by a kind of prolonged hawking. The action of the right vocal cord was normal. *Limbs:* The right limbs were weak. He could grasp with the right hand, but with less force than with the left. He walked with very great difficulty, and it was believed that the left leg was weakened, although not so much as the right. There was diminution of sensation in the right limbs. Mr. Herman used the compasses with the hope of ascertaining the degree of diminution of sensation, but the patient's replies were vague and contradictory.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

DISLOCATION OF THE LEFT FEMUR ON TO THE DORSUM ILII—REDUCTION BY MANIPULATION.

(Under the care of Mr. A. W. NANKIVELL.)

W. H., aged 10, living in Chatham, was brought to the Hospital on November 16, 1869. The boy stated that whilst jumping over a hedge his right foot caught in the briers, and he came to the ground with the left leg extended, the whole weight of the body being thrown upon it. Being unable to walk, he was carried to a neighbouring house, and was taken to the Hospital two hours later.

On admission the injured limb presented all the appearances of dislocation of the femur on to the dorsum ilii. In addition, the boy being not very stout, the head of the femur could be distinctly felt in its abnormal position. Chloroform having been fully given by the Assistant-Surgeon, Mr. W. P. Adams, Mr. Nankivell, before applying the pulleys, determined to try the effect of manipulation. He accordingly forcibly flexed the thigh on the abdomen, at the same time abducting the limb and rotating it outwards. This plan was almost immediately successful, for the dislocation was reduced with a snap plainly audible to the bystanders. A long splint without a perineal band, as no extension was required, was now applied and kept on for three weeks, at the end of which time the boy was able to move his thigh freely about in bed. A day or two later he was allowed to get up and walk about, and when doing so did not complain of any pain, and was very slightly lame. Discharged well December 15, 1869.

I CANNOT help expressing my opinion that Medical science has still a wide field lying before it unexplored. At no very distant period, I believe, Medical treatment will become precautionary instead of remedial. Armed with his microscope and spectroscope, the Physician (I use the term in its highest sense—"the student of Nature") will be able to announce the approach of all kinds of zymotic disease by detecting and analysing the various organisms, metals, and gases contained in the air, and, for aught I know, may be able to discover and provide a remedy for the incipient disease of a patient by analysing a portion of his breath.—*From an Inaugural Address at the Winchester Natural History Society, by the Rev. C. A. Johns, B.A., F.L.S.*

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Medical Times and Gazette.

SATURDAY, JANUARY 8, 1870.

CALOMEL VINDICATED.

IT is needless to say how much the Medical Profession was vituperated some years since for its alleged misuse of calomel, especially in the diseases of children. It was asserted in some quarters that if children were delicate and ill nourished; if their bones and joints were weak; if they were weedy at puberty; and, above all, if their teeth decayed early, that these evil results were due to their having been drugged early in life with that pernicious mineral, mercury, in some of its forms.

The main fact, which was overlooked by the makers of these accusations, was, that some children are born delicate, and that, being delicate, they are more liable than other children to a variety of derangements attended with disorder of the digestive organs and feverishness. Screaming and restlessness at night, headache, pale motions, and fits of sickness, with ejection of green acid matter, are about the commonest forms of these derangements. It was discovered that a small dose of calomel presented by far the easiest and most agreeable method of treatment, for it acted speedily on the bowels, and could be administered without the struggling and nausea caused by more bulky and disagreeable drugs. It is quite certain that children were made to take calomel because ill, and were not made ill originally by taking calomel. There is not an atom of evidence to show that any of the evidences of delicacy at puberty were caused by the calomel, for the teeth of such children as we have described will decay whether they take calomel or not. The real objection to calomel was, that, being so powerful and sure a remedy for the getting rid of the ill consequences of cold and improper food, parents were tempted to neglect hygiene, and to take less pains against their children becoming ill, because they had in calomel so rapid a means of making them well again.

Anyhow, there is no doubt that there is a great decrease in the use of calomel in the nurseries of people of the better classes, especially amongst the fanciful and overeducated. The parents are panicstruck at the use of a drug which has a bad name, and the Medical Practitioner attains his end by other means, though he knows very well that if there is real danger to life he has his old sheet-anchor to trust to. Meanwhile there is solid gain in the fact that both parents and Doctors pay more attention to diet and management.

But it is worthy of notice, and is an irrefragable evidence of the value of calomel, that whilst in the upper classes parents and Doctors restrict themselves in the use of it, the middling and lower classes use it of their own accord to a large extent in the form of Steedman's and Stedman's Soothing and Teething Powders, an analysis of which is before the readers of the

Medical Times and Gazette. In almost every country village, the *materfamilias* trusts to Stedman (or his homonym, Steedman—we know not which is the "only original") in the feverish attacks of her babies. She has proved by ample experience that the half-grain of calomel lowers the pulse, relaxes the skin, and relieves the inflamed gums, by giving vent to the abdominal secretions—in fact, the *vox populi* vindicates the practice of our fathers; and though we try to do without calomel so far as we can, and to render it unnecessary, yet we claim that that practice was rational and harmless in good hands and vindicated by experience.

THE SANITARY CONDITION OF WAKEFIELD.

A REPORT has just been made to the Medical Officer of the Privy Council, as to the sanitary condition of Wakefield, by Mr. John Netten Radcliffe, which is sufficiently worthy of general attention. It reveals a condition of matters at once so shocking, and so dangerous to the public health, that the sooner steps are taken to do away with the evils complained of the better, not only for the inhabitants of Wakefield, but also for all those whose health depends on that of their neighbours. It is useless to insist on compulsory vaccination, and the extension of the Contagious Diseases Act, if slums like those described by Mr. Radcliffe are permitted to exist in the centre of large communities. Be whatever disease there may prevalent, it is sure to find a suitable nidus in such regions—their inhabitants form its first prey; but, growing stronger by each successive attack, it is liable to abandon these congenial quarters, and to attack those whose sanitary surroundings are more wholesome, but whose proximity to the original focus of infection renders them liable to such attack. To deal with one set of infectious disorders and to leave another set, equally remediable, to work their own sweet will would be the height of folly; and the first step in the right direction is to get rid of centres of infection such as exist in Wakefield.

Wakefield itself is one of the manufacturing towns of the West Riding, and has in its neighbourhood two large public institutions, a lunatic asylum and a gaol, both above the average dimensions. It is situated on the banks of the Calder, which, like most streams in the same part of the world, is black as ink and filled with disgusting refuse. Some parts of the town lie low, its drainage is extremely partial, and the refuse is mostly collected in middens and privies. This refuse can only be got rid of occasionally. The local health authorities (who seem grossly in fault) have entirely neglected any provision for its removal, and have in some cases used the powers granted them in a most arbitrary and objectionable way. Not doing their own duty, they would insist on other people doing more or less than theirs, the result being what Mr. Radcliffe makes known to us. The state of matters is so incredible that we prefer making certain extracts from Mr. Radcliffe's report to using any language of our own. Of one set of cottages he writes thus:—

"In each of the cellars of these six cottages (and the condition was said to be common to the unoccupied as well as the occupied cottages) there were from 6 inches to 8 inches depth of water. This, I was told by the inhabitants, was the ordinary state of the cellars. With perverse ingenuity the proprietor has placed a pump at the extremity of the cottages nearest the street, by means of which the water can be pumped out of the cellars. But as to dry the cellars in this manner entails no small amount of labour upon the occupants of the cottages, the pump is rarely had recourse to. The yard is not drained opposite these cottages except by the surface, and even the arrangements for surface drainage are most defective. Slops and other liquid refuse lodge in an imperfect channel opposite the cottages, and here and there spread out into filthier puddles, not the less offensive and indicative of neglect that they have been partially hidden by boulders."

Of another yard he says:—

"Beyond this cottage is a small open unpaved space, sodden with filth, littered with rubbish, and in which privies and a middenstead are placed, both the former and the latter in a foul state. The exit of the surface drain within this space was choked, and a pool of liquid refuse had formed above it. The stench from the privies and midden was said to be well-nigh unbearable at times."

Then again:—

"At the extremity, furthest from the entrance, privies have been built with shallow pits; but they have never been used. They were disapproved of by the Local Board of Health, and closed. In place of them, and with the approval of the Local Board, the fifth cottage on the north side has been converted into a privy in the following fashion:—The entire front has been taken out, and the upper chamber floor removed. Upon the stone flagged floor of the lower room, a privy of four separate compartments has been erected, each compartment with a single aperture, corresponding with apertures in the floor below. The privy is arranged at right angles to the former front of the cottage, and behind the structure the flooring has been cut away, so as to give access to the cellar beneath, converted by this arrangement into the privy-pit and middenstead for the yard. Anything more revolting and wrong-headed than this arrangement it would be difficult to conceive. Properly to cleanse the cellar is impossible; and to have converted it to its present use, regardless of the foundations of the neighbouring cottages, cannot be justified."

There is a description of one of the sources of the water supply of Wakefield.

"Above the dam the ponded water is simply ponded sewage, with the added refuse of various manufactories, dye, and other works, which pour into the beck streams of many-coloured and various stinking abominations. Below the dam, where the stream runs out into the fields, and in its course through them, the bottom is littered with stones and rubbish, and where visible through the sewage (it would be a libel to term the liquid water) is covered with a thick layer of foul slime. About midway, between the Chald Beck and the houses at the south-west extremity of Kingsgate, 'The Ings,' the drainage of a large cattle market is poured into the stream. But even this does not fill up the measure of abominations of this water-course. It is not until the Ings is reached and traversed that these culminate. Standing on a newly built bridge which crosses the beck near the railway, and looking towards the mouth of the stream, eyes and nose are assailed with a combination of noisome smells and disgusting sights which language fails me properly to describe. Even in broad daylight people are seen easing their bowels into the beck which afterwards supplies them with drinking water."

Bad as the town is with regard to drainage, or rather no drainage, its water supply is still more objectionable. This is derived from the Calder four miles *below* Wakefield, consequently containing all the impurities contributed by that town, as well as those higher up the stream, including the delighful Ings Beck above alluded to.

Of the water supply, Mr. Radcliffe writes:—

"Wakefield adds a not inconsiderable quota of abominations to the already offensively defiled stream. Immediately above the bridge from the mouth of the Ings Beck, and immediately below from the outlet of its main drainage, the town pours into the current, conspicuously to sight and smell, its own especial collective streams of nastiness. Seeing or knowing this, it is not to be wondered at that many of the inhabitants have an insuperable repugnance to use for drinking purposes water taken from the river four miles only below the bridge, and that they prefer to run the risk arising from the use of water obtained from surface wells rarely altogether safe from the danger of excrementitious contamination.

"It seems almost incredible that water having the history and presenting the aspect of that of the river Calder below Wakefield can, under any circumstances, be made fit for human consumption. But it is a fact that it is delivered to the consumers free from obvious objectionable qualities either to the eye or the palate; and the evidence given by the late Mr. W. R. Milner, many years Medical officer to the House of Correction, an able and conscientious observer, fully alive to the importance of the question, and the statements made to me by Dr. Wood, the present Medical officer of the prison, and of Dr. J. Crichton Browne, the Medical director of the West Riding Pauper Lunatic Asylum (both the institutions named being supplied with water by the Water Company), go to show

that no manifest ill consequences arise from the use of the water."

The water delivered in the town seems tolerably good, because the supply is only taken from the river occasionally—perhaps once in two months; a long period is thus allowed for subsidence, and the filtration is good. Nevertheless, the safety of the population depends on these two conditions. A large fire or the failure of a filter might carry death and destruction into the midst of a population already subject to the most unwholesome sanitary influences.

The remedy does not lie in increased drainage, at all events into the Calder until a new source of water supply can be obtained. On this point Mr. Radcliffe's recommendations are strong as sound; he acknowledges the difficulties in the way of the authorities, but they are difficulties which they have never tried to surmount. We wish we could believe Wakefield singular in these peculiarities; from our own observation we are induced to believe that there are many towns in Lancashire and Yorkshire whose sanitary condition is as bad, if not worse, than that of Wakefield.

THE WEEK.

TOPICS OF THE DAY.

It is understood that the Committee of the Royal College of Physicians, entrusted with the delicate business of endeavouring to arrange with the other examining bodies a conjoint examination, have produced a scheme which they propose submitting to the sister corporations. The assent of the universities, including the University of London, to the main points in the proposed scheme has, we hear, been gained. The most important characteristic of the plan is that the conjoint board, from which every English Medical student will be bound to obtain a licence, is to be composed of representatives of the three corporations, the Royal College of Physicians, the Royal College of Surgeons, and the Society of Apothecaries, and that the universities will have the power of sending assessors to be present at the examinations of the conjoint board, but these assessors will not act as examiners. Another important provision in the scheme is that the examiners appointed by the three different bodies are to examine in special departments of Medical science. The fee to be charged for the licence, which will not be a small one, is to be distributed, in certain proportions, between the three corporations. The examination for the licence is to be divided into three parts, to be passed at different times in the student's career. Graduates of the universities will be exempted from certain parts of the examinations; but they, as well as foreign and colonial Practitioners who desire registration, will have to pass the final examination of the conjoint board before they are admitted to practise. Such we believe to be the more important provisions of a scheme which we are bound to affirm seems to us in its leading principles a thoroughly fair one. Of the details we are not now speaking. Of course it is not to be supposed that the details of a plan elaborated by a Committee of the Royal College of Physicians will be accepted without discussion and, it may be, important modification by the other bodies. But we think that the labours of the Committee may reasonably form a basis for arrangement. We feel certain, however, that such a conclusion can only, even at this stage, be brought about by much mutual concession and an earnest desire on all sides both to act for the benefit of the common Profession, and to respect the claims and rights of all the contracting bodies. There is no doubt, if the scheme be adopted, the universities must cede the valuable privilege of licensing their graduates in Medicine and Surgery to practise; the Royal College of Surgeons must relinquish a considerable portion of income which has hitherto maintained the noble Hunterian Museum and its valuable library to the great benefit of the Profession and science; the Society of Apothecaries will virtually yield some of the powers bestowed on it by the Act of 1815—powers which the worst enemies of that body can never say it has misused, or employed for any purpose except the improvement of the education of the General Practitioner, and the consequent benefit of the public at large. The Royal College of Physicians will undoubtedly gain in a pecuniary sense, but that body will waive an ancient right to license in Medicine and Surgery, to which it has lately renewed its claim. As we believe that the change, although by no means likely to be productive of unmixed good, will yet produce the great benefit of introducing a uniform standard of Medical acquirements as the minimum on which men will be admitted into the Medical Profession, we trust that just and moderate counsels and conciliatory measures will be in the ascendant.

We are informed that Mr. Gay will bring forward at the next meeting of the Council of the College of Surgeons a motion to the effect that the Minutes of Council containing the division lists on all motions, whether carried or not, after receiving the sanction of the President or Vice-President of the College, shall be suspended in the hall of the College within three days after the meeting of the Council. As this proposal, if carried, will give fuller publicity to the proceedings of the governing body of the College, we think it likely to be a beneficial one, and we hope that it will meet with the support of the Councillors. We hear that Mr. Simon's motion for the complete disassociation of the Court of Examiners from the Council of the College, to which we referred last week, will not be discussed until the report of the committee of the Council appointed to consider the subject of a conjoint board of examiners has been received.

We publish in another column the draft of a proposal for the formation of a "British Association for the Protection and for the better Defining of the Rights and Privileges of General Practitioners." The ends and aims for which it is proposed to organise such an Association are fully set forward in the draft. That such an Association would supply a need is indisputable. The position of the General Practitioner has been so much injured by indiscriminate "Medical charity," cheap Medical clubs, and the removal of lines of demarcation which formerly separated the Consulting-Physician or Surgeon from his brethren, that we cannot be surprised that the need of mutual support and combination is felt by a great part of the Profession. The British Medical Association, which might be the safeguard of Professional rights and the maintainer of Professional ethics, seems contented to exist for the two purposes of forming a joint-stock company for the publication of a Medical journal (an end which, however good that journal may be, is a glaring defection from the chief purpose for which a British Medical Association ought to exist) and a club of London Physicians and Surgeons, who once a year visit and patronise their Professional friends in the country. It cannot, therefore, be a matter of surprise that there is a party in the Profession who are endeavouring to form an association with a more practical aim. As long as they avoid the introduction of the principles of mere trade-unionism into a liberal and beneficent calling, we heartily wish the scheme success.

The annual meeting for the election of officers in the Pathological Society took place on Tuesday. The list of gentlemen nominated by the Council was accepted, and the report read by Mr. Hulke, the Secretary, showed that the numbers of the Society had increased during the past year, and that its financial condition had considerably improved. Instead of a deficit, the Treasurer announced that the Society had a balance of nearly £50 in hand after defraying all the expenses of the past year. Several interesting specimens were exhibited, amongst others one of cerebro-spinal meningitis, which occurred in a hard drinker affected with kidney disease, by Dr. Payne, of St. Mary's

Hospital, and a case of malformed heart, by Dr. Semple, which differed in some respects from any case tabulated in the elaborate memoir by Dr. Peacock.

Several cases of infraction of the Sale of Poisons Act have been reported in the papers recently. At Bolton, Walter Ainscow, a chemist, admitted before a coroner's jury that he had sold a blacksmith six drachms of laudanum without making an entry of the sale, and without a witness. The blacksmith took the poison and died. Another case was that of Edward M'Call, chemist, of Little St. Andrew-street, Seven Dials, who was brought before the magistrate at Marlborough-street by Mr. Bremridge, the Secretary of the Pharmaceutical Society, to answer two summonses—one for selling a certain poison by retail without having the name of the article and the name and address of the seller upon the wrapper, and the second for dispensing a prescription containing strychnine without its being labelled with the name and address of the seller, and without entering the name of the person to whom it was sold in a book kept for that purpose. Professor Attfield gave evidence that a packet merely labelled "poison" obtained from the defendant's shop contained oxalic acid, and that a bottle contained strychnine. The case stands adjourned. We are glad to see that the Pharmaceutical Society is making an effort to enforce the Act.

A fatal case of accidental poisoning from taking solution of iodide of potassium in mistake for gin has occurred at Newcastle-under-Lyme. The poison is said to have been removed from the stomach by vomiting, but the man, who was 56 years of age and in infirm health, died from exhaustion induced by vomiting one hour after taking the poison. A man is said to have died in St. Pancras Workhouse from swallowing a bottle of medicine, containing thirty-six drops of medicinal prussic acid. The man was phthisical, and a mixture containing three drops of prussic acid in a dose had been ordered for him by Dr. Hill. He was suffering from diarrhœa, and, according to his own account, drank the whole of his medicine in the night to allay thirst. He died the next day from exhaustion. It is to be noticed that the man did not die until a long period after taking the supposed poison. The case, however, may be a caution not to order a large quantity of prussic acid in a single bottle of medicine. Had the bottle contained six instead of twelve doses, no harm could probably have resulted.

An inquest has been held at Derby on a woman who was found dead in bed, with her husband beside her, apparently also dying. The man is still alive; but the post-mortem examination of the wife revealed inflammation of the stomach and intestines, and it is believed that she died from an irritant poison—"probably arsenic." There does not seem to have been any analysis of the contents of the stomach or of the organs of the body. The jury returned a verdict of death from poison, but whether taken by herself or administered by another person did not appear.

The Poor-law Board have deputed Mr. Bere, Q.C., to hold an inquiry into the charges brought against Dr. Ellis, the Medical Officer of St. Pancras, by the Board of Guardians. The inquiry was to open on Friday, January 7 (yesterday).

Two cases of death from voluntary starvation have been recorded. One case, which happened in Southwark, was that of a man of 52, who had suffered intense grief from the loss of his wife. The other death took place in Bethlehem Asylum. The patient, a clerk suffering from despondency, was admitted after a fortnight's abstinence. Food was administered to him by force; but he died a few days after admission from syncope. In this case the heart was diseased.

The unfortunate young woman on whom one Wells, a chemist in Poland-street, is said to have performed an operation for producing abortion, has since died. She died at the Home for Young Women, 51, Great Marlborough-street, where it appears she was kindly received and treated.

Eleven cases of death from relapsing fever were reported last week. Seven took place at the London Fever Hospital. Jaundice is noted as having been present in two of the fatal cases, and bronchitis in two. In one there were jaundice and bronchitis. The deaths from zymotic diseases were 438, the corrected average number being 359; 159 deaths from scarlet fever were registered.

Our readers will see that the acute and indefatigable Mr. Webber is dragging to light instances of poisoning by the coloured woollen lining of leather gloves, like that caused some months ago by coloured socks. We have received from him a portion of a most brilliant glove lining, of the sort which is said to have done mischief.

AMERICAN MEDICAL PERIODICALS.

NOWHERE do political newspapers thrive better than in America, nowhere have they greater weight and influence, and yet the Medical newspaper exists only in the most rudimentary form. Nor is it the absence of an organ speaking for and to the whole Profession in America which constitutes the sole characteristic of the Medical press; the kind of its contents is at least equally noteworthy. The average American journal is lamentably deficient from a scientific point of view; ordinarily it rests far too much on others, far too little on itself. Up to a very recent period there was but one journal, a quarterly, which could be pointed at as a fair exponent of American Medical science, and in certain respects, at all events, it was conducted on principles of short-sighted policy such as could not prevail even in benighted England. But we are heartily glad to note a great and a marked change for the better, although much remains to be done. We look upon the establishment of the *New York Medical Journal* as an era in the Medical history of the States. One thing it has done—it has excited a higher respect for American Medicine than was before prevalent in this country. As a rule, American Practitioners are clever and suggestive, ready to strike out new paths in the art of healing, but, probably from their imperfect training, they are rarely skilful penmen, and their attempts seldom go beyond the recording of a curious case. But, in the great American cities, men are now springing up well educated in every sense of the word, and well fitted to advance the knowledge of our Profession in every way. American Physicians held too long by the brilliant but illusory French writers; now they are turning to the more solid Germans with a corresponding advantage. In another respect most American writers are very shaky—that is, with regard to their pathology, and here it is their writings are most barren; but, in this also, they show signs of improvement, and by-and-by we may expect the vast quantity of material afforded by such a country to be fully utilised. Occasionally in some of the Southern journals we come across most interesting details as to malaria and suchlike matters, and the *St. Louis Medical Journal* has been the means of introducing into the country some admirable translations of European authors; but still there is a defect.

One thing is constantly giving rise to discussions in America—that is, their code of ethics. We are inclined to think that too much is said about ethics for very much to be done. Now in this country we have no written code of ethics, yet we have probably fewer offenders against the laws of gentlemanly conduct than there are over the water, code of ethics and all. Their plan is something like making a man moral by Act of Parliament. In this country the leading Medical journals really constitute the code of ethics. They have obtained the respect of the Profession at large, who trust them and their decisions. There is nothing like this in America. Very few American journals are weeklies; most of them are monthlies or quarterlies, and consequently are not in a position to act as Professional arbitrators. Yet some of the weeklies show signs of ability, such as, if they received a more general support,

might develope into great Professional usefulness. To take an instance. The *New York Medical Gazette* has recently published a series of articles on Hahnemann and homœopathy given in wretched driblets, it is true, so that, to benefit by it, the reader would have to wait patiently to the end, and then study the whole series together. Now these articles are unusually able, but, cut up as they are, their utility is lost. In another weekly we might mention there is a slanginess, a taking after the political press, which renders it, to "Britishers" at least, unpleasant and unattractive. The frantic efforts made to procure subscribers are another feature which detracts from the weight of many American periodicals. All sorts of inducements but the right ones are held out. We fancy if they did as we do here—secure the best writings of the best men—offers of bonuses and composition fees would not be needed. There must surely be in New York the means of turning out a weekly as the monthly journal is turned out—one, that is to say, which relies on its own intrinsic merits, and not on pickings and stealings from its neighbours—and such a journal, we think, would be a boon to the Profession at large; but such an undertaking requires general support.

The amenities of the Medical press in America are sometimes amusing enough. One gentleman apologised for the non-appearance of his journal one month by publicly announcing that he had no time to attend to it. On another occasion the same individual accounted for a lot of blunders by the fact that he was off for a holiday when the journal was going through the press. What would our readers say were we to treat them thus? Upon the whole, we are hopeful of the condition of the American Medical press: its defects are those which time will remove. And, although we cannot quite agree with the enthusiastic gentlemen who hold that we old-country men will by-and-by pass over to America to learn our Profession, still we do believe that the Medical press is increasing in influence, and most deservedly so, in America, and we should be glad if a more generous support would enable those who are doubtless both able and willing to turn out a paper which shall vie with, or even excel, its British congeners.

PRESENTATION TO SIR JAMES ALDERSON.

A DEPUTATION, consisting of fifteen gentlemen who were educated at St. Mary's Hospital, waited upon Sir James Alderson, at his residence in Berkeley-square, on Thursday, 30th ult., for the purpose of presenting a congratulatory address from the former students of that institution. After a few words of introduction from Mr. George G. Gascoyen, the address (which was written on vellum and beautifully illuminated by Warrington and Co.) was read by Dr. Felce, as follows:—

"*To Sir James Alderson, Knt., M.D., F.R.S., President of the Royal College of Physicians, Consulting Physician to St. Mary's Hospital, etc., etc.*

"Dear Sir James,—We have observed with much satisfaction that her Majesty the Queen has recently been pleased to confer upon you the honour of Knighthood, and, as students at St. Mary's Hospital during the time you held the office of Senior Physician and Lecturer on Clinical Medicine there, we present to you our warmest congratulations, availing ourselves also of the occasion to express our high esteem and regard for you as our former respected teacher. The honour conferred upon you as President of the Royal College of Physicians, the recognised head of the Medical Profession, will command the grateful approval of all its members, but we who have been brought into closer relationship as your pupils cannot but feel especially interested and gratified. Although now widely separated, we shall always cherish the remembrance of our association in times gone by, and of the kindly counsel you were accustomed to afford us. Trusting that you may long be spared in health and strength to enjoy the honours and to perform the duties devolving upon you,

"We are, dear Sir James,

"Yours very faithfully."

(Here follow the names of fifty-two old students of St. Mary's.)

Sir James then spoke briefly, expressing his great pleasure at receiving this mark of sympathy and affection from his former pupils, and promising a more detailed reply in writing. The company were entertained at luncheon before separating.

INFLUENZA.

THE West-end of London has been visited with severe influenza during the last fortnight. It usually begins quite suddenly with pain in the throat and ears, followed by shivering, *malaise*, constriction of the chest, sneezing, and utter prostration. The temperature goes up to 102° the first night, and there is some tendency to lightheadedness. Bed, lemonade, and beef-tea, with an aperient pill and ammmonia draught, the first day; next morning a five-grain dose of quinine, and half a pint of champagne at night, form the best way of dealing with this unpleasant visitor—*tuto, cito, et jucunde.*

THE PHARMACEUTICAL SOCIETY.

THE last two meetings of the Pharmaceutical Society have been occupied with the discussion of the Pharmacopœia. Professor Redwood, under the authority of the Pharmacopœia Committee of the Medical Council, has been engaged in investigating those preparations in the present Pharmacopœia which have most been the subjects of criticism. The questions he has examined were undertaken at the request of the Medical Council, with whose sanction, we understand, he now invites further comment upon the alterations which he brings forward with the view of their probable introduction into a future edition.

The principal features of the Pharmacopœia of 1867 to which he, in the first place, calls attention are the language in which the book is written, and the general plan of arrangement. The former seems to have met with almost universal approval. The day for Latin as the language of works on Medicine and allied subjects appears to have gone by, and Physicians have tacitly fallen in with this principle by employing English to a considerable extent in their prescriptions.

The preparations which it is proposed materially to modify are but few.

Acidum Sulphurosum.—Instead of the solution now directed to be prepared so as to contain 9·2 per cent. of sulphurous acid gas—a proportion which very rapidly diminishes by keeping—one containing 5 per cent. is proposed. Further, certain salts of sulphurous acid, as the acid sulphite of lime and the sulphite of soda, are thought likely to be useful.

The *Liquor Magnesiæ Carbonatis* was introduced with the intention of representing a very useful and popular preparation. The strength as now ordered is, however, so uncertain in consequence of the escape of carbonic acid gas and deposition of part of the carbonate of magnesia, that it is thought desirable in this instance also to diminish the strength from thirteen grains to ten grains to the ounce; but perhaps a still further reduction would be desirable. Samples of the solution found in commerce have been found to vary from five grains as the minimum to ten and a half grains as the maximum proportion of carbonate per ounce.

Many other preparations are noticed, but chiefly with reference to points which interest only the druggist and manufacturer. The question is then raised whether some additions might not be made to the list of remedial agents in any future issue of the Pharmacopœia—for example, lactic acid, acetic ether, chlorodyne, citrate of magnesia, and pepsin. With reference to the preparation known as chlorodyne, much discussion has arisen as to how far remedies of this character, possessing a composition which is only imperfectly known, should be encouraged. The very extensive employment, however, of this popular remedy seems to make it desirable to introduce a formula which should present the same general properties with the advantages of a known composition and the stamp of authority.

THE BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW.

To many of our readers the fact that this long-established and excellent quarterly appears this month under new editorship is nothing new; but both they and all who are familiar with it will bear testimony with us as to the care and ability which have been displayed in its management. It has long been well known for the ability of its reviews, and authors, even while suffering from its strictures, could not but admit that they were not tinged with conscious injustice. It has possessed perhaps the ablest staff of writers ever brought together on any journal in this country. Its reviews on special subjects have been equally conspicuous with those on isolated books; they have been carefully compiled critical essays, giving an account of everything which had been done at home and abroad on the subject in hand up to the latest date—essays frequently involving enormous labour. It has thus constituted a most valuable repertory of digested Medical knowledge, not in the crude form found in year-books, but compiled and compared by men who thoroughly knew their subject, so that the net results, according to their values, were laid before the reader. Its original communications have been of an equally high character, some of them completely establishing a reputation for their writers. The chronicle of current scientific topics has also been most creditable to those engaged on it. But, while thus praising the past of this Review, we by no means infer that the present number is at all inferior; on the contrary, it shows signs of increased vitality. Sundry small changes have been effected in the way of improving the look and convenience of the pages. The matter is of the highest excellence—in short, all that could be desired. In conclusion, we most cordially commend the Review to our readers; far too few are acquainted with its excellences, which, we can confidently assert, have only to be known to be appreciated.

THE COMPOSITION OF CHLORODYNE.

Mr. Edward Smith reports, in the *Pharmaceutical Journal* for January, an inquiry into the composition of this well-known secret remedy. Hitherto, of the formulæ which have been published, two—one by Dr. Ogden, the other by Mr. Squire—have attracted most attention in this country. The difference between these lay essentially in the presence of Indian hemp and capsicum as indicated by Ogden, their absence in the formula given by Squire. But besides this, the proportion of morphia, as given by the two authorities, differed greatly. About the three important ingredients—chloroform, morphia, and hydrocyanic acid—there can be no doubt; no more can there be about oil of peppermint and treacle. The question is whether anything else exists in the compound. Mr. Smith thinks there is no Indian hemp, because the alcoholic extract is soluble in water; but then there is capsicum, as, after the chloroform and ether, which also give pungency to the mixture, have been distilled off, the substance left behind has a hot peppery taste. He seems to have taken much pains with the analysis. Here is the composition he assigns to chlorodyne:—

℞ Chloroformi f.℥iv.
Morphiæ mur. gr. xx.
Æther. rectif. f ℥ij.
Ol. menthæ pip. ♏viij.
Acidi hydrocyanici dil. f.℥iv.
Tinct. capsici f.℥vj.
Mist. acaciæ f.℥j.
Theriacæ ad f ℥v.

This is not quite so dark as the original, as no caramel is used. Mr. Smith suggests for it the title Liquor Chloromorphiæ Co., as not likely to be confounded with that of any other compound.

RETRO-CURVATION OF THE KNEE.

Dr. Louis Bauer records in the St. Louis *Medical and Surgical Journal* for November, 1869, a most interesting case of this very rare affection. The subject, a strong and healthy young man, aged 24, had, when a boy, been stabbed in the knee with a knife. While in bed with this injury he contracted scarlatina, the consequence of the two being prolonged suppuration of the joint. Ultimately, however, he began to improve, when he left his bed and insisted on being allowed to get about on crutches. For seven years his condition was variable. Ultimately he got strong and well, but with a bent knee, for during his illness he had been accustomed to support his limb by a leathern strap stretched from his shoulders to the point of his toes. The constant action of this drew the toes towards the body, and this tendency was perhaps increased by an early recourse to the use of a cane instead of crutches. While the plastic material in and around the joint was still soft and pliable, the constant dragging upwards of the toes gave the limb a permanent set, and, when afterwards he could put his foot to the ground, the set would be increased till the bone had hardened. When he came under observation the leg projected forward, so that both thighs being horizontal, as when seated in a chair with the feet raised, the affected foot rose in the air nearly at a right angle. No operation had been performed at the above date. Dr. Bauer proposed resection.

FROM ABROAD.—INQUIRY ON ANIMAL VACCINATION—EXTRACTION OF A CATHETER BY THE UMBILICUS.

The Editorial Committee of the *Union Médicale* has issued the queries which it promised concerning vaccination; but unfortunately it has confined the scope of these to the question of "animal vaccination," concerning which there cannot be much to be said in many quarters, seeing that it is a practice so recently introduced, and taken up by so few persons on a large scale. One could have wished that, on an appeal to the Profession in France for the results of its experience in relation to vaccination, the example set by Mr. Simon in this country in 1856 might have been followed. The four sets of queries which he issued to more than 500 persons well qualified to furnish well-matured and strongly supported replies, have given rise, together with his admirable prefatory observations, to, we do not hesitate to say, one of the most valuable documents ("Papers on Vaccination," 1857) that has ever been issued by any of our public departments. Many of the questions now being so warmly debated in France in relation to vaccination may be said to have been decided by anticipation in this publication.

Speaking of inquiries concerning experience in vaccination, we may notice that in 1806 the Royal College of Surgeons issued to its Members throughout the country a circular containing queries as to the results of their experience of the good and ill effects of vaccination; and the answers received are preserved in their library. Although, of course, at that early period nothing decisive as to the durable advantages of the practice could be stated, yet the answers are well worth perusal, as exhibiting thus early strong opinions on the beneficial character and innocuity of the procedure, which the further experience of half a century has so fully confirmed. As to the present inquiry, as we observed, it is limited to "animal vaccination," and the queries are couched in the briefest terms. They are:—1. What have you seen of animal vaccination? 2. What have you observed? 3. What results have you obtained? Among the circumstances especially to be noted are the number of vaccinations and revaccinations practised with animal vaccine lymph; the origin of the lymph; whether the lymph has been taken directly from the heifer, and at what epoch of its evolution, the sixth, seventh, or eighth day, or later; the procedure employed for taking the lymph; if preserved lymph has been used, its date, and the mode of its preservation—whether in tubes or between glasses; the results obtained, whether positive or negative, observing, with respect to the former, the more or less similitude or difference between the results of animal and ordinary vaccination as to the periods of incubation, pustulation, virulence, and desiccation; the nature of the accidents which attend animal vaccination.

M. Foltz recently read at the Lyons Medical Society a very interesting case that had been under his own and M. Petrequin's care. A woman, the mother of several children, applied to him, stating that, six days before, when between six and eight weeks advanced in pregnancy, abortion had been effected by means of a female catheter. In passing in the instrument, however, it escaped from the hand, and could not be recovered, nor could it be fonnd amidst the discharges which ensued on the operation. Careful exploration with the finger, the speculum, and Simpson's instrument, carried in every direction within the cavity of the uterus, failed to discover any metallic object. Examinations of the bladder and rectum were attended by the same result; and, as there was neither fever nor pain present, expectation was advised, it being also suspected that the instrument might have passed out without the patient's knowledge.

It was not until four months later that she again presented herself, still having all the appearance of health, but complaining of a tumonr at the umbilicus. This did not project much, but it was hard and rounded, and reducible on the slightest pressure, to reappear immediately—just as a commencing umbilical hernia. M. Foltz, however, felt certain that it was produced by the extremity of the catheter; and, in fact, by passing a finger of the one hand into the cervix uteri and placing the other hand over the umbilicus, the body could be moved to and fro pretty much within the axis of the upper aperture of the pelvis. M. Petrequin, now consulted, advised the immediate extraction of the foreign body, although, thus far, it had given rise to no unpleasant symptoms. Its great mobility, the impossibility of determining the precise seat of its lower extremity, and the fact of its entire disappearance during horizontal decubitus, rendered this no easy matter. The total disappearance of the object, as if by enchantment, when the woman lay down, was indeed very remarkable, and after she had stood up it required that she should walk and fatigue herself for at least an honr before the umbilical tnmour reappeared and the diagnosis could be pronounced as certain. During the treatment preparatory for its removal on several occasions its presence could not be determined. As a preliminary step the uterine cavity was efficiently dilated by the introduction of compressed sponge twice daily during a week. But, in spite of such dilatation, the lower end of the catheter could not be felt, nor the exact portion of the organ in which it was located determined, the upper end retaining its mobility so as only to be vaguely felt. A renewed dilatation for six days longer was effected, when it had to be suspended for eight days in consequence of the menses appearing. When these had ceased it was renewed for another three days, and it was then ascertained that the lower end of the catheter was lodged in front of the anterior wall of the uterus, or rather in the ntero-vesical partition. Between the uterus and bladder, on a level with the superior orifice of the cervix, the anterior lip of which was notably thickened, the index finger, introduced into the cervical cavity, or merely placed at the bottom of the anterior *cul de sac* of the vagina, was able to feel through a considerable thickness of tissue, but still plainly enough the end of the catheter. In order to remove the instrument, the woman was placed standing against an article of furniture, and, while M. Foltz fixed between two fingers the end that projected at the umbilicus, M. Petrequin incised the whole of the anterior lip of the cervix, sometimes employing long straight scissors, and sometimes a narrow long bistoury with a rounded end, and having its blade guarded with diachylon. To the surprise of both, the incision did not allow of the extremity being reached, although it extended through the whole lower lip and higher up than the cervix. Endeavours were in vain made during two hours to reach it, its mobility and the depth of its situation rendering wounding of the bladder a possibility. Next day, after an ineffective renewal of the attempt, the removal of the body by the genitals was given up, and an incision comprising the skin and aponcurosis was made over the upper projecting end at the right of the umbilical ring. At the same time, the instrument was thrust from below upwards, so as to project through this incision. A thread was passed through its eyes in order to retain it, and a renewed attempt was made to remove it through the genital organs by pushing it towards the uterus. This, however, could not be accomplished, and it became evident that the entire instrument had passed through the uterine wall, which had closed and cicatrised over it. It was then resolved to remove it by drawing it upwards with a torsion movement, in order to disengage it, but on raising it up the womb and bladder were dragged with it, and such severe pain and nausea caused as almost to produce syncope. The greatest precaution was therefore required in order to gradually break up the adhesions. The instrument was then withdrawn until its end was nearly reached, when the ring soldered on to it here rendered some enlargement of the incision necessary. No bad symptom followed the extraction beyond some rather severe abdominal pain at first; and the catamenia have since appeared.

ANALYSES OF PATENT MEDICINES.—II.

STEDMAN'S TEETHING POWDERS.

The writer of this notice had some difficulty in obtaining specimens of this medicine. At six druggists' in different parts of London he was unable to get them; Steedman's Soothing Powders being kept at all of them, but Stedman's Teething Powders not. Ultimately, by dint of ordering them, he managed to obtain the two packets which were subjected to the following examination:—

The packets resembled Steedman's, described in the last notice. They were enclosed in covers of marbled paper and labelled "Stedman's Teething Powders for Children. Price 1s. 1½d." Inside this case of marbled paper there were (as in the other instance) a large sheet with letters recommendatory on one side and instructions on the other, two smaller pieces of paper, one white and the other blue, which were advertisements of other medicines by the same author, and a diminutive bundle of powders in the middle of all. Instead of eight powders, as in the other instance, these were, however, nine; and instead of being bound together with thin string they were clasped by a very delicate caoutchouc band. Each little powder was wrapped in a little white paper, on which the following was printed:—

"Observe—This is the Original and Genuine
"Stedman's Teething (not Soothing) Powder."
"STEDMAN'S TEETHING POWDER.

"Directions—When the Child is nnder three months of age, the third of a Powder only is to be given; from three to six months, half a Powder may be used; when above six months, a whole Powder may be taken."

The more elaborate "Directions for taking Stedman's Teething Powders" given on the large sheet are, word for word, the same as those given in the former notice of Steedman's Soothing Powders, except that Stedman omits "and it must go down," which occurs after "spit it out" in Steedman's directions. Once Stedman puts "for" instead of "and," and "be" instead of "is." After "loss of appetite and debility," Stedman iuserts "and costiveness," and instead of "nine or ten years" Stedman puts "twelve years."

In place of the long extract from Dr. Ramsbotham's lecture on dentition, there are "instructions relative to children teething," apparently from the pen of Stedman himself. These instructions are opened by the following statement:—

"Children form one-third of all patients, and so serious are their diseases that one child in five dies within a year after birth, and one in three before the completion of the fifth year."

The "testimonials to Stedman's Teething Powders," given on the large sheet, are, with one exception, from ladies, "both English and foreign." The solitary male who has testified in favour of them is "Mr. Mann, Stockbridge, Hants." The ladies are Mrs. Phillips, of Dublin; Mrs. Denny, of the Rectory, Burgh-Apton, Norfolk; Mrs. Davis, East-road, London; Mrs. Leggat; Madame Verrière, of Islington; and Frau Hirschmann, of De Beauvoir-square. The dates are 1865, 1866, and 1867.

Both Madame Verrière and Frau Hirschmann appear, judging from their letters, to have suffered from somebody's "soothing powders." The French lady is very explicit on this point. She says, "Je me suis servie une fois de la 'soothing powder" d'un individu, mais elle a presque empoisonné mon enfant, tandisque la vôtre est, j'en suis assurée, aussi saine qu'elle est efficace." The Frau Hirschmann says of Stedman's: "Es unterscheidet sich darum von dem s. g. Stoffe 'soothing powders' dadurch, dass es nicht wie dieses das Leben der Kinder gefährdet." The English ladies appear to have been more discreet. Only one of them refers to "other sorts of soothing and teething powders." She says, "I had tried many other sorts of soothing and teething powders, but only yours ever did me any good."

The *differentia* is thus set forth by Mr. Stedman himself:—

"As other spurious and worthless imitations of these powders are offered for sale, purchasers should be particularly careful to ask for and to insist on having 'STEDMAN'S TEETHING' NOT SOOTHING 'POWDERS.' The 'TEETHING POWDERS' alone are the original and genuine 'STEDMAN'S POWDERS,' and are safest for Children, as they contain nothing DANGEROUSLY SOOTHING. Prepared by J. STEDMAN, Surgeon, East-road, London."

As in the former instance, I weighed each one of the eighteen powders contained in the two packets, with the following results:—

	Packet I.		*Packet II.*	
1	2·25	grains.	1·49	grains.
2	2·23	„	1·87	„
3	2·23	„	2·07	„
4	1·99	„	1·84	„
5	2·09	„	1·57	„
6	1·42	„	1·60	„
7	1·83	„	1·60	„
8	1·73	„	2·78	„
9	2·74	„	1·93	„
Mean.	2·06	„	1·75	„

The chemical composition of Stedman's teething powder was—

Calomel	42·03
Organic matter	57·97
Ash	trace
	100·00

The organic matter appeared to be quite inert. It was soluble in water, giving a solution having no particular taste. No opium was detected. There was no corrosive sublimate.

A Stedman's teething powder varies in weight from 1·42 grain up to 2·78 grains, and contains from about $\frac{6}{10}$ grain up to about $1\frac{1}{10}$ grain of calomel mixed with rather more than its own weight of some diluent substance.

WINTERING IN THE SNOWS.

(*From our St. Moritz Special Correspondent.*)

THE *Medical Times and Gazette* of December 18 contains some "corrections and comments," by Mr. F. Greatheed, on my "Letters from St. Moritz," which were published in this journal some months ago.

I very reluctantly proceed to make a few comments on this commentary—reluctantly, because its querulous tone throughout is so apparent that it really answers itself. The "correction" with which this communication commences, to the effect that the "Engadine" of J. Michelet, of Murray's and Ball's guides, and of my own letters, should be "Engadin," affords an admirable gauge of Mr. Greatheed's critical calibre, as is the "Ober-Engadin, *Suisse*," from which he dates his letter, a specimen of his literary accuracy.

I cannot admit that there was any want of courtesy in my republishing in your columns what Mr. Greatheed had already published in the visitors' book of the hotel in which I was residing. Such remarks have always been justly considered as public property, and those who promote their publicity as favouring the writers' intention.

I scrupulously avoided mentioning names, and I am quite sure that the existence of Mr. F. Greatheed would have been absolutely unknown to the readers of the *Medical Times and Gazette* had he not thought proper to acknowledge in this journal the authorship of the remarks I quoted.

Mr. Greatheed feebly attempts to justify his statement "that a temperature of 56° F. would be unbearable in winter in the more humid climate of England." I observed that this statement would not bear criticism. I now add that it is simply monstrous. Often lately I have been sitting, with others, in a room which we found exceedingly comfortable at a general temperature of 54° F. The statement itself was of no importance whatever, save as an indication that the rest of Mr. Greatheed's facts were to be received with caution.

With regard to the next paragraph of this curious letter, I may observe that the readers of the *Medical Times and Gazette* are sufficiently intelligent to supply the minus sign when its omission is so obvious as in the instance he alludes to. Mr. Greatheed goes on to observe that "the Engadin is less shut off from communication in the winter than in the summer." From communication with what? If he means from the rest of Switzerland, I have only to observe that, in common with most persons, I had imagined that mountain passes at an altitude of nearly 8000 feet above the sea were often rendered impassable during the winter by snow-storms.

Then comes the following bewildering remark:—"Your correspondent does not apparently advocate the necessity of phthisical patients breathing constantly renewed air." Do I not? When and where have I ever said, written, hinted, or implied that I do not?

Next I am accused of "inconsistency" because I object to being "shut up in a stove-heated room, from which, however, one has to make periodical flights for five minutes every two hours for purposes of ventilation." Here, in this sentence, there are two things objected to—1st, the stove-heated room; and, 2ndly, the periodical flights which it necessitates—and this, according to Mr. Greatheed, is an inconsistency! So that in this queer kind of mental arithmetic two objectionable things make an inconsistency. I am further charged with "somewhat questionable delicacy" because I wrote as follows:—"It is also very evident that but few invalids could hope to command the comfort which must have attended the companionship and care of three of his countrywomen—an advantage which this gentleman appears to have had, and without which I doubt greatly if a winter at St. Moritz would have passed so agreeably." I fail to see the indelicacy of this remark, and I can only add that if I am ever banished to St. Moritz for the winter I hope it may be my let to have the like advantages. The entry in the visitors' book of Herr Badrutt's hotel begins with "we," soon changes to "I," falls back again upon "we," and finally closes with the first person singular. It is headed by the names of one gentleman and three ladies. It is clear that Mr. Greatheed is the "I"; it was not unreasonable to conclude that he and the three ladies whose names were attached to the entry constituted the "we."

With singular infelicity it is reproachfully suggested by Mr. Greatheed that "*want of imagination*" has led me "to discredit and disregard facts that *do* exist." Is it possible that this gentleman trusts to his "*imagination*" in searching after reliable facts? Is it in his "imagination" only that during winter "fifty sleighs cross the Julier, Maloja, and Bernina Passes each daily?" Has he *imagined* the "balls, concerts, and theatricals" which he assures us are the "winter amusements of the Engadiners?" For my own part, I am glad to admit that I think "imagination" entirely out of place in investigations of this kind.

Then, again, because the proprietor of the Kulm Hotel at St. Moritz has with difficulty been prevailed upon to keep open his hotel during the winter, we are required to believe that the Swiss, and especially the Engadiners, are "averse to winter invasion."

Now, it is obvious enough that there must be great inconvenience in keeping open a large hotel for the sake of half a dozen guests; but will Mr. Greatheed assure us that the probability of an increased number of winter visitors was not urged as an inducement to keep this hotel open? If so, what then becomes of the dread of invasion by winter visitors? Does there exist no rivalry or competition for English patients between Davos and St. Moritz? If not, why does the proprietor of the Kurhaus at the former place sneer at the claims of the Engadine as a winter resort for consumptive cases, and complain that a certain well-known German Physician, resident in London, neglects the tried efficacy of Davos and recommends all English patients to the comparatively untried St. Moritz?

In looking over the letters I contributed to this journal on St. Moritz, destined as they were for the perusal of the Profession, and not for the public, I see nothing in them which I

should desire to modify or recall. The opinions which I held then I hold now; but I am quite prepared to modify them when I see sufficient reason for doing so. I had no desire to make an *ex parte* statement. I went to St. Moritz predisposed by reports which had reached me in London to regard it favourably as a winter resort for the phthisical. I left St. Moritz disappointed—disappointed, as I have already said, by the poverty of the information to be obtained there—disappointed by the existence of an unpleasant puffing spirit, which was discernible there as well as at Davos—and disappointed not the least by the distinct refusal to impart information by those who were said to possess it—a refusal which was defended by the plea that this information had been obtained, and was destined for the sole use of a London Physician, who is known to take a considerable interest in the place. I am glad to hear that this gentleman is now at St. Moritz investigating for himself the influence of its winter climate in cases of chest disease, and we may therefore hope before long to receive fuller and more reliable information on this subject than any we have hitherto procured.

REVIEWS.

The Life and Letters of Faraday. By Dr. Bence Jones, Secretary to the Royal Institution. In 2 vols. 8vo. Longmans.

(*Concluded from page* 18.)

Having somewhat summarily disposed of the electrical discoveries of Faraday, we may refer to a remarkable year in Faraday's life (1835), not so much for the work he did as for the character which he showed in refusing and in accepting a pension from the Prime Minister. It appears that Sir Robert Peel, if he had remained in office, intended to give him a pension, but in answer to a communication to this effect from Sir James South, Faraday says, "I think Government is right in rewarding and sustaining science. I am willing to think, since such approbation has been intended me, that my humble exertions have been worthy, and I think that scientific men are not wrong in accepting the pensions, but still I may not take a pay which is not for services performed, whilst I am able to live by my labours." A second letter was sent in the place of this; it contained a less decided refusal. Eventually, he had an interview with Lord Melbourne, the Prime Minister, at the Treasury. A conversation took place, in which Lord Melbourne says he expressed himself "certainly in an imperfect and perhaps in too blunt and inconsiderate a manner." It is probable he also said that he looked upon the whole system of giving pensions to scientific men as a piece of humbug. The same evening, Faraday left his card, with the following note, at Lord Melbourne's office:—

"My Lord,—The conversation with which your Lordship honoured me this afternoon, including as it did your Lordship's opinion of the general character of the pensions given of late to scientific persons, induces me to decline the favour which I believe your Lordship intends for me; for I feel that I could not, with satisfaction to myself, accept at your Lordship's hands that which, though it has the form of approbation, is of the character which your Lordship so pithily applied to it."

After some explanation and friendly intercession, and a reminder from the King, Lord Melbourne wrote a kind and apologetic letter to Faraday, who afterwards accepted the pension. But we can do nothing in our public offices in this country without circumlocution and blundering; and just about two years afterwards he received a note from Mr. Spring Rice, then Chancellor of the Exchequer, informing him he was about to move for a committee to inquire how far the existing pensions ought to be continued, having due regard to the just claims of the parties and to economy in the public expenditure. In acknowledging the receipt of this circular, Faraday wrote Lord Melbourne, when granting him the pension, said that "the distinction so bestowed" was with the "desire to reward acknowledged merit and to advance the interests of science." "I am no judge," says Faraday, "whether that in the present instance be the case or not; but if the grant do not retain the same feeling and character as that which his Lordship attached to it, I should, though with all respect to the Government, certainly have no wish for its continuance." Subsequently Mr. Spring Rice wrote for a list of his works and titles! We need not here enumerate them, but we can well estimate the indignation of Faraday at what was at least an insult, more particularly so when we remember the classes of persons who had received civil list pensions in the time of George IV.

For Faraday's correspondence with many of the most distinguished English and foreign *savants* we must refer to the volumes themselves. They will well repay perusal.

Faraday was frequently employed by Government on important inquiries, and for this he refused payment. To the Trinity House he afforded the most valuable information regarding the lights, extending from the practical use of the magneto-electric light down to the samples of cottons, oils, and paints that were to be used. "His knowledge, judgment, accuracy, and dutiful service were repaid," says Dr. Bence Jones, "by an appointment known only to very few persons—an unlimited amount of kindness, and £200 a year. From his Trinity House work Faraday did receive the highest reward a scientific man can obtain, but it did not come from the Government, nor from the Trinity House. He was able to report that his own grandest discovery could be made useful for the preservation of the lives of seamen." Faraday was a great favourite of the late Prince Consort, and instructed some of the juvenile members of the Royal Family at the Royal Institution. For some months before he died the gradual failing of his bodily powers became painfully manifest, but "his mind continually overflowed with the consciousness of the affectionate care of those dearest to him." He died "quietly and peacefully" on August 25, 1867, at the house at Hampton Court, which her Majesty had assigned for his occupation. He was buried in a private manner at Highgate Cemetery. A plain stone, with the simple record of his name, with the date of his birth and of death, marks the spot where the remains of one of England's greatest sons are deposited.

Dr. Bence Jones draws, at the conclusion of his volumes, a most elaborate and able summary of Faraday's chief characteristics as a philosopher, and he enumerates in eloquent terms "the greatest of those qualities which made the beauty and nobleness of his character." To this just tribute to his memory we may add that, in rising from a perusal of this work, we are impressed throughout with an admiration of his consistency, his self-denial, and his modesty. He states in one of his earliest letters that the reading of the works of Dr. Isaac Watts made him first a thinker. But he bore in some respects a remarkable likeness to that eminent person. Johnson said of Watts that whilst he stooped to write hymns for little children, he was equally at home when he, one of the greatest thinkers of his age, occupied himself in philosophic dissertations on some of the most intricate questions which can engage the attention of mankind. Faraday was equally great in his "Juvenile Lectures" as he was in his most elaborate expositions of natural science. In all but his "nonconformity," said Johnson, "Watts is entitled to our admiration." We have no such reserve in regard to Faraday. It is not our place to judge of Faraday's creed; but his "simple faith" was a sustaining element in his career; it was the ruling guide of his life, and in his later years and at his death a consolation which the most "orthodox" might envy. J. F. C.

Vaccination: a Condensed Summary of the Evidence in Favour, and of the Objections urged against it. By J. Thorburn, M.D., Lecturer on the Diseases of Women and Children at the Manchester Royal School of Medicine, etc. London: Simpkin, Marshall, and Co. 1870. Pp. 59.

An Essay on Vaccination: its Actual Value and Attendant Dangers, etc. Eastern Post Printing Works, Worship-street. Pp. 56.

Both of these *brochures* are well adapted for popular use, and the former especially, being easily obtained and costing only sixpence, might be advantageously put into the hands of silly parents by Medical men when they find objections raised to the vaccination of their children. The Anti-Vaccination League is very active agitating in all directions through the medium of provincial newspapers, magistrates are indisposed to deal with cases of neglect of vaccination, and offenders, having their fines paid for them by sympathisers, care little for prosecution. Now and then a convicted offender has preferred, for reasons best known to himself, to go to prison rather than pay the fine. There is no accounting for tastes, or for the motives which sway the mind of the would-be martyr. We have never felt much faith in the present compulsory Act, although we have held that it ought to have a fair trial. What is likely to be more to the purpose is a diffusion of knowledge by way of counterblast to the pernicious nonsense of the League.

Baron's Life of Jenner.

A PAMPHLET, of the nature of a Review of the "Life of Jenner," published by a relative of his biographer in 1858, has just been reprinted at Cheltenham, in the hope that it may be of service at this time when questions, which it was supposed had been definitively settled, are now again being raised. It is one of the characteristics of national life to ignore the experience of earlier generations, so far as the practical use of it for the avoidance of national calamities is concerned. We are apt to fail in realising a state of things existent when those lived with whom we can have had no personal communication. Thus, when we now-a-days speak of an epidemic of small-pox, we speak of a degree of prevalence which our forefathers would have regarded as somewhere about the normal condition of things. The cruel devastations of this plague, which recurred at intervals prior to the discovery of vaccination, have passed away from the national memory. Could we again fall beneath the scourge of one of the small-pox epidemics of the last century (and God forbid we ever may see the like again in this country), we should hear no more of anti-vaccinators or anti-vaccination leagues. Do the opponents of vaccination ever cast back their thoughts to this period? Do those who ignorantly or maliciously repeat their trashy arguments know what small-pox was in these days, or with what enthusiastic rejoicings the prophylactic was hailed by less civilised people than ourselves who had felt the lash? If not, we earnestly beg of them to study this little publication; it will open their eyes and let in some light.

FOREIGN CORRESPONDENCE.

FRANCE.

THE PRACTICAL WORKING OF THE LAWS AGAINST SYPHILIS IN PARIS.

(*From our Paris Surgical Correspondent.*)

WITH regard to the working of the laws against syphilis, no one here in Paris is better posted up than Professor Léon le Fort, of our Faculty; and as I possess some explanations of his on a few difficult points concerning this question, I cannot do better than give them to you word for word as I have them from his own hand.

1. What are the results of the laws against syphilis? Before replying to this question, a slight digression seems necessary to me, for the insufficient results obtained would appear to annul the utility of the measures taken against prostitution by the administration.

If we look back for a period of fifteen years, we may say the greatest preoccupation of the *Bureau des Mœurs* (especially the police charged with matters concerning prostitution) was to protect the public health as much as possible; and, of all the means employed, the principal aim was to find out diseased prostitutes, in order to see that they were cured, and prevent their communicating the affection to others. At that time, nearly all inscribed women inhabited houses of prostitution.

But since fifteen years ago, the *Bureau des Mœurs* has undergone another influence; it has occupied itself more with having the disciplinary than the sanitary regulations observed, with seeing that these women do not promenade the streets after eleven o'clock at night, preventing them from frequenting (immaterial at what hour) certain prohibited quarters (Boulevard, Rue de Rivoli, etc.), seeing that they do not enter grog-shops, etc., etc. The new spirit predominating, less attention has been paid to the Medical visits, which are quite inefficacious as to frequency or thorough examination.

The results of these measures are altogether insufficient; the reason is this. I have shown in my *mémoire* that the number of men who have contracted venereal diseases from inscribed and inspected women is much less than the number of those who have had relations with women not inscribed and not inspected. But, even as it is, too great a number of individuals have caught diseases from inspected women. This is due to the bad organisation of the sanitary service. In fact, the women living together in licensed houses are only visited every eight days, and the isolated women, *i.e.*, living in their apartments, are only visited once every fortnight. Therefore, if one of these latter is affected with a chancre which has been overlooked by the Physician, or if the chancre appears five, six, or eight days after the visit, the woman has yet a week to propagate syphilis; moreover, knowing that, being ill, she will be sent to St. Lazare, she does not present herself at the visit, often waits until forced to do so, and may thus in the lapse of two or three weeks infect her clients, which, in the course of twenty days, amounts to, say, from forty to fifty individuals infected.

If to this we now add that the examinations are insufficiently made, we can foresee that even the inspected women can become a considerable source of infection. But this is not all. The 4987 patients which I have observed, and upon the history of which my paper is based, belong all to the labouring classes, who generally frequent houses of prostitution; but persons in easier circumstances—the strangers especially—take up with the women they meet at public balls, on the boulevard, in the theatre, the cafés—that is to say, women who practise clandestine prostitution, those which are not submitted to inspection. It can, therefore, be easily understood if, on the one hand, we have 1306 women in houses and 2545 isolated, in all 3851 women under the control of the sanitary law—already in itself insufficient—and if, on the other hand, we have from 40,000 to 50,000 who absolutely escape this law, that these measures produce but little effect, and that the result, therefore, of the means employed against syphilis in Paris amounts to nothing. We shall see presently what is to be done.

2. Are innocent and virtuous women ever insulted by the police, and threatened? No one is infallible. However, it is difficult to see how an error could possibly be committed as regards a virtuous and innocent woman. Women are never arrested for prostitution save when caught "in the very act;" the thing is done with the greatest reserve, and the mistake can never be more than relative. Great noise has been made about a case which happened a few months ago. Of course the fact is to be regretted, but it is necessary to know the circumstances.(a) The victims were Madlles. P., dancers at the grand opera, which in itself leaves but little room for the presumption of virtue. They were returning home from the theatre after midnight, and found themselves in one of the streets which, more than all others, is frequented by clandestine prostitutes (Rue Notre Dame de Lorette); their toilet *à la mode* was calculated to lead into error. They met a friend, and the agent, mistaking them for public women, reproached them for promenading the streets after 11 o'clock. Without doubt the mistake is awkward; but where is the *virtuous* woman, dressed in the latest fashions, who would promenade alone and on foot after midnight through one of the most notorious quarters of prostitution, and walk slowly enough to give rise to suspicion that she looks for adventure?

3. What are believed to be the sources of new syphilitic infection in Paris? Is it brought by foreigners?

Paris is sufficiently rich in syphilitic virus not to need borrow elsewhere. As to the strangers, they certainly take away more than they bring; but they contribute directly to its propagation by the great encouragement which they offer to prostitution. If the empire has made of Paris the city of luxury and the capital of purchasable pleasures, it has also made of it the *lupanar* of Europe.

4. What is believed to be the quantity of syphilis in society at large? How many out of 500 average people show any traces of it?

It is impossible, even approximately, to answer these questions. But, if it were merely question of venereal diseases in general and gonorrhœa especially, we might say what Voltaire has inscribed at the pedestal of a statue of Cupid—

> "Qui que tu sois, voici ton maître;
> Il l'est, le fut, ou le doit être."

Of my 4987 patients I find 4287 with blennorrhagia, either actually or previously, once or repeatedly in the same person.

5. What are the measures applicable in Paris for the more efficient repression of syphilis?

Organise an efficient Medical service by increasing the number of Physicians, by allowing them a sufficient compensation, and especially multiply the number of visits, which should at least be two in the week. Do not permit inscribed women to live isolated in their apartments with the licence of the prefecture of the police. Only authorise the practice of prostitution provided the women inhabit houses of toleration. Protect the health of these women by forcing the mistress of the house to assure herself of the integrity of the men who frequent the establishment, and punish her with a fine every time one of her inmates is found diseased.

As to clandestine prostitution, regard prostitution as an

(a) This is the only mistake which the agents have ever committed in regard to virtuous (?) women.

offence (the law already punishes provocation to debauch) whenever it is practised by women not inscribed, consequently not authorised, and not inspected. Condemn these women to one year's Medical visits, and to the vigilance of the police. In case of a second offence, and if the woman cannot prove her means of subsistence by honest labour, but that she seeks her support in prostitution, inscribe her as a public woman, and force her to dwell in licensed houses. In case of a second offence applicable to minors, hold the father responsible by a fine for the want of watchfulness over his child. Inscribe every minor who has been arrested three times as a public woman, and in spite of the father's opposition. (Out of 13,818 women arrested for prostitution from January 1, 1861, to December 31, 1866, 7277 not found diseased nor claimed by their parents as minors could not be made to observe any measures, although they were notorious prostitutes.)

These decisions should be pronounced by judgment of the court, after public evidence and arguments on both sides, and should no longer be left, as they now are, to the arbitrariness of the police.

A very serious objection may be opposed to all these measures. Prostitution, like every species of commerce, is subject to the law of supply and demand. There are prostitutes because the looseness of man's morals favours prostitution. As I have remarked in my paper, the substitution of man's labour for that of woman in many trades where the woman might and should be employed, the insufficiency of salary, the elevation in prices of everything, the interdiction (in France) of seeking to prove the paternity of illegitimate children, which creates the impunity for cowardly abandonings by seducers, the want of material enjoyments, the love of expenditure, the example of fortunes which some women have acquired by the incessant sale of their body, the kind of consideration which surrounds them when they have raised themselves—as high as their carriage above the mire—the encouragement which the press, the romance, the theatre gives by their indulgence to easy morals and even paid debauchery, all this has contributed to demoralise woman and to make her look upon prostitution as a means of livelihood—too often as a means of gaining riches.

But it is not in itself and in it alone that prostitution finds its encouragements; it is man who offers them. The more and more remote period at which he arrives in creating for himself a position which will permit, without imprudence, the great responsibility of marrying, the delays of all kinds thrown in the way of it, the habit of espousing a woman who has been scarcely seen, and especially marrying a dowry, the laxity of manners, the transformation of a city which has become the gathering place of the nomads of pleasure—all this has brought prostitution to Paris to a very alarming degree. All this exists or tends to exist, more or less, in London.

Inasmuch as the diminution of prostitution thus depends on social conditions, on manners and customs which the law is incapable of modifying, one might argue, and with reason, that the measures taken can never be of more than very limited efficacy. To this I reply, the moment the police recognises prostitution, the moment it authorises the existence of licensed houses, the moment, in fact, prostitution is practised as an authorised profession, it (the police) has the right to say: "I hold it as indispensable for public security to tolerate prostitution, to recognise it in order to be able to watch over it.

"The same as in public market, confided to my inspection, I watch for you that no putrid meats may be sold, so that you may go and purchase in perfect security; but if you prefer to buy elsewhere, and you are cheated, so much the worse for you. I have no right to prevent you, but my duty is to warn you. The same with houses of prostitution. There they are; I inspect them. You are free to go elsewhere, but you do so at your own risk and peril.

"As I desire to exercise my supervision with facility, and as I do not wish you to be led into debauch when otherwise you might have quietly returned home, prostitutes are not to walk the streets, but shall inhabit houses of prostitution, and every permission given to isolated women shall be suppressed.

"Moreover, as the police of the public highway is under my control, also that of the *cafés* and public balls, I forbid the practice of prostitution at these places, and shall regard it as a punishable offence. Do what you please elsewhere; if you contract syphilis it is your affair."

En résumé, let me sum up thus. We must not give inscribed prostitutes *legal* permission to practise prostitution isolated and at their own homes, for this is merely rendering all vigilance impossible, and favouring clandestine prostitution. Return to the customs of twenty years ago, and only permit prostitution in licensed houses; there make the inspection of men obligatory by the mistress of the house. Organise a special and efficacious Medical service for prostitutes. Announce loudly that, *aside from these conditions*, the authorities are not responsible, and that street-women are not inspected. Let the law declare *non-authorised* prostitution as an offence for provoking debauchery. Persecute actively the prostitution which is practised openly on the streets, in the *cafés*, or public balls; bring the women before the tribunals, and condemn them to one year's vigilance. Punish them with imprisonment in case of a second offence.

GENERAL CORRESPONDENCE.

SUCCESSFUL EXTIRPATION OF ONE KIDNEY.

LETTER FROM MR. SPENCER WELLS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just received a letter from Professor Wagner, of Königsberg (so well known here by Mr. Holmes's excellent translation of his work on the healing process after the resection of bones and joints, published by the New Sydenham Society), and I think the following extract will be read with great interest:—

"As I passed through Heidelberg, I saw a patient of Simon's whose case will interest you extremely. A provincial Surgeon had performed ovariotomy for her; and, on account of inseparable adhesions, had removed both ovaries and the uterus as far as the neck. The patient recovered. It appeared, however, that the operator had also injured the right ureter, for a urethral fistula formed in the cicatrix in the abdominal wall. This led to the patient going to Simon. After several unsuccessful attempts to cure the fistula, Simon at last *extirpated the right kidney*. He went in from the lumbar region, shelled the kidney out of its capsule, tied *en masse*, and cut it away. I saw the patient *cured*, and going about with the fistula also cured. The ligature threads had not come away. Simon now proposes extirpation of a kidney for such diseases as echinococcus, abscess, hydronephosis, and renal calculi."

I may add that I have seen a healthy kidney, inseparably connected with a fibro-cystic tumour of the uterus, removed with the tumour; and, although the patient died on the third day, there was not one symptom which could be referred to the loss of the kidney. The urine was normal in quantity and character, and there was no sign of uræmia.

I have also published cases which show that cysts of the kidney may be very successfully treated by tapping and drainage, and have joined in advising nephrotomy in some cases of renal calculi. When Simon publishes his case of extirpation of the kidney, he will no doubt discuss the principle of this operation, and we shall be glad to have a broad distinction drawn between cases in which disease of one kidney is killing a patient, and such a case as that of a urinary fistula where life is *not* threatened.

It may also be of some interest if I add that the lady from whom I removed a large fibroid uterus and both ovaries last summer, and of whose case I gave a short account in a paper on chloral in your number of October 2, 1869, is not yet at all strong, and occasionally suffers from pain and sickness.

I am, &c. T. SPENCER WELLS.

Upper Grosvenor-street, January 4.

POST-MORTEM EXAMINATION OF THE WELSH FASTING GIRL.

LETTER FROM MR. J. PHILLIPS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to enclose you notes of the post-mortem examination of the body of Sarah Jacobs, made by J. Thomas, Esq., and myself, thinking they may interest many of your readers.

I am, &c.

Newcastle Emlyn, December 30. J. PHILLIPS.

Notes of the Post-mortem Examination on the Body of Sarah Jacobs, aged 12½ years, the so-called "Welsh Fasting Girl," Three full Days after Death.

Exterior.—Hair nearly black, long, and plentiful; eyes very sunken, pupils dilated; very handsome features; left cheek still florid; chest and body generally well developed; mammæ

slightly so; armpits and pubes showing precocious puberty; right shoulder much more developed than left; left axilla more than usually hollow, as if a bottle or other hard substance had been kept there; thighs well rounded, but the legs below the knee small in proportion—less developed than the thighs; soles of feet soft, bearing no evidence of being used for locomotion; nails had been recently trimmed, the skin under the edge of the nail of the right great toe bearing a line of ecchymosis continuous with the cut nail, as if pinched by the scissors in trimming; toes of both feet pointing downwards.

Head.—On removing calvarium, found the vessels on the surface of brain turgid, the membranes quite healthy, brain beautifully developed, the anterior lobes especially; cerebellum of ordinary size (on cutting into the substance it was found firm, having a large proportion of cineritious matter, a few red spots only visible on the cut surface); ventricles empty, base quite normal, containing no fluid.

Chest.—Lungs collapsed, free, rather small, but quite healthy in colour and touch. Heart in every respect natural; pericardium containing no fluid or adhesions.

Abdomen.—The whole alimentary canal free from any thickening or contraction, and perfectly healthy throughout. Stomach of ordinary size, containing no food, but about half an ounce of a thickened acid mucous exudation; duodenum contained a little of the same fluid tinged with bile; jejunum also a little of the same fluid, as well as the ileum, where it became slightly grumous. Five half-grown lumbrici, and one full-grown, were in the ileum. In the cæcum the fluid became thicker, but same in character. Colon fairly distended with gas, and, with the rectum, contained about eight ounces of hardened fæces—not at one spot, but diffused through its entire length. Anus pervious, having a little thickened mucus therein; bladder empty; uterus small, but quite healthy; spleen normal, also kidneys and liver; gall-bladder distended with healthy bile; omentum contained a little fat. The body measured fifty-three inches in length; and under the integuments was a thick layer of fat, from half an inch on the thorax to one inch on the lower portion of the abdomen.

December 20.

"SORROW IN THE SOCK" AND "GRIEF IN THE GLOVE," *ALIAS* MORBUS COLORQUE TINCTORUM.

Letter from Mr. Webber.

To the Editor of the Medical Times and Gazette.

Sir,—The dispassionate, concise and explicit, and, I may add, very serviceable remarks, which have from time to time appeared in your widely circulated journal respecting "Dye Poisoning," to which I first drew public attention in September, 1868, lead me to enclose for your inspection a portion of the soft and beautiful lining of an equally handsome if not charming pair of kid gloves, the like of which has caused a gentleman at Brighton, tempted by the quality and seasonable warmth they held out, to become a very unhandy person, through the severe inflammation and blisters produced in both his hands, putting him somewhat in a fix in the conduct of his toilet, to say nothing of the suffering he has endured the last month.

It has been broadly asseverated that these dyes do not occasion any mischief save in "hot weather" (a very undesirable effect then, it will be conceded). But how comes it about that so many persons, as I am prepared to show, have suffered from them in the depth of winter? The old song of "July and December can never, can never agree," would seem to be a fallacy—the two negatives affirming the fact that where there is a mutual attraction, these dyes, positively, can warm too much and love too long.

The sock damage being *sub judice* precludes further remark from me just now. It will suffice to say that the glove as well as the sock malady has been brought to the knowledge of her Majesty's most honourable Privy Council, who will, no doubt, as you stated some time since, give due heed and attention to the matter.

In addition to the arsenic (I challenged the moment I saw the first case, then stoutly denied, but since admitted both at home and abroad), it is still my firm conviction, there exists in the coal tar a highly virulent property—the essence of carbolic acid probably—and that this property is capable, as in the "Tar pleuk," (a) either inherently, or rendered so by the process of compounding the dyes, of engendering violent and permanent toxical effects—effects evidenced in the ready susceptibility to suchlike seizures in those who have so suffered.

I am, &c.

William Webber.

38, Craven-street, Strand, W.C., January 4.

(a) "Those who work in establishments for extracting tarry matters commonly suffer from what is known as tar pleuk—pleuk meaning pimple or pox."

AMMONIA INJECTION IN COLLAPSE FROM UTERINE HÆMORRHAGE.

Letter from Dr. E. G. Wake.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to be allowed to publish in your columns some particulars of a case of collapse, following a very different cause from the one reported by Dr. B. Wills Richardson, but treated with the same remedy, and happily with a like result.

In obedience to an urgent summons, I visited Mrs. F., the mother of several children, on April 15, 1869. I found her suffering from profuse hæmorrhage, at (as she supposed) the third or fourth month of pregnancy. This was at once stopped by plugging the vagina; but alarming symptoms of collapse were fast setting in. Vomiting, cold extremities, and extreme jactitation were followed by absence of radial and brachial pulse, by the faintest heart-beat, and by seriously impeded respiration. As the patient has a great dislike to brandy—which was nevertheless tried without effect—I substituted the compound spirits of ammonia, and of this she took freely. Nothing, however, seemed able to restore the heart's action; and, in despair, I determined to try the subcutaneous injection of ammonia. The patient's home being five miles from mine, I had to wait at least an hour before the syringe was brought to me; and this is the only guide I have as to the length of time during which she was pulseless. That it was of no less duration than an hour I have not the slightest doubt. In my eagerness to use a remedy which seemed likely to loosen the fast-closing grasp of death, I injected a few minims of strong liquor ammoniæ over the sternum, as near the region of the heart as the breast would allow; and this operation I repeated three other times—over the right biceps humeri, on the forearm, and between the shoulders. I cannot remember at this interval of time how many drops were injected, but I should say from ten to twenty each time. The result was most cheering; the pulse slowly returned, and the most pressing symptoms gradually gave way. The next day the cause of the flooding was removed by the forceps, and was found to be a false conception.

Thus far all was satisfactory; but I must own in candour that my treatment was followed by four frightful sores, which were not healed until the beginning of June. It would have been much better, therefore, if I had diluted the ammonia, according to Dr. Halford's plan; and the urgency of the occasion can be my only excuse for having failed to do so.

I am, &c. E. G. Wake, M.D.

Collingham, Newark, December 27.

THE TREATMENT OF CANCER BY ELECTROLYSIS.

Letter from Dr. Althaus.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall feel obliged if you will kindly insert in your valuable journal the following particulars of a bad case of cancer which has been successfully treated by Dr. Neftel, of New York, with the aid of the electrolytic method which I proposed for the treatment of tumours three years ago. This important case goes far to show that the effects of electrolysis are, in a certain sense, constitutional as well as local, and adds another mite of independent testimony to the favourable experience which Dr. Morell Mackenzie has gained with it in cases of bronchocele, and Messrs. Durham and Cooper Forster in hydatid tumours of the liver.

Dr. Neftel used in his case the "serres-fines couductor," described in my paper on the treatment of tumours by electrolysis, which appeared in the *Medical Times and Gazette* for May 2, 1868.

"The patient was a member of the American Congress, and aged 56. In 1868 he consulted a number of eminent Surgeons, both in London and Paris, who were unanimous in their opinion concerning the cancerous nature of the tumour, which occupied the left mammillary region. This tumour was excised by Dr. Marion Sims in Paris. Soon after the wound had healed, the axillary glands of the left side began to enlarge, and formed in

January, 1869, a hard swelling of the size of a fist. The patient and Dr. Marion Sims were both at that time in New York, and the same Surgeon again excised the tumour, which was microscopically examined by competent histologists in New York, and pronounced to be cancerous. Diffuse erysipelas set in after the operation, with fever and severe constitutional disturbance, and the wound afterwards healed very slowly. Cicatrisation was hardly completed when a fresh tumour began to develope itself in the right mammillary region, and this soon attained the size of an orange.

"Further Surgical procedures now appeared inadmissible, especially as the general health of the patient had given way. Dr. Neftel therefore proposed to employ the electrolytic treatment. He introduced on three several occasions, in April and May, 1869, at first two, then three, and at last four gilt needles separately into the tumour, and connected them, by means of the serres-fines conductor, with the negative pole of a Daniell's battery, the positive electrode being placed on the skin in the neighbourhood of the tumour. He began with a current of ten cells, which was gradually increased to thirty. The first operation lasted two, the second five, and the third ten minutes. The needles were removed without any hæmorrhage taking place. Immediately after the operation the tumour appeared somewhat larger, from the hydrogen which had become evolved in it, but it was softer and more elastic to the touch. No fever or any other unpleasant symptoms supervened; on the contrary, the patient, who had been very feeble, anæmic and cachectic, became stronger from day to day, and the tumour gradually began to shrink. Two months after the first application, it had almost entirely disappeared; and three months after, no trace of it was left. The general health of the patient had improved *pari passu*, and was, when last seen, excellent. No fresh tumours had appeared anywhere.

"Dr. Neftel is inclined to believe that electrolysis produces remote constitutional effects, by altering the condition of the protoplasm of the cells in which the poison of the cancer is contained, and by the propagation of which the disease becomes constitutional. As soon as the protoplasm has, by the electrolytic process, lost its specific contagious qualities, the cancer is prevented from reproducing itself, and gradually disappears through the process of absorption."

I am, &c. JULIUS ALTHAUS, M.D.

18, Bryanston-street, Portman-square, W., Jan. 1.

CLINICAL OBSERVATIONS ON THE TEMPERATURE IN DISEASE.

LETTER FROM DR. HERBERT DAVIES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Every practical observer of the course of disease will receive with much satisfaction the series of thermometric results now publishing by Dr. Fox, Physician to the Bristol Royal Infirmary, in the columns of your periodical. In many of the statements contained in the last communication I fully concur, but I am compelled to differ from him with respect to the effect of the blister treatment on the temperature of the body. He says, "If under the treatment the temperature has fallen, the fall has generally seemed to be temporary only." And again, "Very frequently the most marked relief to pain which blisters afford will be accompanied by no diminution of temperature." And lastly, "The thermometer seems to point out that the treatment by blisters is not curative, however valuable it may be as a means of relieving pain." Proverbially, Doctors differ, but facts cannot; and I would here refer to the essay which I published in 1864 on the blister treatment in acute rheumatism, which will serve to show that my facts do not harmonise with the conclusions now published by Dr. Fox. The thermometric observations were taken at the London Hospital by Mr. George Mackenzie and Dr. Woodman, and for their accuracy I can distinctly vouch.

If these observations are of any value whatever, they establish distinctly the following conclusions:—

1. That the fall of the temperature was in most cases permanent.

2. That the marked relief was accompanied by a marked fall in the thermometer.

3. That the blister treatment proved in most cases rapidly curative where it was fully and boldly carried out.

These cases published *in extenso*, and very many others to which I could refer, fully warrant the statements I have thus made. I would earnestly impress upon any one intending to adopt the blister treatment the absolute necessity of doing so as early as possible in the affection, as the prompt application of the plan will secure rapid relief of pain, probable immunity from cardiac complication, and marked fall in the temperature of the body. I am, &c.

HERBERT DAVIES, M.D. Cantab., F.R.C.P.,
Senior Physician to the London Hospital.

23, Finsbury-square.

DR. RICHARDSON'S PORTABLE BELLOWS.

LETTER FROM MR. EDWARD MACKEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the course of some experiments with Dr. Richardson's "portable bellows for artificial respiration," so ably described by their inventor in your number of December 4, I have ascertained a fact which may be of interest—viz., that they are remarkably efficacious in forcing air into the Eustachian tubes.

In practice, when requiring to do this, I have been accustomed to use a "Politzer's bag" of the best construction, and although generally with success, yet sometimes with difficulty and annoyance.

With the "portable bellows" I have found the operation easier, less unpleasant, and more satisfactory. Whether it be that the hand has more command over the instrument, or that the valves are more suitably placed, I cannot say; but if any one will try the experiment on his own person, he will be able, I think, to confirm my observation.

I find the single nose-piece more convenient than the double one, and I compress both bellows at the same time. The nostril must be well closed over the tube. I am, &c.

Newhall-street, Birmingham. EDWARD MACKEY.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, DECEMBER 21, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

DR. MURCHISON, on behalf of Mr. De Morgan and himself, reported on Dr. Robinson's specimen supposed to be a Syphilitic Liver. It was only half the usual size, but presented no cicatrices or depressions, nor nodes. There was a good deal of fibrous-looking matter between the lobules, which presented many granular cells. The disease was not ordinary syphilis, but rather Frerichs' simple induration, perhaps arising from peritonitis.

Dr. MOXON exhibited a specimen of Pulmonary Embolism. He said: This year I showed a specimen of sudden fatal embolism of pulmonary artery. The specimen I now show illustrates a system of effects of Embolism very different from the simple mechanical obstruction that was the cause of death in the former case. The specimens shown were a portion of lung and the vena cava inferior from the body of a woman who died of pyæmia. The left lung, in its lower lobe, showed a sharply circumscribed patch of pneumonia. The pleura was inflamed, and some three-quarters of a pint of liquid was present in its cavity. The pneumonic patch was of a bluish or blackish-grey colour, and was otherwise peculiar through having a deeply injected zone around it, purplish-red in colour. This zone formed on any section a strongly marked narrow margin to the pneumonic patch. The colour and smell of the patch proved it to be in a state of incipient gangrene. On examining the artery that supplied this patch there was found in it a yellowish-coloured clot, lodged at a bifurcation, adherent to the wall of the artery at one point, and extending a little way into each arm of the fork of the artery. The main pulmonary artery and its other branches were occupied, on the contrary, with a prolongation of the post-mortem or death-bed clot that was in the right ventricle, as usual in death from inflammatory diseases. The vena cava inferior was occupied in its whole length by a clot having the same yellowish colour as that in the pulmonary artery. This clot extended up from the iliac veins, both of which were full of a like clot. It adhered to the left side of the vena cava, and was rounded on the surface and did not entirely fill the whole channel up, there being space for the passage of a small stream of blood between its smooth surface and the vessel's wall. The clot presented upwards a rounded end that reached a little way into the right auricle of the heart. The clot appeared oldest in the left common iliac vein, and there the vein was in contact with an

abscess which was between the rectum, broad ligament, and pelvic wall. This abscess had semi-organised walls corresponding to an age of four or five weeks. It appeared dependent on an inversion of the uterus, from which the woman had suffered for eight months, and it was the only cause of the pyæmia that could be discovered. The clot extended from this into the left renal vein, and followed up all the divisions of this to the smallest ramifications, filling it with curdy-looking pale-coloured clot that was easily removable from the vessel's channel. This kidney did not show any suppurations, whereas the right kidney, in whose veins were no ante-mortem clots, had numerous points of suppuration present in it. The clot in the cava ran up through its hepatic portion, but did not extend into the hepatic veins. Examination of this yellowish clot showed it to be made up of cells having the characters of pus-cells. These were in parts mutually compressed and flattened, being crowded together so that they made up the bulk of the clot. These microscopic characters showed it to be of very different nature from the passive clots that form and soften in the heart and in the vessels of uninflamed parts. There was suppuration of both knee-joints.

Mr. Murchison said, as to the kidney, the explanation given was not necessary, for in general pyæmia pus in the kidney was very common, as his experience went.

Dr. Moxon thought that the heart and kidney were most usually affected in pyæmia resulting from periostitis.

Dr. Bastian asked why the masses were described as purulent, and not as altered blood-clots. Why were the bodies pus-corpuscles, not white blood-corpuscles?

Dr. Bristowe thought that when clots were conveyed from one part to another, the kind of clot undoubtedly influenced the consequent local change. He had recorded a case where an embolus in the pulmonary had come from the tricuspid valve. This led to extensive inflammation, although there was nothing peculiar in the clot.

Mr. Gay thought it not an embolus, but a thrombus.

Dr. Moxon agreed with Dr. Bastian as to the impossibility of discriminating white blood-corpuscles from pus-corpuscles, but in this instance they were too numerous to be white blood-corpuscles. In a case similar to Dr. Bristowe's which he had seen, the valve was evidently broken on its surface. Pus was not infrequent in veins, especially in the cerebral sinuses.

Mr. Hulke said that in one instance—viz., that of the arteria centralis retinæ—the embolus could be seen. Where the clot was rheumatic he had never seen suppuration, but, where pyæmic, suppuration of the whole vitreous had followed. This could only be due to the kind of embolus.

Dr. Clapton exhibited a specimen of Ulcer of the Stomach, occurring in a woman aged 37. She had suffered from bad health, and complained of her stomach. When seen she was rambling and hysterical, and seemed to have much pain of the bowels. Opium was ordered, but next morning she was collapsed, and soon died. Five pints of fluid were found in the peritoneum, and there was slight effusion round the gut. There was an opening in the anterior wall of the stomach. The liver was soft, pale, and fatty. The perforation was large, with dense callous edges, and situated near the small curvature. The margin was congested. Behind, but not opposite, was a large opening leading to the pancreas, and a sinus appeared to extend into the small sac of the peritoneum. A patch of lymph was adherent towards the cardia, probably the beginning of a similar opening. The dense edges were perhaps scirrhous.

Mr. Sydney Jones showed a specimen of Tumour of Clavicle complicated with aneurism of the arch of the aorta. The patient, for about two years, had suffered pain and loss of power in his neck and left arm. From the history, there seemed to have been about twelve months ago some prominence of the left sterno-clavicular articulation. When first seen by Mr. Sydney Jones on September 30, there was a tumour connected and moving with the clavicle, extending downwards into and almost filling the axilla. The left arm was useless. No pulsation was to be detected in the axillary, brachial, or radial arteries. There was a great deal of impulse behind the sterno-clavicular articulation (which might have been dependent on blocking up of the subclavian by the tumour), but there was no bruit. There was then no projection of the inner end of the clavicle; at the lower part of the neck there was nothing to be felt indicating an aneurism. The clavicular tumour was at that time removable by operation (supposing that the clavicle and humerus had been removed along with it); but the patient had cough, was pale and much emaciated. Later on the left carotid had its impulse diminished. At the end of November no pulsation could be felt in this vessel, and the axillary growth, from its immobility, had evidently involved the thoracic parietes. He died on December 4 from obstructed respiration. There was found a large aneurism of the transverse arch almost completely filled with laminated coagulum. The innominate artery was pervious, but the left carotid and subclavian had their sides compressed in consequence of their oblique course through the wall of the aneurism. They were also obliterated by adherent clot, so that the aneurism, not the clavicular tumour, had arrested the circulation in the upper extremity. The aneurism and tumour were perfectly distinct; the latter had broken the clavicle, and had involved the coracoid process of the scapula and destroyed for about an inch the first rib. Sections of the tumour and of the adjoining glandular enlargements were white and succulent, yielding an abundance of creamy juice. This was made up of nuclei about the size of pus-corpuscles, with a well-marked outline and a very distinct nucleolus, surrounded by more or less abundant granular matter. In the spleen were four or five deposits with the same microscopical characters.—Referred to committee.

In reply to Mr. Hulke, Mr. Jones said he had been unable to examine the eye with the ophthalmoscope.

Dr. Whipham exhibited specimens illustrative of Cystic Disease of the Kidneys occurring in a policeman, who had necrosis of the tibia. He came to St. George's to have the bone removed, but was attacked with bronchitis and died. There was found congestion of bronchus and lung, but no dropsy, although both kidneys were affected; one was ten inches long. The urine was albuminous before death. A specimen similar in all respects had been exhibited last year.

Mr. Maunder showed an Ovarian Tumour removed from the body of a woman aged 30. It had existed three or four years, and she had been tapped once. An operation for removal was attempted, but failed, and two cysts were tapped. For three weeks she did well, and there was little or no discharge, but then suppuration set in with rigors. At the time of the operation a small fleshy mass had been felt. This had suppurated, given way, and caused general peritonitis and death.—Referred to Messrs. Bellamy and Arnott.

Mr. Hulke exhibited the Genito-urinary Organs of a man to show the effects of impacted calculi. There was stricture of the urethra with dilatation behind. A stone was supposed to have been felt, but there was difficulty in making certain of this, owing to the stricture. This was split, when no stone could be found. He died of pyæmia. There was dilatation of the ureter, owing to an impacted calculus, causing in turn dilatation of the kidney.

Mr. Hulke also showed an Encysted Hydrocele from an old man, consisting of single cysts communicating by intricate passages. It appeared to have originated in the epididymis and unravelled it. It did not consist of expansions of the seminal tubes; more likely it originated from the innominate bodies of Giraldès.

Dr. Murchison showed specimens of Ulcer of the Stomach. The cases had an obscure history. A woman, aged 40, died last summer. She had been intemperate, but her health had been tolerable. She complained of nausea and of pain not increased by food. She had vomited a great deal of blood just before being brought in. The liver was rather small, but there was no evidence of portal obstruction. The hæmatemesis was checked for a time, but it returned profusely, and she died from loss of blood. The liver was small, but not diseased. The stomach, after careful examination, presented a very small ulcer in the great *cul de sac*. In its centre was a minute orifice leading into an artery. There were two small ulcers close by, but no signs of inflammation. The second case occurred in a male, aged 28, who had been a soldier, and possessed of good health till six months before, when he became faint and brought up much blood. Again he was seized suddenly with nausea, vertigo, and weakness; hæmorrhage again occurred, the blood being bright red. The hæmatemesis caused his death. An exceedingly minute ulcer existed close to the œsophageal opening; its orifice was rounded as if of some standing. His liver was cirrhosed and syphilitic.

Mr. Sydney Jones had reported a similar case where there was a minute opening in the posterior wall.

In reply to Dr. Powell, it was stated that the vessels were atheromatous.

Dr. Cayley showed a specimen of Aneurism of the Aorta, communicating with the pulmonary artery, in a man, aged 37, who died of pericarditis. There were signs of aortic valvular disease during life, but only the aneurism was found.

Dr. Murchison had had a similar case. The patient was characterised by very great pallor.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 29.

PETER MARSHALL, Esq., President, in the Chair.

DR. COCKLE read a paper entitled "Further Notes on Pulsating Tumours of the Neck." This paper was to be considered as a complement to a former one read before the Society at the close of its last session. Two additional cases of dilitation of the innominate artery were herein detailed, in one of which, independently of the pulsating tumour in the episternal hollow and lowest part of the right side of the neck, cirsoid aneurism of the upper half of the left carotid artery existed, attended by forcible impulse and remarkable locomotion of the vessel; this was exhibited for examination by the Society. In both cases existed signs of implication of the aorta, but in the latter the murmurs audible over the heart and aorta were attended with certain peculiarities which offered difficulties in the way of differential diagnosis. In adverting to these difficulties, the author was lead to offer some remarks upon the subject of cardiac murmurs generally, pointing out the difficulty at times of determining either the precise time, during a cardiac revolution, at which such murmurs are heard, or the exact seat at which they are generated. The diagnosis of these tumours from some other affection of the chest and neck was then briefly alluded to, but more especially the point of difference between them and ordinary aneurism of the innominate artery, from which they clearly are to be separated. These more especial points of difference were stated to consist in the peculiar intermitting prominence of the tumour, in the constant complication of dilatation in the aorta, in the indefinite duration of the affection, and, according to the author's experience, in its exclusive occurrence in females about the middle age.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 8, 1869.

Inspector-General LAWSON in the chair.

A PAPER, by Dr. BLAXALL, R.N., was read on

THE LATER HISTORY OF THE OUTBREAK OF FEVER IN MAURITIUS.

Dr. Blaxall, having recapitulated the earlier history of the outbreak of the epidemic in 1867, when it devastated the leeward or north-west shores, stated that it subsided in the cooler months of August, September, October, etc., but awoke with renewed vigour on the return of the hot weather in January, 1868, and it was then no longer confined to the leeward districts, but appeared also in the windward, particularly in the town of Mahebourg, which is the chief town of Grand Port, and where all the concomitant circumstances favourable for the generation of malaria were present in a marked degree—*i.e.*, exposed banks of rivers, swampy grounds, vegetation, and great heat, and the sanitary state of the inhabitants, as at Port Louis, was in a most unsatisfactory condition. Overcrowding to a very considerable extent prevailed, of drainage there was little or none, defecation was in some instances performed into simple pits dug in the yards appertaining to the houses, and there was a considerable deal of underfeeding; consequently the people were a ready prey for the malarious poison to attack, and fatally it did its work of destruction, as 1076 died. And, after dwelling upon the interesting fact of the fever not having appeared in the windward side until 1868, although apparently the predisposing and exciting causes were precisely the same as in 1867, he stated that evidently the poison was much less virulent in 1868 than in 1867; for although the whole island was encircled in the former year, still the mortality from fever was two-thirds less than in 1867—viz., 10,049 against 32,241. The total mortality from the epidemic, which is now acknowledged to be of a paludal, malarious nature, amounted in October, 1868, to about 48,000 out of a population of 350,000. He thinks that if the island and inhabitants are allowed to remain in the same state as at present, malaria will be persistent and diseases rife. He recommends the improvement of the sanitary condition by preventing overcrowding in the towns and Indian camps; by removing the sites of the latter from the neighbourhood of rivers to more healthy spots, as they now frequently contaminate the water by excreta, washing, etc.; by building loftier and better ventilated huts; by giving them a plentiful supply of wholesome water, and drainage to carry off that used for washing and domestic purposes; and by establishing latrines on the dry-earth system, with stringent laws for their regulation; and to endeavour to prevent the formation of malaria, trees should be planted on the mountains to induce a greater rainfall, and to prevent rapid evaporation; also along the banks of rivers and canals, which canals should be cut through the marsh land, as suggested by the sub-committee. All this will take time and be expensive, but the local government will reap a rich reward in the improved salubrity, the decrease of disease and mortality, and in the enhanced value of the land. Dr. Blaxall concluded by giving an interesting history of four cases of intermittent fever that occurred on board H.M.S. *Urgent*. The first, quotidian, appeared on the twelfth day after leaving the Mauritius; the second, also quotidian, on the fourteenth; the third, tertian, on the forty-eighth; and the fourth, also tertian, on the 184th day; and although the periods of incubation varied so much, there was no doubt but each individual contracted the disease during the *Urgent's* stay of five days in Port Louis harbour.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, NOVEMBER 17.

S. A. BINDLEY, Esq., President, in the Chair.

DR. JOLLY exhibited an Epithelial Growth removed by the knife from the left temple of a man aged 62. It was first noticed fourteen months since, and had reached the size of a large walnut.

RESULTS OF STRICTURE.

Mr. WILDERS showed the urinary organs in a case of Stricture. The man had been the subject of stricture for thirty years, having had a fall on a rail when a child, and since that time he had diffiulty in passing his urine. Six years ago a catheter was passed, and a scrotal abscess followed. At the time of admission he only passed water *guttatim*, with a constant desire to micturate. The man being very anxious to be relieved, and there being no albumen in the urine, the patient was put under the influence of chloroform, and a No. 2 catheter was passed gently into the bladder. For a few days the man went on favourably, and the urine passed in fair stream. On the fourth day he complained of pain in the left groin, with slight swelling; the pulse and temperature rose rapidly. Great abdominal tenderness came on, with profuse diarrhœa. Various remedies were employed, but the man gradually became worse, and died about three weeks after the catheterisation from exhaustion. A post-mortem examination revealed slight general peritonitis. There was an abscess surrounding the prostate, extending up to the right iliac fossa, and dissecting the peritoneum from the rectum. The parts surrounding the abscess were in a gangrenous condition. On opening the urethra two strictures were found—the first about four inches from the urethral orifice admitting a No. 2 catheter; the second at the junction of the spongy and membranous portion, through which a silver probe was unable to be passed. The cavity of the bladder was very small, scarcely admitting a small hen's egg. The walls were much thickened. The kidneys contained abscesses; the ureters were much dilated, and in places pouched. The prostate gland was enlarged.

Mr. WILDERS also exhibited a very characteristic-looking Fatty Tumour which he had removed from the right shoulder of a woman.

Mr. WEST then read a paper on Wounds of the Heart, relating a case which had happened in his own practice, and fully entering into the diagnosis, prognosis, pathology, and treatment of such wounds. The paper was very fully illustrated by cases, showing great industry on the part of the author.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, OCTOBER 15.

THE INAUGURAL MEETING.

J. LANE, Esq., President, in the Chair.

THE PRESIDENT, after giving a short address, exhibited a Tumour of Fibro-cellular character, weighing five ounces, which he had removed from the scrotum of a child 2½ years old. The tumour was first noticed when the boy was two months old, and enlarged rapidly, but for the last six months it had not increased in size. The testis was perfectly sound, and situated behind the tumour, but not involved in it. The case was one

of considerable interest from the extreme rarity of the growth in such a situation at so early an age, and from the difficulty before the operation of forming a correct idea of its nature, and of ascertaining whether the testicle was or was not implicated in it. That organ was of course carefully sought for and preserved, and was in no way injured in dissecting away the tumour. The wound in the scrotum rapidly healed.

Dr. Daniell then exhibited some Extract of Beef Suppositories which he had used successfully in a case of intestinal obstruction in which beef-tea could not be retained.

OBITUARY.

JAMES NICHOLS, M.R.C.P.,

Died on Monday morning last at his house in Savile-row. Dr. Nichols was born in Norfolk, and received his Medical education at St. Bartholomew's Hospital. He started in general practice in Castle-street, Leicester-square, in partnership with Mr. Skair. He subsequently removed to Leicester-place, to the house which was occupied for nearly half a century by Mr. Honoratus Leigh Thomas, to a considerable portion of whose practice he succeeded. He removed to Savile-row about fourteen years since, and, having obtained the Membership of the College of Physicians, devoted himself chiefly to consultation practice. Dr. Nichols had, for a considerable time before his death, occasionally suffered from symptoms of asthma and slight heart disease, which laid him up for a few days at a time. He was a Fellow of the Royal Medical and Chirurgical Society, but seldom visited its meetings. He was not only a well-informed and able Practitioner, but he was a great admirer of Shakespeare, and devoted much of his leisure time to "annotating" the works of the great bard. Some of his notes were exceedingly interesting and ingenious. They were published in the *Athenæum* and in a separate pamphlet. He wrote several articles for the Medical journals, some with his name attached and some anonymously. Though somewhat brusque in his manners, he was a kind-hearted man, of high principles, and thoroughly independent.

JOHN HARRISON, F.R.C.S.,

Was formerly House-Surgeon to St. George's Hospital. He practised for many years in the Albany-courtyard, and is chiefly known for his work on "Stricture of the Urethra."

NEW INVENTIONS.

THE BITTER WATER OF FRIEDRICKSHALL.

There is an increasing tendency among us to prescribe natural mineral waters rather than artificial combinations of salts as habitual purgatives in dyspepsia and suchlike disorders. Of all the waters so used the two most popular are the Püllna and the Friedrickshall bitter waters, as the Germans call them. The Püllna water comes from a valley or plain in Bohemia, not far from Teplitz, of a most peculiar character; the Friedrickshall water from the Duchy of Saxe-Meiningen, not far from Coburg. Enormous quantities of both are exported, Cottle and Co., of Duke-street, Manchester-square, who have forwarded us certain specimens, being among the largest dealers in this country. The Friedrickshall waters contain alkaline sulphates, carbonates, and chlorides, with a small quantity of bromide, and some free carbonic acid. The taste is not unpleasant, but seems, by way of antithesis, to render the draught of ordinary water which follows exceedingly sweet and pleasant. Half a tumbler generally suffices for a laxative dose; its action is not powerful in this quantity, and is very certain. We cordially commend it to our brethren.

CONDENSED MILK.

There is now for sale in various parts of London the "Condensed Milk" of the Anglo-Swiss Condensed Milk Company, the factory of which is at Cham, in Switzerland.

The substance in question is sold in tins containing about a pound, and hermetically soldered up. The process of manufacture is very simple. The best Swiss milk has most of its water removed by evaporation in vacuo, and is mixed with a certain quantity of cane sugar in order to preserve it. Thus prepared it constitutes the "condensed milk," and needs only to be mixed with four to five times its weight of water in order to reproduce milk differing from ordinary milk only by being a little sweeter. In appearance and consistence it resembles pale honey. It keeps remarkably well, even after the tin has been opened. In virtue of these qualities and of its portableness it will become invaluable on shipboard and to travellers and invalids. As will, however, be obvious on a little reflection, it can hardly become a general article of diet under ordinary conditions. It must be too dear. It claims only to be milk; and milk which has been subjected to a costly process and then conveyed a thousand miles should not be able to compete with our home produce. Reference to prices fully bears out the justice of this reflection. Two tins, at 1s. 2d. each, are required to give one gallon of milk, which therefore costs 2s. 4d. The price of excellent milk in London is 4d. per quart, equal to 1s. 4d. per gallon.

NEW BOOKS, WITH SHORT CRITIQUES.

The Swimming-baths of London. By R. E. Dudgeon, M.D. London: Henry Turner. Pamphlet.

*** This is a very interesting little pamphlet. It contains some account of all the places in London where men can go for a swim, whether the water be cold or tepid. Some of them would seem to be far from inviting, whilst the Marylebone, in the Marylebone-road, would seem to be among the best. Dr. Dudgeon is a great advocate for increased swimming accommodation. In this we readily concur; increased accommodation and better regulations are urgently wanted. In conclusion we may say that our readers will not contract homœopathy from the perusal of the pamphlet, for Dr. Dudgeon, notwithstanding his well-known tendencies, does not take to water homœopathically.

The City Diary for 1870. Price One Shilling.

*** Our readers who want a cheap desk diary cannot do better than to select the "City." The paper is good, the size convenient, and it is interleaved with blotting-paper, so that no inconvenience follows on closing it after making any note. It also contains an almanac and a great deal of curious and useful information as to City officers and dignitaries.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, December 30, 1869:—

Howson, Joseph James, Grange-road, S.E.
Smithson, John, West Town, Dewsbury.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Gamgee, Dr., F.R.S.E.—Physician to the Royal Edinburgh Hospital for Sick Children, *vice* Dr. Keiller, resigned.

Hawaro, Dr. Edwin—Physician to the St. Marylebone General Dispensary, Welbeck-street, *vice* Dr. Cayley, resigned.

Smith, R. Shingleton, M.D. Lond., B.Sc.—Medical Registrar to King's College Hospital, *vice* Dr. C. W. Philpot.

Wright, Chas. J., M.R.C.S. Eng.—Surgeon to the Leeds Public Dispensary.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointments have been made:—Thomas A. Pickthorne, Staff Surgeon, additional, to the *Fisgard*, for service as Visiting Surgeon, under the Contagious Diseases Act, at Plymouth, Dartmouth, Devonport, Ivybridge, and Plympton.

The Secretary of State for War and the Lords Commissioners of the Admiralty have appointed William Henry Sloggett, M.R.C.S., Staff Surgeon R.N., to be Inspector of Certified Hospitals, under the Contagious Diseases Acts 1866-69.

War Office.—The following appointments have been made:—17th Foot: Staff Assistant-Surgeon George Wellington L'Estrange, to be Assistant-Surgeon. 52nd Foot: Surgeon John Coghlan Haverty, having completed twenty years' full-pay service, to be Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867.

Medical Department.—Assistant-Surgeon Edward Vallance, from the 2nd Dragoon Guards, to be Staff Assistant-Surgeon, *vice* George Wellington L'Estrange, appointed to the 17th Foot.

BIRTHS.

ELLIOTT.—On December 30, at Hull, the wife of G. F. Elliott, M.D., of a son.

HAYWARD.—On January 1, at 4, Hobart-place, Eaton-square, S.W., the wife of Sidney Hayward, M.D., of a daughter, who survived only five days.

NESHAM.—On December 23, at 43, Northumberland-street, Newcastle-on-Tyne, the wife of Thomas Cargill Nesham, M.D., of a son.

PRINGLE.—On December 3, at Meerut, N. W. P. India, the wife of Surgeon R. Pringle, M.D., H.M.'s Bengal Army, of a son.

SPYERS.—On January 3, at Faversham, the wife of Thomas C. Spyers, M.D., of a daughter.

THOMPSON.—On December 28, at Jarrow-on-Tyne, the wife of R. Farrer Thompson, M.D., of a daughter.

MARRIAGES.

BEST—MATHESON.—On January 3, at St. James's, Piccadilly, Alexander Vans Best, M.D., F.R.C.S., late Surgeon Bengal Army, to Louisa Cecilia, widow of the late Lieutenant-Colonel Matheson, Bengal Staff Corps.

DANSON—DOBSON.—On December 30, at the chapel of the English Embassy, Paris, Henry Danson, M.D., of St. John's-wood, London, to Mary, daughter of the late R. Dobson, Esq., of Pickering, Yorkshire.

NEWCOMBE—MILLER.—At All Saints Church, Newcastle-on-Tyne, on December 6, 1869, F. W. Newcombe, M.D., Gateshead, to Emily, second daughter of Wm. Miller, Esq., of Newcastle.

PEARSON—RAE.—On December 29, at Kensington Presbyterian Church, David Ritchie Pearson, M.D., to Jane, elder daughter of James Rae, Esq., of 32, Phillimore-gardens.

REED—ROSS.—On October 3, at Sydney, New South Wales, Howard Reed, youngest son of Dr. Andrew Reed, of London, to Sarah Elizabeth, youngest daughter of the Rev. Robert Ross, M.D., of Kidderminster and Sydney.

DEATHS.

BUSS, ELIZABETH REBECCA, the beloved wife of H. Buss, M.D., at 56, Shoreditch, on January 1.

CHAPMAN, Dr. E., late of Biarritz, at Madrid, on December 26, in his 34th year.

CROWDY, SOUTHBY, Assistant-Surgeon R.N., at Plymouth, on December 28, aged 30.

EVANS, JANE MARGARET, widow of Holliday-Evans, M.R.C.S., of Wellington, Somerset, at Woodhill-place, Bath (the residence of the Rev. Wm. Shaw), on December 30, aged 81.

HARRISON, JOHN, F.R.C.S., at his residence, 2, Albany-courtyard, Piccadilly, on January 3, aged 62.

HOOD, Sir WILLIAM CHARLES, M.D., M.R.C.P., etc., at Bridewell Royal Hospital, London, on January 4, aged 45.

MORGAN, AMELIA, relict of Moses Morgan, M.D., at Hampstead, on December 31, aged 56.

NICHOLS, JAMES, M.R.C.P. Lond., at 13, Savile-row, on January 2.

SLADDEN, JOHN, Surgeon, at Ask-next-Sandwich, on January 3, in his 85th year.

STOKES, MARY, the long-beloved wife of William Stokes, M.D., at Dublin, on December 28.

WARREN, Captain ROBERT, late 4th Dragoon Guards, last surviving son of the late Dr. Richard Warren, Physician to George III. and to the late Prince of Wales, at 24, Marlborough-road, N.W., of bronchitis, on December 31.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ANDOVER UNION.—Medical Officer for No. 1 District. Candidates must be qualified in accordance with the general orders of the Poor-law Board, and be registered. Applications and testimonials to Thomas Lamb, Esq., Clerk to the Union, Andover, on or before January 20, 1870. Election on the 28th inst.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

CHARING-CROSS HOSPITAL (WEST STRAND).—Registrar. Must be qualified and registered. Applications and testimonials to H. Woolcott, Esq., Secretary, on or before January 19, 1870.

GLOUCESTER COUNTY ASYLUM.—Junior Medical Assistant. Must possess one qualification, and be registered. Applications and testimonials to Mr. E. Toller, at the Asylum. The duties will commence about the middle of January.

HAMBLEDON UNION.—Medical Officers for the Chiddingfold and Shalford Districts. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to J. F. Smallpiece, Esq., Guildford, on or before the 8th inst. Election on the 10th.

ISLE OF MAN HOSPITAL AND DISPENSARY.—Resident Medical Officer; must be legally qualified. Applications and testimonials to John Moore, Esq., Hon. Sec., Douglas, on or before the 19th inst.

MIDDLESEX HOSPITAL.—Surgical Registrar. Must be M. or F.R.C.S.E., not engaged in general practice. Applications and testimonials to the Secretary, on or before January 8, 1870.

NORTH STAFFORDSHIRE INFIRMARY, HARTSHILL, STOKE-UPON-TRENT.—House-Surgeon. Further particulars will be announced in our next.

SUNDERLAND INFIRMARY AND DISPENSARY.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

VICTORIA HOSPITAL FOR SICK CHILDREN, GOUGH HOUSE, QUEEN'S-ROAD, CHELSEA.—House-Surgeon. Must be qualified and be registered. Applications and testimonials to the Secretary, on or before January 10.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, N.W.—Resident Surgeon and Apothecary; must be a Member of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be L.S.A. Applications and testimonials to the Dispensary House, on or before the 10th inst., on which day candidates must attend a meeting of the Board of Directors at 8.30 p.m.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Andover Union.—The First District is vacant; area 12,146, population 6069; salary £70 per annum. Also the Workhouse; salary £55 per annum.

Keynsham Union.—Mr. John Lodge has resigned the Keynsham District; area 10,004; population 4585; salary £55 per annum.

Wolstanton and Burslem Union.—The North-east District is vacant; area 1875; population 9203; salary £40 per annum. Mr. John Alcock has resigned the Wolstanton District; area 5240; population 9563; salary £30 per annum.

APPOINTMENTS.

Lincoln Union.—Frederick S. Higgs, L.M., M.C. Dur., L.S.A., to the Third District.

Manchester Township.—Edmund Manley, M.R.C.S.E., L.S.A., M.B. Lond., to the St. Michael District.

Radford Union.—Henry R. Hatherley, M.R.C.S.E., L.R.C.P. Edin., L.S.A., to the First District and the Workhouse.

Thirsk Union.—James Rust, M.D. Aber., C.M. Aber., to the Knayton District.

ROYAL COLLEGE OF SURGEONS.—The following are the arrangements made for the delivery of the ensuing courses of lectures in the theatre of the above institution—viz., Professor Erasmus Wilson, F.R.S., will commence a course of six lectures on "Dermatology," on Monday, the 31st inst., at the conclusion of which Professor Flower, F.R.S., will deliver a course of eighteen lectures on the "Anatomy of the Mammalia," commencing on Monday, February 14, the anniversary of the birth of John Hunter; and in June next, Professor Birkett, F.R.C.S., a member of the Council of the College, and Mr. Hulke, F.R.S., will complete the lectures for the present year, the former by a course of six lectures on the "Nature and Treatment of New Growths," and the latter by a course of three lectures on the "Minute Anatomy of the Eye," in continuation of his subject of last year. Professors Wilson and Flower will deliver their lectures on Mondays, Wednesdays, and Fridays, at 4 o'clock.

DR. REGINALD THOMPSON has been appointed Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

DR. GEORGE GODDARD ROGERS, late Medical Registrar of St. George's Hospital, has been appointed by Lord De Grey to the vacant Inspectorship in the Medical Department of the Privy Council Office.

AT a meeting on the 24th ult. of the Governors and Court of Assistants of the Royal Society of Musicians of Great Britain, Mr. Ashton, of Cavendish-square, was appointed Surgeon-Aurist to the Society.

VACANT CORONERSHIP.—There is a vacancy in the coronership of East Berks, consequent upon the death of Mr. Rupert Clarke, solicitor. At present there is only a lawyer candidate in the field; there would be a good chance of a Medical Practitioner's success if he entered into the contest.

THE two vacant places in the staff of Physicians of the Hôtel-Dieu, at Lyons, have just been filled up by the election of Dr. Elisée Français and Dr. Paul Laure, after a *concours*.

RELAPSING fever has made its appearance in Manchester.

HORSEFLESH was eaten in Paris during September, October, and November last, to the extent of 273,200 lbs., as against 226,000 lbs. in the corresponding months of 1868.

MR. W. B. SHORTO, the Resident Surgeon at the Royal Southamptonshire Infirmary, Southampton, has sustained a severe fracture of the foot by accidentally slipping while walking along one of the passages of the building.

MR. GEORGE MOWAT, M.R.C.S. Eng., has been presented with a Harley binocular microscope and several valuable instruments, on resigning the office of House-Surgeon to the Swansea Infirmary.

MISS GARRETT, L.S.A., passed, on the 4th inst., the fifth examination for the M.D. of Paris.

THE *Dreadnought* Hospital-ship, off Greenwich, is to be "disestablished" and removed early in the spring. The patients will be transferred to the Infirmary of Greenwich Hospital.

Medical Club.—The members of this Club met and held their first dinner for the present year on Wednesday, the 5th inst. Dr. P. Hood presided on the occasion.

Presentation.—Mr. Alfred Winkfield, M.R.C.S.E., has been presented with a valuable microscope and a purse containing banknotes on resigning as House-Surgeon to the Radcliffe Infirmary, Oxford. The presentation was made by Dr. Acland, publicly, in a very eulogistic speech, and suitably acknowledged by Mr. Winkfield.

Longevity.—A woman died at Govan last week who completed her 103rd year on the "shortest day." Till within a few days of her death she was able to go about as hale and hearty as many who have not lived half her years. She was twice married, but outlived all her family.

Medical Attendance at Night.—It has been proposed to establish in Paris, throughout the city, forty stations at which a Medical Practitioner should be in constant attendance during the night and be charged with the gratuitous attendance of all urgent cases. The cost of sustaining this Medical night force—which would consist of sixty members—would fall either upon the Imperial or Municipal Government.

The Medical Dispensary Officers of Ireland.—At a meeting of the Medical Dispensary Officers of Sligo and Leitrim, held a few days since, votes of thanks were unanimously passed to Lord Longford and Archdeacon Goold, "for their very complimentary remarks in reference to the Medical Dispensary officers of Ireland."

Baby Farming in France.—A widow, living in the commune of Houdan, has for many years past made a business of receiving children to nurse, but of eighteen entrusted to her in four years sixteen had died. On inquiry, Medical evidence failed to establish either criminality or negligence on the part of the woman. It was, however, shown that she had appropriated the money sent for the burial of the children, and for this offence she was condemned to three months' imprisonment. It was said that one night her house took fire when she was several miles distant, having left a child 7 years of age in charge of the infants entrusted to her.

Post-mortem Examinations.—At an inquest held by Dr. Diplock on Monday last, the husband of the deceased woman on whom the inquest was held positively refused to allow the body of his wife to be examined with a view of arriving at the cause of her death. The inquest was adjourned for the purpose of examining the body, the husband still protesting against it, saying he would rather go to prison than allow it to take place.

The Cholera Miasma.—Dr. Bryden has just published a remarkable report, in which he generalises from the detailed cholera statistics of the past fifteen years, and from the scantier records of the earlier epidemics. The cholera miasma still remains a mystery, and Dr. Bryden devotes himself to a purely scientific inquiry into its natural history. He comes to the conclusion that it is bred in the endemic area of Lower Bengal, that it is borne by the prevailing monsoons, and vitalised by humidity according to known meteorological laws, so that its course and even duration may be predicted, and that the influence of man and of water in propagating it is merely secondary.

The late Dr. Yonge, of Plymouth.—The *Western Morning News* announces the death, in Plymouth, from bronchitis, of Dr. Yonge, who was formerly an assistant to the celebrated Abernethy. In 1832 he went into practice in Plymouth, and was deservedly esteemed both for his reputation as a Physician, and his activity as a philanthropist. The deceased gentleman, who was a staunch Conservative, was first married to a daughter of Sir Thomas Crawley, of Flaxley Abbey, Gloucestershire, afterwards to a daughter of Admiral Couch.

The dockyard at Deptford has recently been inspected by Dr. Bridges, on behalf of the Poor-law Board, with a view of utilising some of the buildings as a temporary fever Hospital, and an Admiralty order has since been received directing that the house formerly occupied by the Master Attendant, with two other houses facing the river, should be handed over for the use of the Poor-law Board for the purpose referred to.

On Wednesday, December 29, Mr. Arthur Sketchley kindly assisted at a Christmas treat provided for the patients of the Middlesex Hospital by the Lady Superintendent and one of the head nurses. He kept the crowded ward in an almost continuous ripple of laughter for nearly an hour whilst he recited his well-known "Mrs. Brown at the Play." Some of the students and two or three ladies afterwards furnished some good singing and music.

The Gresham Professor of Physic, Dr. E. Symes Thompson, will deliver two lectures — one on "Catching Cold," the other on "Stimulants"—at the Gresham College, Basinghall-street, on Friday and Saturday evenings, Jan. 14 and 15, at 7 o'clock. The lectures are free to the public.

Composition and Quality of the Metropolitan Waters in December, 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	19·10	0·098	0·018	0·002	14·8	3·6
West Middlesex .	18·97	0·031	0·024	0·000	14·3	3·6
Southwark & Vauxhall . . .	18·97	0·031	0·013	0·001	14·5	4·0
Chelsea . . .	19·13	0·002	0·022	0·001	14·6	4·0
Lambeth . . .	19·07	0·098	0·023	0·002	14·5	4·0
Other Companies.						
Kent	27·07	0·013	0·022	0·000	20·4	6·0
New River . .	18·97	0·009	0·021	0·000	14·2	3·9
East London . .	18·33	0·022	0·024	0·000	14·4	4·0

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Medical Officers of Health, 97,329,081 gallons, and the number of houses supplied was 473,876. This is at the rate of 30·7 gallons per head of the population daily.

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

H. Letheby, M.B.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

E.—A member of the Society of Apothecaries is not necessarily a Medical Practitioner. He may have been a member of the ancient Society before 1815, before the Court of Examiners and present licence were in existence.

A. B. C.—1. Laceration of the urethra. 2. Passing a catheter and retaining it in the bladder. 3. Extravasation of urine. 4. Incision of the perinæum for both purposes. 5. We fear so. 6 Five guineas.

Dr. Beigel has removed to 56, Russell-square, W.C.

Dr. C. Carter Blake's address is 1, Cromwell-terrace, Pembroke-road, Kensington, W.

Christmas at University College Hospital.

To any one imbued with old-fashioned notions about the discomforts of Hospitals and the character of Hospital nursing, no better awakening to the marvellous improvements effected in these matters during the past few years could be furnished than a visit to the annual Christmas-tree entertainment given by the nursing sisters of All Saints Home, Margaret-street, to the patients of University College Hospital. We had the pleasure of being present on the evening of Thursday, December 30, and we shall not soon forget the happy scene.

In one of the upper Surgical wards, gaily decorated with evergreens and illuminated texts and Christmas greetings, forming a pleasant contrast to the handsome engravings on the walls, a long table was set out, reaching down the centre of the ward for the greater part of its length. This table was covered with heaps of useful presents, chiefly articles of clothing, in which knitted worsted works bore a conspicuous part, and at one end was a mighty Christmas-tree—not the good old traditional fir-tree, but an arrangement of evergreen hoops around a central stem, which, set thickly with tapers and hung with the customary glittering presents, had very much the appearance of the usual tree, and, at the same time, held more presents, and was absolutely free from the risks of falling and burning, which generally keep one anxious on these occasions. All the patients who could bear the excitement had been brought upstairs, and were seated on benches or lying on beds all round the ward, whilst the small remaining space was occupied by a motley crowd of cheerful-looking nurses in neat brown uniform, a goodly array of visitors, and over a score of sisters, who, in their long black habits and large white head-dresses, added no little to the interest and picturesqueness of the scene. As far as we could ascertain the presents (most of which had been furnished by sympathising friends of the sisters) so far outnumbered the patients that, besides some useful gift for each, the families also of the sick ones received a certain share of the good things—for we saw one gentle sister loaded with such toys as dolls, tops, small knives and forks, etc., going amongst the men and distributing them for "your little boy at home, Jones, and this pretty doll for the girl." And the wasted faces seemed to brighten more on receiving such remembrances for the youngsters than at the warm flannel jacket or scarf for themselves. In an adjoining ward the resident Medical officer was amusing a crowd of old and young children by a humorous explanation of magic lantern marvels. Altogether we do not remember to have ever seen a happier assemblage of sick and lame folks, and we are heartily glad to think that this is no exceptional thing, but that, year by year, the practice of having some Christmas jollity is becoming more general in our London Hospitals.

A Provincial Surgeon.—The Medical Directories for the present year are published.

Inspections for Controlling Venereal Diseases.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In one of your last numbers is mentioned the remarkable fact that, since the inspection of soldiers concerning syphilis has been stopped, this disease has decreased among them. This leads me to suggest the idea that perhaps the same result would, *mutatis mutandis*, be obtained if the inspection of women were also stopped.

To my mind, all inspection of this kind is objectionable. It cannot be executed without an insult towards individual liberty. Besides, it does not belong to the vocation of the State, I think, to provide people with sound prostitutes, and to be in a certain way public procurer. The State has, of course, to take care that nobody should get ill without his fault. But syphilis is a thing everybody can avoid if he wishes. All the State ought to do in this matter is to promote science,(a) and to make good marriage laws, in order that people should be able to take themselves the necessary precautions against the contagion.

With these opinions many people will not agree; but if the inspection had the result of promoting the illness—which, for several reasons, is possible—in that case everybody ought to be against the inspection. Therefore, this question is worthy of careful examination.

I am, &c. F. A. Hartsen.

*** As if to give force and appropriateness to our remarks on the intimate alliance between quackery and homœopathy as ordinarily practised, we have this week received at our private residence a copy of a pamphlet which has, we believe, been delivered at most houses in the west-end of London. It is entitled "Homœopathy compared with the Old School; a Report of Medical and Surgical Cases successfully treated by David Jones, M.D., late Physician's Assistant, University College Hospital, Medical Referee to the Home Assurance Company, etc." First we have a notice of the Homœopathic Dispensary, Oxford-street, founded by Dr. Jones; next Dr. Jones's address, and his hours for consultation, with the statement that, for poor persons, his fee is five shillings, including medicine. Next come the ordinary lying comparisons between homœopathy and orthodox practice; and finally a record of "Living Monuments to Homœopathy." In these records Dr. Jones has not only violated the first rules of Professional etiquette (these, of course, are nothing to such men) in publishing detailed accounts of cases, with names and addresses attached, but, as a thoroughbred quack, he has abstained from mentioning a single remedy. And we are asked to associate ourselves with such men. *Absit omen.*

Registration without Medical Certificate.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you kindly answer the following?—Supposing a person (man or woman) chooses to refuse having any Medical man to attend, and dies without such attendance, is it necessary to have an inquest on the body? Would not a statement from the friends "that death was from natural causes" be sufficient for the registrar? I am, &c.

Ashby-de-la-Zouch, January 1. Perry Dicken, M.D.

*** In the case of a known person, whose friends are also known, the registrar would register the death, and an inquest would probably be judged unnecessary; but it is a matter for the discretion of the coroner and his officers.

Ezra.—The existence of magnetism or electricity in any such so-called experiment is a mere assumption. The alliance of heat, light, electricity, galvanism, and magnetism, and we may add gravitation, rests upon experimental research. The laws of each had been previously worked out—as the decrease of force as the square of distance increases, for example—and all had been established independently. The fact that heat radiates—that it causes expansion—the apparent exceptions to this latter law, and the modes of generating heat, would remain as they are even if we did not know the relation between heat and motion. Animal heat was once considered a thing *sui generis;* so it may be in the mode of its development, but the heat communicated by an animal body differs not *per se* from heat communicated by a linseed poultice or hot-water bottle. Surgeons no longer cut open live puppies or pigeons to place them on wounds; a poultice is better; the reeking hide flayed off a just-killed sheep may be useful for exhausted and bruised persons, but spongio-piline and poppy fomentations are nicer. As for the warmth communicated by the bodies of young children or young women, it may be agreeable to more senses than one, but, *quoad* warmth, an india-rubber bag would be as good. We deny that King David's case is any authority for the vitalising efficacy of animal heat. Doubtless the record is a true account of the proceedings of a barbarous age; but it does not propound an example for imitation. Old people like children to sleep with them because they like children and like warmth; when we come to actual facts, we know nothing to warrant the belief that the children lose vitality, or the old ones gain it, by the contact. If the old person has offensive breath, so much the worse. If we had to decide, we should say, let them have separate beds. Our correspondent will please notice that if nothing can be made out of the virtues of the heat proceeding from animal bodies, as distinguished from other heat, still less, or rather nothing at all, can be made out as to the magnetic virtues of living animals. Silk cord is a non-conductor; and whatever influences may pass along it, magnetism certainly will not.

Samuel Jackson.—No competitors have appeared this Christmas for the prize of the College of Surgeons. The award for the Collegial triennial prize will not take place until after Christmas, 1870.

(a) Professor Niemeyer thinks it to be immoral to indicate prophylactic measures against venereal contagion. We think, on the contrary, ttha propagating knowledge, of whatever kind it may be, is never immoral.

British Association for the Protection and for the better Defining of the Rights and Privileges of General Practitioners.

It is considered desirable to form an association with the above or a similar title and with the above objects in view, based on the following considerations:—

1. The duty of the general Practitioner to the public.
2. The duty of the public to the general Practitioner.
3. The duty of the teachers and acknowledged heads of the Profession to those whom they educate and to the general Practitioner.

The first division will embrace the question of Medical charities in all its bearings. Giving gratuitous indiscriminate advice and medicines by Medical men is no charity, but in reality an injury to the hard-worked general Practitioner. The practice and mode of operation of such institutions as dispensaries, clubs, etc., are found to be mischievous in their effects upon the self-reliant spirit of the working classes of the country who wish to be represented in Parliament, and also upon the middle classes, as it impedes self-reliance and industry in providing for those dependent on their means. At the same time it must be clearly understood that the general principle of gratuitous Medical aid to the really necessitous poor will be steadily maintained.

The second question bears upon the remuneration and general position of the general Practitioner. Society expects—and that justly—every Christian virtue in Medical men—as self-denial, charity, untiring zeal, and never-failing sympathy—in addition to a liberal education, an ever-increasing standard of Professional ability and general refinement; and this is especially so during the prevalence of epidemics, when society is unceasing in urging them on to ever greater exertion and charitable, often gratuitous, services. But, on the other hand, society, as a rule, is content to give in return moderate and often totally inadequate compensation for valuable services, notwithstanding that Medical life is the lowest condition of hazard, and that no body of men have to sustain a greater weight of responsibility. Many clubs and dispensaries in England are founded by wealthy and charitably disposed persons, and then the general Practitioner of the district is almost invariably called upon to perform the duties connected with such institutions either gratuitously or at a totally disproportionate and inadequate rate of remuneration, and thus the legitimate earnings of the general Practitioner are frequently reduced to one-fifth, or even one-tenth, their former amount.

The third head refers to the relation and action of the members of the Profession *inter se*. Those who educate the future Practitioner should instil into his mind a true sense of the value of his services and of the dignity of his Profession; they should see that his future means of existence are not interfered with, and should secure to him the full enjoyment of those privileges common to him and to the hardworking members of all professions. Medical men, as a body, have less enjoyment and means of relaxation than almost any other class of society; there are no sinecures whatever in the Profession of Medicine, as there are in the sister professions of divinity and law; all Medical appointments have their full share of work, with in too many instances inefficient pay. The working relations between general Practitioners and those in "consulting" practice are frequently unsatisfactory. For, whereas the general Practitioner, similarly as in the practice at the bar, should be the medium of communication between the patient and the consulting Practitioner, both as regards the details of treatment and the payment of fees, the latter often and more frequently acts in total independence of his brother Practitioner, and thereby virtually steps into the province of the general Practitioner, interfering with his means of existence, and lowering the prestige of his own position.

Medical men, and especially general Practitioners, are now invited to give their views, suggestions, and advice upon the subject above stated, and upon the feasibility of combined and united efforts upon the part of the entire body of the Medical Profession throughout the country to place the whole question on a right and satisfactory footing.

All communications and letters to be addressed to Dr. Treutler, Secretary *pro tem.*, at the Rooms of the Linnæan Society.

A Constant Reader from the First Number.—Five grammes = 77½ grains: this is a large dose for a first trial in an elderly patient. Probably it would be better to begin with 20 grains of hydrate of chloral, and gradually increase it if need be.

Dobrudja Archæology.—Dr. Cullen, of Kustendji, communicates an interesting antiquarian note of an inscription on a brass tablet—*tempore Vespasiani*—discovered by him in the neighbourhood of that town. The bronze plate is 9 inches by 6 in size, found about a year ago in the sand on the south-east side of the seashore, and is engraved in twenty-one lines within a shallow frame in legible characters. These tablets, or good-conduct discharges as they may be called, were given to Roman soldiers who had served the required number of years—twenty—or had attained the age of 45, when they were by law entitled to it. They conferred the privileges of citizenship, gave the right of marriage, and thus legitimatised the children of the first wife if the soldier was married at the time of his discharge, or of any woman he might subsequently marry if he was single when he obtained it; so that they became as fully Roman citizens as if both parents had been originally free-born. This reservation to the children of one only, and that the first wife, marks the jealousy with which the Romans regarded the "*Civis Romanus sum.*" The present tablet makes the fiftieth at present known. Examples have been found from the year 34 A.D. of the Emperor Claudius to the year of the Emperor Maximian, A.D. 300.

Common Salt against the Bite of a Mad Dog.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In Mayhew's "London Labour and London Poor," vol. iii. p. 19, I observe a statement by Black, the famous ratcatcher, to the effect that he had once been bitten by a mad dog—"a black retriever dog that died raving mad in a cellar afterwards." He goes on to say: "The only thing I did was, I washed the wound with salt and water, and used a turpentine poultice." Now, assuming the man's statement as to the madness of the dog to have been correct, and he was scarcely likely to be mistaken, and considering the known antiseptic properties of common salt, may there not be here a hint worth taking a note of by Medical men, to be remembered when a suitable opportunity presents itself? I am, &c.

Kew-green, Dec. 28, 1869. W. J. Treutler, M.B., C.M. Edin.

Rusticus.—Walker on "Intermarriage."

Z.—Dr. Elliotson resigned his appointment of Lecturer at University College and Physician to the North London Hospital in the autumn of 1837.

Gower-street.—The saying is attributed to Dr. Armstrong, who in his last illness, in which he was attended by Dr. Bootl, said, on taking a "dose of brandy," "Ah! Boott, there is no tonic like brandy."

Statistic.—A very able article appeared in the *Birmingham Daily Gazette* of January 3, entitled "The Weather and the Public Health in 1869." The writer is Mr. T. F. Plant, F.M.S. The subject is treated of in a very able and exhaustive manner. The article is reprinted, and may be obtained by application to the author, Park-hill-road, Moseley, Birmingham.

On Scarlatina Maligna.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Scarlatina of a malignant type has been epidemic here for some months. The treatment adopted and the results obtained being successful and satisfactory to an extreme degree, I feel actuated, upon reading of the ravages of this disease in other places, to record the measures I adopted and still adopt.

If called into a case upon the commencement of the malady, I direct my patient to be "packed"—that is to say, I have him wrapped up in a blanket wrung out of warm water—I apply hot-water bottles to the feet, and cold-water bandages to the head. Keeping him this way for an hour, I remove him to a warm bed, prescribe a reliable diaphoretic and a mercurial aperient. The following day I commence with a solution of chlorine in mixture, and this I prepare by placing six grains of chlorate of potass in a six-ounce bottle gently heated, adding half a drachm of strong hydrochloric acid, shaking well as the bottle is filled with water, and a little simple syrup in addition. I allow lemon-kali draughts when thirsty, and keep the bowels and kidneys acting. When the throat becomes affected, I steam it with vinegar and sage, and direct the application of bran poultices externally. When the breathing becomes laboured, the breath foetid, and the nose discharging, I freely employ the liquor sodæ chlorinatæ for painting the interior of the throat. The patient is supported from the first with beef-tea and cream and rice and milk, and in the latter stage of the complaint, when the exhaustion is great, I give port wine with an unsparing hand. The sponging of the surface of the body with carbolic acid soap and tepid water affords great relief when the skin is shedding. I, in every instance, direct a sheet to be hung up in the most draughty part of the patient's room, saturated with Condy's fluid. The draught wafts the disinfectant through the air of the room from the sheet, and the nurse in attendance can wipe her hands on it when needful.

The great number of cases treated in this way, the invariable success of it when fairly carried out, and the small comparative mortality, are my best apology for troubling you with what may not be new, but, what is more important, and our great aim in practice, a great success.

I am, &c. J. Waring-Curran.

Osman House, Sutton, Jan. 3.

Fudge.—The *Wimborne Journal* publishes the following choice bit of nonsense:—

"The death of a well-known London Medical man within the last few days recalls two anecdotes of great liberality on the part of one of his patients. One morning the Medical man found a cheque for a thousand guineas as a fee for attending this patient. On another occasion he received from the same patient a present of a set of dinner casters, which on being lifted seemed very heavy. When the bottles were opened they were found full of sovereigns. The donor is a nobleman still living, and famous for his great wealth."

A Member of the Royal Institution is quite correct. Dr. B. Jones, in his life of Faraday, says, p. 472, vol. ii., "Writing to Lord Wrottesley regarding rewards for scientific men, he said—'For *his own sake* the Government should honour the men who do honour and service to the country.' 'I have, as a scientific man, received from foreign countries and sovereigns honours which surpass, in my opinion, anything which it is in the power of my own to bestow.' Most noble England!"

Oiling a Gristly Stricture.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reply to the communications of Mr. Clough and Mr. Sympson in your last week's issue allow me to thank Dr. Sympson for his courteous suggestion as to Sir H. Thompson's method of injecting warm oil into the urethra. I was already aware that this was Sir Henry's practice, and I can quite conceive that it would greatly facilitate the passing a catheter in spasmodic stricture; but in such cases as I alluded to in my first letter—namely, permanent stricture, which not unfrequently occupies more situations than one along the same urethra—I cannot help doubting if it is possible to force the oil right through that portion of the passage most requiring it by means of a common glass syringe. The disposition the urethra has to oppose such injections is well known. It appears to me that by passing a catheter charged with oil and perforated at its very extremity down to the stricture and allowing it to remain steadily in that position for a few minutes with the patient on his back, it is hardly possible to conceive that the passage, however constricted, should escape a thorough flooding of oil. My instrument insures this to a certainty, and continues to shed oil for any distance it may have to traverse, exactly where resistance is most offered—that is, at its point.

I regard the ordinary lateral apertures found in all catheters as subserving the same purpose to an eminent degree. Should the oil have escaped from any cause before the bladder is reached, it is very easy to feed it without removal by filling a smaller-sized instrument and inverting its open end into the corresponding part of the one in use. It should be filled to the brim. After having said thus much I think it is sufficiently obvious that the use of a syringe attached or unattached is quite unnecessary. I recommend my plan for its simplicity, safety to the patient, its entire painlessness, and its perfect efficiency. In the trial of the different methods suggested lies the proof of their relative worth. I am, &c.

St. Just, January 3. Wm. Chenhalls.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In reference to Dr. Sympson's communication in the last number of this journal, in which he recommends, in some cases, Sir Henry Thompson's plan of overcoming stricture by forcing olive oil into the urethra by aid of a common glass syringe in preference to passing a catheter perforated at its extremity to the stricture, and then applying the fluid pressure, I consider, upon the whole, the latter method is preferable, because of the difficulty and pain in passing the nozzle of a common glass syringe down this part of the urethra, closing, by pressure with the fingers, the external meatus upon it, and then forcing the oil along the urethra to the strictured part. If a specific gonorrhœal inflammation or ulceration existed along the urethra, it would excite this condition by the pressure, and the oil, turning rancid, cause absorption of the poison, and the urethra, with its lacunæ and ducts, being frequently (apart from the stricture) in an enlarged condition, this would be increased, and the most tender part would yield to the pressure sooner than the gristly stricture. The great principle to observe in applying pressure with an instrument is, that it is in the strictured part, and not following or making a false passage. I have constructed an instrument for this purpose—of applying direct pressure to the strictured part with oil, glycerine of carbolic acid, camphorated oil, or other medicinal fluid, to soften and cause the stricture to yield, alleviate pain or spasm, prevent hæmorrhage, and remedy diseased action. Also for syringing the urethra or its strictured part with fluid or lotion, or for applying dry heat or cold to freeze or numb the part, to allay pain and prevent hæmorrhage, inflammation, or suppuration whilst the stricture is being overcome or absorbed through pressure with the instrument.

I am, &c. William Clough, L.R.C.P.

Edinburgh, January 4.

A Candidate.—The inquiry is constantly made whether candidates for the diploma of Membership of the College of Surgeons rejected by the *Medical* examiners, but approved by the *Surgical* sections, would have to undergo *all* the examinations again. On inquiry, we find that they would only be examined in *Medicine* the second time, unless they afterwards obtained a Medical degree elsewhere, in which case, on the production of the degree or licence, they would be admitted Members at a subsequent meeting of the Court of Examiners.

The City Diary and Almanack (W. H. and L. Collingridge, City Press, Aldersgate-street) has again made its appearance. In addition to the matter ordinarily given in a diary for the desk, it contains a large mass of official information with regard to the City not to be found in any other publication, the whole being carefully compiled and well arranged for reference. It is a complete guide to the various business offices of the Corporation and City generally. There is ample space for daily entries, upon good paper; and the blotting-paper with which the diary is interleaved is very useful. It is strongly half-bound, and the price only one shilling.

The Oxford and Cambridge Local Examinations, Medical Students, and Medical Reform.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The contemplated amalgamation of the colleges and universities for establishing a conjoint board of examination in Medicine and Surgery suggests to what extent the universities may assist in instructing Medical students, or causing them to be instructed, in the first principles of those sciences which constitute the basis of Medicine strictly so called.

The certificates of the Oxford and Cambridge Local Examinations are now accepted (provided they embrace Latin) by the colleges, in place of their own preliminary examinations, this is the first step towards the reform now pending; and as those examinations already embrace chemistry, botany, physics, etc., a considerable amount of time might be saved by Medical students possessing a knowledge of those sciences previous to entering the Hospital Schools of Medicine.

Being a member of the Committee of the Oxford and Cambridge Local Examinations held in this town, and having on several occasions had to watch over the candidates who presented themselves for the Practical Chemical Examinations, I have had opportunities of seeing the proficiency of some of the candidates, as manifested in the performance of analyses. The advantage, then, which schoolboys now possess of obtaining a knowledge of chemistry, physics, botany, etc., and such knowledge being tested by the great universities, opens a new road to the attainment of those sciences, especially chemistry, which are indispensable in the treatment of disease.

Instruction in practical chemistry at schools might not be advisable, because a pupil would be liable to neglect some of the more important branches of classical education. A knowledge, however, of the first principles of chemistry, tested by written examinations, should be accepted by the Hospital Schools of Medicine in order that a student may devote more of his time to the study of anatomy and physiology during the two first winter sessions. It is impossible for a student to attain a knowledge of physiology without a knowledge of organic chemistry, and it is also impossible to gain a knowledge of physiology without the previous knowledge of anatomy. If, therefore, a good system of instruction in the first principles of chemistry were to be introduced into all private and public schools, as forming a common branch of education, and if that instruction were to be assisted by schoolmasters allowing their pupils to attend lectures on chemistry, which are occasionally given at the various scientific institutions in the towns in which they reside, the desired object would be attained.

In order to prepare a student for the practical chemical examination at the Hospital Schools of Medicine, lectures and practical instruction might be given in connexion with botany, Materia Medica, and pharmacy during the summer session, so as not to clash with the study of anatomy during the winter session. The introduction of a good system of teaching schoolgirls, as well as boys, in chemistry and physics would be attended with a good result. The instruction, however, should not be confined to any particular class of individuals, but permitted to extend from the ragged schools to the higher classes of society. The result of such a system of general scientific instruction might be anticipated; every individual would be in a position to assist in the advancement of sanitary reform, and many would be enabled to improve in the arts; others in agriculture; some in the manufacture of every article we possess; also to detect the adulterations of food, etc.; and, lastly, not the least, to know, when they see the prescriptions of their Medical attendant, whether the remedial agents are

so classified as to act in concert, producing physical or chemical and physiological action, and thus to guard against the attempts now made to mystify our noble art by the introduction of that jargon *similia similibus curantur*, or the pretended administration of infinitesimal doses, or to disregard the dose altogether as being of no importance!

In conclusion, I would ask how the union of the two Colleges is to take place, whether there should be three grades in the College of Physicians when there are only two grades in the Universities and in the College of Surgeons. Many of the general Practitioners (the new Licentiates of the College, for instance) are equal to the Members of the College, and the public know no difference. It is, therefore, a question of importance whether the College would not do well to create Fellows by examination, and Fellows by promotion after attaining a certain age and Professional position in Medicine. The Fellowship in Surgery we know to indicate Professional attainment in Surgery, while the Fellowship or Membership of the College of Physicians is intended to represent the same in Medicine, or those who seek Medical cases in preference to Surgical. These distinctions are of great importance, provided the Physician and the Surgeon have been equally educated in Medicine and Surgery, and afterwards followed one branch in preference to the other. If Medicine and Surgery were to be mingled together in our Hospitals and Infirmaries, both Medicine and Surgery would retrograde, because it is almost impossible to devote one's whole attention to the two branches at the same time when the greatest skill is required; and this extends to private practice in a greater or less degree. I am, &c.

Southampton, December 22. HENRY OSBORN, M.R.C.P. Lond.

COMMUNICATIONS have been received from—

Mr. J. PHILLIPS; Dr. LETHEBY; Dr. G. G. ROGERS; Dr. J. W. KIRE; Mr. HENRY RICHARD; Mr. SCOVELL; Dr. E. VAN MILLINGEN; Mr. W. CARTER; Dr. HENBEAT DAVIES; Dr. P. DICKEN; Dr. J. WARING-CURRAN; Mr. W. T. GRANT; Dr. F. G. RUBIO; Dr. CLOUGH; A CONSTANT READER; Mr. J. CLARKE; Dr. J. J. PHILLIPS; Mr. T. BAYANT; Dr. FELCE; Mr. HAYNES WALTON; Dr. HUGHLINGS-JACKSON; Dr. JAMES RUSSELL; Dr. YEO; Mr. SPENCER WELLS; Mr. ARNOTT; Dr. ALTHAUS; Dr. MACPHERSON; Mr. J. CHATTO; Messrs. JOHNSON and SONS; Miss GARRETT; Mr. W. CHENHALLS; Dr. LORY MARSH; Dr. SYMES THOMPSON; Mr. BAKER BROWN; Mr. T. M. STONE.

BOOKS RECEIVED—

Gamgee on Force and Matter in relation to Organisation—Journal of Mental Science, No. 36—Pharmaceutical Journal, No. 127—Dental Journal, No. 163—Monthly Journal of Microscopical Science, January—Dudgeon on the Swimming-baths of London—Quarterly Journal of Science, No. 25—British and Foreign Medico-Chirurgical Review, No. 89—Quarterly Journal of Microscopical Science, No. 37—Edinburgh Medical Journal, No. 175—Grabham on the Climate and Resources of Madeira—City Diary for 1870—Practitioner, No. 19—Drs. Crum-Brown and T. B. Fraser on the Connexion between Chemical Constitution and Physiological Action, two parts—Thorowgood's Notes on Asthma—Half-yearly Abstract, July to December, 1869—Sewell on Irregularities and Diseases of the Teeth—St. George's Hospital Reports, vol. iv.—American Journal of Syphilography and Dermatology, No. 1—Tuke and Rutherford on the Morbid Appearances met with in the Brains of Thirty Insane Persons—Faraday as a Discoverer, by John Tyndall.

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 1, 1870.

BIRTHS.

Births of Boys, 1205; Girls, 1104; Total, 2309.
Average of 10 corresponding weeks, 1859-68, 1903·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	1028	968	1996
Average of the ten years 1859-68	763·8	758·7	1522·5
Average corrected to increased population	...	...	1675
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small pox.	Measles.	Scarlatina.	Diphtheria	Whooping-cough.	Fever.	Diarrhœa.	Cholera.
West	463388	...	18	12	3	9	5	5	...
North	618210	3	8	44	2	11	22	5	...
Central	378058	...	1	13	...	6	2	1	...
East	571158	1	18	32	2	14	12	7	...
South	773175	3	14	58	2	17	10	4	...
Total	2803989	7	59	159	9	57	51	22	...

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·565 in.
Mean temperature	34·2
Highest point of thermometer	48·0
Lowest point of thermometer	21·3
Mean dew-point temperature	29·5
General direction of wind	S.S.W., S., & N.N.E.
Whole amount of rain in the week	0·31

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 1, 1870, in the following large Towns:—

Boroughs, etc.	Estimated Population in middle of the year 1869.	Persons to an Acre. (1869.)	Births Registered during the week ending Jan. 1.	Deaths. Corrected Average Weekly Number.	Deaths. Registered during the week ending Jan. 1.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Tons per Acre.
London (Metropolis)	3170754	40·7	2309	1462	1996	48·0	21·3	34·2	0·31	31
Bristol (City)	169423	36·1	140	76	*128	48·2	20·2	34·7	0·60	61
Birmingham (Boro')	360846	46·1	220	175	244	48·4	19·3	33·2	0·65	66
Liverpool (Boro')	509052	99·7	380	295	327	48·1	23·8	37·1	0·45	45
Manchester (City)	370892	82·7	266	210	*277	48·0	13·5	32·9	0·54	55
Salford (Borough)	119350	23·1	81	60	91	45·1	13·8	32·5	0·44	44
Sheffield (Borough)	239752	10·5	184	126	169	47·5	22·7	34·7	0·56	57
Bradford (Borough)	138522	21·0	138	71	71	...	...	...	...	...
Leeds (Borough)	253110	11·7	272	129	146	46·0	20·0	34·0	0·49	49
Hull (Borough)	126682	35·6	101	59	74	43·0	14·0	30·7	0·55	56
Newcastle-on-Tyne, &c.	130503	24·5	129	69	62	42·0	20·0	33·4	1·40	141
Edinburgh (City)	178002	40·2	122	86	116	47·7	21·0	35·7	0·30	30
Glasgow (City)	458937	90·6	333	268	328	47·2	13·0	33·7	1·74	176
Dublin (City, etc.†)	320762	32·9	158	158	173	50·5	11·0	37·4	0·54	55
Total of 14 large Towns	6546587	35·5	4833	3244	4202	50·5	11·0	34·2	0·66	67
Paris (City)	1889842	...	...	...	...	...	...	...	...	...
					Week ending Dec. 25.	Week ending Dec. 25.				
Vienna (City)	605200	...	...	...	312	...	...	39·9	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·565 in. The barometrical reading decreased from 29·98 in. on Wednesday, Dec. 29, to 29·16 in. on Saturday, Jan. 1.

The general direction of the wind was S.S.W., S., and N.N.E.

Note.—The population of Cities and Boroughs in 1869 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous.

* The deaths in Manchester and Bristol include those of paupers belonging to these cities who died in Workhouses situated outside the municipal boundaries.

† Inclusive of some suburbs.

APPOINTMENTS FOR THE WEEK.

January 8. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Light" (Juvenile Lectures).

10. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures—The Pathology and Treatment of Eczema, and, incidentally, the Influence of Constitutional Conditions in Skin Diseases, by Dr. Tilbury Fox. Lecture 1: A Criticism of Modern Opinions on the Subject.

11. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Dr. Gustav Oppert, "On the Kitia and Kara-Kitai." Mr. J. Bonwick, F.R.G.S., "On the Origin of the Tasmanians, geologically considered." Dr. Julius Haast, F.R.S., "On some Prehistoric Remains discovered in New Zealand."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. A. Poland, "On Compound Fracture of the Patella."

12. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

EPIDEMIOLOGICAL SOCIETY. 8 p.m.: Meeting of Council. 8½ p.m.: Staff-Surgeon Gunn, "On Cholera in Senegambia."

HUNTERIAN SOCIETY. 7½ p.m.: Meeting of Council. 8 p.m.: Mr. Corner, "Cases of Injury to Skull and Brain." Mr. Brownfield, "On a Case of Popliteal Aneurism."

13. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

14. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CLINICAL SOCIETY, 8½ p.m. Annual Meeting. Mr. Langton, "Case of Cancer involving the Left Half of the Soft Palate." Mr. Thomas Smith, "Cases of Facial Carbuncle."

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ORIGINAL LECTURES.

ON APHASIA, CONSEQUENT ON EMBOLISM OF THE LEFT ARTERIA FOSSÆ SILVII.

By Dr. NIEMEYER,
Professor of Clinical Medicine in the University of Tübingen.

II.

If we ask the further question "What is the seat of the disease?" we may decisively answer that *the disease is situated in the left hemisphere*, both on account of the extent of the hemiplegia and of its limitation to the right facial, the right hypoglossal, and the motor nerves of the extremities. Circumscribed disease in the crura cerebri may likewise produce hemiplegic paralysis of the extremities, with facial and hypoglossal implication; but with these symptoms there is always combined paralysis of the parts supplied by the motor oculi nerve of the same side as that on which the disease is found. When the lateral parts of the pons are diseased, the motor nerves on the opposite side of the body are affected; but the facial nerve, having completed its decussation in the pons, is paralysed on the same side as that which is diseased. Lastly, hemiplegic paralysis may also occur in consequence of disease of the cerebellum, sometimes on the same, sometimes on the opposite side to the disease, which can only be accounted for by participation of the crura cerebelli ad pontem and the crura cerebelli ad medullam oblongatam respectively, the disease of these parts being a form of œdema, since the cerebellum may be entirely destroyed without the production of paralysis of the extremities.* The hemiplegia observed in consequence of cerebellar disease is less complete and decided than it is in the case before us, and more especially are there never absent paralytic symptoms within the districts of those nerves which leave the skull by its posterior fossa. The reason why hemiplegia, to this degree and limited as in the case under our consideration, is so often observed, is that most local affections, and particularly apoplexies, embolisms, and thromboses, are generally situated in the one or other hemisphere.

In our patient we are able to distinguish *the part of the left hemisphere* in which the disease is localised with greater precision than can be done in many other cases. The hemiplegia which was at once noticed on the first day of the disease, does not *per se* give any information on this point; on the contrary, the casuist teaches that localised disease of the most different parts of the hemisphere may be the cause of hemiplegia; nevertheless we find, on comparing numerous cases, that different regions of the hemispheres vary very much, both with respect to the frequency with which lesion leads to hemiplegia, and with regard to the duration of the hemiplegia. Destruction of the corpus striatum and thalamus opticus is without exception followed by hemiplegia which lasts throughout life, but localised disease in the large medullary masses or in the cortical substance of the hemispheres, or which proceeds from above or below towards the surface of the hemispheres, is in some instances followed by hemiplegia, in others not; and if hemiplegia does occur, it not unfrequently disappears after a longer or shorter duration. From these facts we conclude that in the corpus striatum and optic thalamus is situated the apparatus of irritability for the motor nerves of the face, tongue, and the extremities of the opposite side of the body; or, speaking more correctly, that through these central parts the nerve fibres pass, which convey impressions from the organs of volition to the motor nerves just enumerated. By lesion of any other parts of the hemispheres, that conveyance cannot be interrupted, since, if it were so, disease of those parts would cause hemiplegia, and the hemiplegia which does sometimes occur with such lesions can only, according to my opinion, be explained by a secondary participation of the district of the corpus striatum and thalamus opticus. This participation consists either in compression of the capillaries by the diseased parts, if the latter diminish the space limited by the falx, the tentorium, and the calvarium, or in a collateral œdema around the diseased parts extending into the district of the corpus striatum and optic thalamus, such an œdema likewise leading to compression of the capillaries and anæmia, by which the function of the affected part becomes interrupted. On the post-mortem table such a participation of the corpus striatum and optic thalamus in a distantly localised affection which is accompanied by the most positive symptoms during life, cannot of course be demonstrated, since in the brain, as in other organs which contain little blood and are enclosed within an unyielding case, œdematous infiltration and capillary anæmia evade discovery. The disappearance of the hemiplegia, not unfrequently observed in affections the seat of which is not near the corpus striatum and thalamus opticus, is also evidence in favour of the correctness of our views. For if an extravasation into the large medullary masses or on the surface of the hemisphere, which has caused compression of the capillaries of the whole hemisphere, get smaller by absorption, then the pressure exercised by it on the hemisphere diminishes, the capillaries become again open to the transmission of blood, and the function of the part previously devoid of blood is restored. So if an abscess in the brain surrounded by an extensive collateral œdema become encysted, then the œdema disappears or diminishes.

The fact that in our patient the hemiplegia which occurred several weeks ago is at the present time unaltered in degree entitles us to consider that the local disease is in all probability situated about the corpus striatum and optic thalamus, the more so since experience teaches us that the local diseases which commence with so-called apoplectic results, and in which hemiplegia does not appear gradually but suddenly—viz., extravasations, thromboses, and embolisms—are in the majority of cases situated in that region.

We may go yet further in defining the locality of the disease, and may maintain, with an approach to certainty, *that it extends from about the region of the corpus striatum and thalamus opticus to the third frontal convolution of the left hemisphere.* The number of cases in which aphasia has been found to be connected with lesion of that convolution is so considerable, that we must, if aphasia exists, form the diagnosis of a lesion in the left frontal lobe, particularly if there be coexistent any other evidential phenomena of a diseased condition of the left hemisphere. Our patient on being asked her name is capable of producing only inarticulate sounds, but if a slate be given to her she writes her name. She has, therefore, certainly not lost the faculties of thinking and of framing her thoughts into words, but the conducting chain from the organs which are necessary to the formation of words to the nerves and muscles necessary to the act of speaking is interrupted. The aphasia is then dependent on the same causes as the paralysis of the extremities. The patient understands when she is requested to give us the right hand; she has a wish to comply with the request. The irritability of the nerves and muscles of the paralysed extremities is preserved, as may be seen by their conduct under the action of the induced current; but, as the conduction from her organ of volition to the nerves and muscles of her right extremity is interrupted, she must, in order to obey our request to give us her right hand, call to her assistance the left hand, to which the conducting circuit remains unbroken. As the patient can voluntarily move her soft palate, tongue, and lips, when eating or performing any other function, we are warranted in the conclusion that the interruption of the current from the organs of volition to the mouth has been limited to those tracts by which the stimulus is conveyed to the muscles necessary to the performance of the movements of speech. It is a most remarkable phenomenon that the power of speech should be almost always destroyed by a lesion limited to the third frontal convolution of the left hemisphere; and it is still more remarkable that, in single authentic cases, aphasia should be observed with lesion of the third frontal convolution of the right hemisphere, and that, in other single cases, the power of speech should be intact in cases of lesion of the left third frontal convolution. In the face of anatomical considerations it is difficult to assume that the one hemisphere should have different functions to perform from the other, and that the one should contain an organ which is in the other wanting. And still less is the assumption justifiable that this organ should, in the majority of persons, be in the left, and in some others be placed in the right hemisphere. Without attaching great importance to the following explanation of the seemingly paradoxical observations just alluded to, I consider it, although hypothetical, yet in some degree justified by the fact—in both hemispheres conduction exists between the organs of psychical action and the nerves and muscles necessary to the act of speaking, but when a child learns to speak it seems to be the rule that the tracts of the left side should be more used than those of the right. This assertion will appear less paradoxical if we remember that the same thing occurs in connexion with the complicated movements of the extremities which we learn to execute with considerable trouble. There are very few men

* Niemeyer's "Lehrbuch der speciellen Pathologie und Therapie," 7te Auflage. 1868. Vol. ii. p. 201.

who are capable of writing and doing other things with the left hand as well as the right. We need not consider whether this is the consequence of the left hemisphere having a better blood supply than the left through the arrangement of the vessels, and whether, in the task of learning complicated movements, an alteration takes place in the arrangement of the molecules of the central or peripheral nerves employed. At all events, almost all men become by far more helpless, and especially so as they entirely lose the power of writing, if the right arm and hand become completely paralysed (say, by apoplexy), than if the left be the one affected. The possibility must be conceded that, in the same way as there are exceptionally men whose left hands are more clever than the right from the fact of their more frequent use, there may also be such who in speaking have employed the conducting channel through the right more than that through the left hemisphere, and that, in such exceptional cases, lesion of the right frontal lobe is more dangerous to the power of speech than disease on the left side.

(To be continued.)

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon to the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(Continued from page 4.)

GENTLEMEN,—*Cataract is loss of transparency of the whole of the crystalline lens, or of a part, or of the lens and its capsule, in whole or in part.* This embraces every form of opacity, from the least to the greatest.

First about the Lens.—Every morbid change here is attended with some degree of opacity.

There are different kinds of lenticular cataract, and a classification is requisite.

My plan is to arrange them as hard and soft, making two grand divisions. It is the least objectionable, and by far the easiest for the student to learn, and it is sufficient.

Hard Cataract.—This is merely greyness or opacity appearing in an already discoloured and dense lens, one which has undergone what I have designated as senile changes. Hence hard cataract cannot occur before that time of life at which the lens has increased in density, having, too, a definite and very hard nucleus, and much colour.

Soft cataract is opacity invading a lens that has not become dense by age and much amber-coloured, and exists in children and young persons, occurring also in young adults.

As the natural changes in the crystalline lens are gradual, the density increasing by slow degrees, it cannot always be determined when a cataract should be classed as hard or soft, especially as there is very great variation in different individuals in the arrival of those several changes of structure incidental to age. Hard cataract does not occur under the forty-fifth year, if we require as the proof of hardness, a well-marked amber colour, or amber-grey.

Spurious cataract is spoken of by all authors, and by this are meant various deposits on the capsule of the lens, for the most part the result of inflammatory action, as well as deposits within the capsule, and hence we have described the fibrinous cataract, the pigmentous, the purulent, the sanguineous, and a great many others. Such expressions are founded on conditions that can exist only in eyes that have been inflamed, and literally bear no pathological connexion whatever with cataract as a disease of the crystalline lens, or of the capsule. I reject the term "spurious" altogether, and all that it relates to in this sense.

Morbid Anatomy.—This has been worked out in detail to exhaustion. It is a subject easy to investigate; specimens are numerous, and several laborious men, who seem to live for scientific research, have been engaged on it.

Primary Changes.—The morbid phenomenon may be described as loss of nutrition, producing atrophy, and sometimes combined with proliferation or cell growth.

The atrophy is conversion of the lens fibres into different materials, solid and fluid. This action, or chemical separation, depends in degree much on the consistence of the lens. From the commencement of the atrophy, absorption is in operation, and the fluid portions chiefly are removed. Hence it is that cataracts get less.

In the dense lens of hard cataract there is in the commencement the least breaking down of tissue, and, with a great deal of opacity, much light is yet transmitted. This explains how it is that persons with this form of cataract far advanced, the capsule being yet clear, can still see so much. A long description would be necessary to tell what has been observed about this minute metamorphosis as seen with the microscope. The coarser morbid anatomy only avails us surgically, in pointing out rules for treatment. The curious investigator of mere morbid products will find enough to amuse him in foreign writings on the subject. The commonest changes may be thus expressed:—

Softness of the cortex of the cataract, and specially the very surface. Many of the hexagonal cells lose their walls, and their nuclei get opaque. Sometimes these cells quite disappear. The cortex may be softened to the state of a semi-fluid pulp, with the remains of opaque fibres, molecular bodies, and fatty tissue. There is the most variation here in the degrees of atrophy, and also the extent to which the lens is so affected.

Increased hardness and dryness of the centre. The nucleus becomes hard and dry to a degree far exceeding what is ever seen in the healthy lens. To break through it requires as much pressure as a modern cataract-needle will bear. The fracture has the same appearance as a bit of broken yellow wax. These lens tubes are hard, atrophied, and brittle, and are rendered more or less opaque by fine molecular deposits, as well as by little cracks and fissures, and sometimes fat globules. There are also seen transparent particles, called myeline.

In a given number of cataracts that may be extracted, there will be found much variation in the relative proportions between the amount of lens fibres in the cortex that has undergone softening, and that of the nucleus which has become hardened. Hence it is that we find a large nucleus or a small one. In some exceptional cases, not often met with, there has been softening nearly throughout the lens, and in some still rarer, very little softening, the whole lens being dense and adherent to the capsule. This is always associated with much darkening of the cataract.

In the soft lens of soft cataract the atrophy more resembles that which takes place on the circumference of a hard lens. There is a breaking up of the lens tissue into a paste-like material, or a more fluid degeneration of a thin milk-like colour with granular flocculi, corpuscles, and fatty material.

It is said that there are pathological changes allied to atrophy which are produced by inflammation—a sort of lentitis. This requires explanation. Inflammation of the lens and its capsule occurring alone may be said to be unknown. It takes place only as the extension of inflammation from surrounding parts. On this particular question nothing material has been added since Dr. Jacob discussed the subject in a masterly manner in his work on inflammations of the eyeball where he says that he cannot show, as he has done in the case of the cornea, that red vessels make their appearance in the body of the lens, or that purulent matter is formed in its texture in consequence of inflammation originating in and restricted to it. He sums up the discussion by expressing his belief that no insulated inflammation of the lens, originating in the part, and confined to it, so as to constitute a distinct variety or species, to be enumerated in a nosological arrangement, under the title of lentitis, ever takes place; and alluding to Dr. Walther's description of such isolated inflammation, remarks, that what Walther refers to, appears to him to be not an unusual effect of general inflammation of the contents of the eyeball, described, perhaps, with a little colouring, and such accuracy of detail as the establishment of a new species of disease seems to demand. That the capsule of the lens, and in many cases, ultimately, the lens itself, becomes implicated in the general inflammation of the eye, commonly called iritis, there can be no doubt; and this he thinks that Dr. Walther has been describing.

It is unnecessary to give a detailed account of the changes that the inflammation produces in the production of newly formed elements, and their degeneration into fatty material, mucus, or otherwise, nor of the alteration in the denser lens fibres, which seem for a long time to resist the invasion of disease, but are ultimately implicated. Practically I have always found that tissues so changed by inflammation are, in reality, soft cataract. These remarks apply also to the capsule, which does not inflame, except in the extension of disease from surrounding parts, especially the iris.

Secondary Changes.—These vary very much in the time that they appear, and this would seem to depend on the healthy

state of the rest of the eye, or unhealthy, the latter facilitating them. Although there is sufficient regularity in the order of the degeneration to admit of this division being made for the sake of more easy teaching, exceptionally, some of the usually latter destructive forms set in early. The final degeneration may be very rapid.

In hard cataract, the already hard nucleus generally undergoes very little further change; it merely becomes harder, dryer, and darker. The darkness is often so great as to cause astonishment. Some years ago I made some remarks before the Medico-Chirurgical Society of London on a case of this description, which I denominated black cataract. It was certainly more black than brown—indeed, so black that it could not be detected by any one till the eye was examined with the ophthalmoscope or the concentrated light of a powerful lens.

Lately, some cases of black cataract have been published by Mr. Solomon in the *Reports of the Pathological Society of London*. One was from a disorganised eye. It was of a jet-black colour by a reflected light, and of a deep red colour by transmitted light. Its equatorial margin for half a line was whitish. Another was also from a disorganised eye. In a report made on these specimens, it is stated that the colour proceeded from brown tinging of the lens fibres, and not from the presence of fine granular pigment.

Mr. Dixon mentions a case of a cataract entirely black, which was extracted by one of his colleagues. There were several fine whitish lines radiating on its anterior surface produced by white deposits.

Mr. Laurence has published a case of a perfectly black nucleus, with a greyish-white and soft cortex.

I have seen a lens quite black escape from a disorganised eye after the removal of a large staphyloma corneæ.

Nearly always the intense darkness or blackness is associated with disorganisation of the eyeball. A man 65 years of age was sent to me by Mr. Philbrick, of Colchester, because of blindness. In both eyes there was a congenital coloboma iridis. Right Eye: Except that there were a few minute dots of grey in the pupil of the left eye, nothing could be recognised there, as all else was black. Even when the light of the ophthalmoscope was concentrated on it nothing more could be seen. As the interior of the eye could not be illuminated, sufficient light not entering for the purpose, it was evident that there was some black body that intercepted the rays. There was scarcely any sight in the eye, only the mere perception of light from darkness. I operated, and extracted a perfectly black lens, of the ordinary consistence of senile cataract. The cornea healed well and fast; no bad symptoms ensued, but there was no sight. Left Eye: The centre of the pupil was quite black, while a small marginal portion was deep brown, rather than black. The other conditions were the same as in the right eye. I did not operate here.

It is of clinical interest to know that there are exceptions to the rest of the eye being disclosed. Such a one is reported in the *Bollettino delle Scienze Mediche*. A black cataract was extracted. The fragments of capsule that escaped are said to have been darker than the lens, which was reddish-black. Sight was restored. Mr. Lacey, of Poole, sent me a gentleman, over 70 years of age, with double cataracts. In one eye the disease was incipient; in the other the cataract was so black that it could be detected only be oblique illumination, with a fully dilated pupil. The eye seemed healthy otherwise. Reddish-brown cataracts are not very uncommon.

The outer surface or circumference of the cataract degenerates markedly in the loss of watery elements, becoming denser and reduced in bulk, so that fattening is produced. A still further change may ensue. There may be conversion into fatty materials, generally disseminated, or in masses of granules or globules. Some are changed into cholesterine scales, which may appear early, and be recognised only by oblique illumination, as a few bright dots here and there. In other cases, where there is much of this degeneration, the scales are seen in great numbers, and form a pretty object even to the naked eye. There may be long crystals of fatty acid, or free oil in globules. Such products are always better observed by oblique illumination. Coincident with these formations, there is frequently absorption or decrease of the cortical substance. It is said that when the secondary metamorphosis is far advanced, often the nucleus may be seen very clearly, or brought into view by the patient bending his head forwards for a few minutes. It is not always central, but apt to sink downwards.

The absorption of the cortical layers may be so great as to leave only the hardened nucleus covered by a thin veil, studded with earthy spots and groups of cholesterin. Carbonate of lime, and sometimes phosphate, are found in minute molecular deposits, with an organic base, forming a sandy pulp mass, or in distinct masses, or in indistinct, giving a dead white, chalky appearance. The latter are seldom seen except in cataract, the result of inflammation of the eyeball. This white degeneration may interfere with diagnosis. The matter will be noticed further on. It is in the eyes that are spoiled from traumatic inflammation or otherwise, that such chalk concretions are most witnessed.

If there have been much secondary change, the deposit is mortar-like, and contains fatty matter, with cholesterine and margarine. There may be an outer shell of chalk, or the whole cataract converted into a solidified piece, which will ring when struck with a steel probe. In this state, the form of the lens is not lost, although reduced. Sometimes true bone is found. Myeline substance is also found.

If the destruction of the lens tissue should cause the cortical layers to degenerate to fluidity while they are whitish, the fluid is white, and, while they are dark, the fluid will be very dark, or very brown, chocolate-coloured, or even sepia.

The nucleus also may pass into fluid degeneration, but this is an exceedingly rare event.

An exception to the increasing hardness of the nucleus is that of its getting rather pulpy around, with a loss of cohesion centrally, by which it is readily broken into pieces.

A very marked difference in the atrophy may occur in the opaque lenses of the same individual. I performed double extraction in a female sixty-nine years old: the one lens had a hard amber-coloured nucleus, surrounded by soft whitish-brown matter; the other did not exhibit the slightest amber tint, but was grey throughout, and softer. With the former the posterior chamber was natural; with the latter it was lost by the iris being pressed forwards.

It sometimes happens in hard cataract and semi-hard that, after the greatest destruction of the outer part, even to fluidity, the nucleus is yet but in the primary change, and still yellow; it never gets white, and looks like a little miniature opaque and hard lens. It is rare for a hard nucleus to become fluid.

All the primary changes may occur in the lens without the capsule becoming opaque, and even some of the secondary.

In *soft cataract* the lens loses much of its bulk, and gets flat. It may lessen at the margin, and break away more or less from its zonular attachment, and become irregular in form. The lens tissue is changed into fatty, chalky pulp, perhaps with cholesterine and lime, causing elevations on the cataract. Or the degeneration may take another course, and pass into a dry brown substance, which breaks up on the least pressure.

But the organic base may become fluid, and the entire cataract break down into a lime-water-like fluid, with earthy granules and fatty matter floating, or deposited, on the capsule walls. This fluid or emulsive metamorphosis is almost always connected with soft cataract, and is the result of a chronic inflammatory process. The fluid does not remain long, but, becoming absorbed, leaves generally crystallised fatty matter. When the capsule remains tolerably clear and the eye at rest, denser parts of the degenerated lens are sometimes seen to gravitate in accordance with the position in which the head is held. In consequence of this the lower portion seems almost opaque, while the higher is whey-like, bluish-white, and less opaque. I have seen the line of separation very marked. The general colour is restored by moving the eye about, or pressing on it.

(*To be continued.*)

THE temperance people of Stonington, Connecticut, have appointed a committee to circulate a petition for signatures inviting the liquor dealers to cease selling adulterated liquors.

A MEDICAL friend being called in consultation, in a case of protracted labour, asked the attendant Physician the nature of the presentation. "Oh!" he replied, "the head is presenting." Doubting the fact, our friend asked him how he knew that the head presented. "*Why, I made an examination with the speculum and saw the hair on the scalp.*" A female Physician on Howard-street has had an inspiration equally luminous, and, for the sake of the Medical art as well as humanity, we give it to the Profession. A lady who was suffering from acute vaginitis had been under her treatment for ulceration of the cervix uteri. She afterwards consulted a Physician, whom she told that this woman had been *poulticing the* uterus for several weeks with flax-seed. With some incredulity, he asked how she did it. "*It was stuffed through a speculum*"!—*California Medical Gazette.*

ORIGINAL COMMUNICATIONS.

ON LUMBAR COLOTOMY.

By C. F. MAUNDER, F.R.C.S.,
Surgeon to the London Hospital.

In a recent communication (Feb. 13, 1869) to the *Medical Times and Gazette*, I ventured to draw attention to the above operation as a means of giving great relief to those suffering from either complete or partial obstruction of the rectum, whether of a simple or cancerous nature. My remarks were illustrated by four cases in which the operation had been performed under different pathological conditions. In all the procedure was completed with ease, without loss of blood, and placed the patients in a state of comparative comfort, and, without doubt, prolonged a then tolerable existence. The oldest patient, a female nearly 70 years of age at the time of operation, was alive fifteen months subsequently.

I have repeated lumbar colotomy twice rather recently, and, having encountered more or less difficulty in both instances, record my experience for the benefit of the Profession. The first case in point, the fifth in which I have operated, was one of painful but only partial obstructive malignant disease of the rectum with not infrequent hæmorrhage. The patient was a female, under the care of Mr. J. Lovegrove, of Ightham. The loin having been opened as usual, the kidney presented, and hung so low that I could with difficulty get my finger in between this organ and the crest of the ilium to search for the descending colon. The position of the kidney was recognised by Messrs. C. and J. Lovegrove, who assisted me, and the consequent difficulty in the operation was appreciated by them as well as by myself.

The second case, the sixth in which I have operated, was that of a male, under the care of Mr. Dryland, of Kettering. The patient was the subject of painful but not quite obstructive malignant disease of the rectum. He was well nourished, and his muscular system very well developed. I proceeded with the operation as usual, and opened the loin at a very great depth from the surface. The kidney was situated high up, well under cover of the ribs, and was therefore no source of difficulty here. Having removed some lobules of fat which cropped up, I sought in vain for the colon at the outer border of the quadratus lumborum muscle. I should say that, previous to using the knife, I had injected about three quarts of milk per anum, and the whole had been retained; but, notwithstanding firm pressure being made upon the abdomen, the colon would not bulge at the wound, and I could not at this stage detect it. At this point I unintentionally wounded, I believe, the peritoneum, as something very like omentum protruded (although it is not always easy to discriminate between sub-peritoneal fat and omentum); but I at once returned this latter, and closed the aperture in the supposed serous membrane by a ligature after the fashion of securing the free end of an artery. I now continued my search for the colon by dividing freely the quadratus lumborum and erector spinæ muscles, and was at last rewarded by finding the bowel unusually near the spine and almost empty and at a great depth from the surface. Having opened it, only a little milk escaped, and I fastened it by long stitches to the sides of the wound. I must not forget to mention in connexion with this case that I was most ably aided by Messrs. Dryland and Roughton, of Kettering, and by Dr. Francis and Mr. Mash, of Northampton, all of whom appreciated the difficulty of the operation.

Mr. Dryland informs me on January 9, the fourteenth day after the operation, that his patient is in high spirits, has been absolutely free from the pain which led him to submit to the operation, and wishes to get up, and he thinks the case would do well if the wound were not so excessively deep. He fears that the artificial anus will close, although the fæces pass freely now.

Remarks.—Bearing in mind the above complications and their possible recurrence, I should select in order to meet them the transverse (Amussat) incision, and this, to avoid the kidney, should be made immediately above the crest of the ilium. In the case of the female above mentioned whose kidney hung low, and upon whom I practised the transverse incision at a finger's breadth above the iliac crest, I was obliged, to prevent undue strain upon the colon, to convert the horizontal into a T incision, fastening the bowel to the stem of the letter. How to deal with a case such as is last recorded is the difficulty.

Here again, the transverse incision will allow the operator, by extending it in either direction, to search for the colon either forwards or backwards if he do not find it in its usual position; and the posterior half of the incision would form a convenient channel along which the fæces might readily escape when the gut was deeply placed. Indeed, in any case in which the bowel cannot be stitched to the skin, or in which it is feared that the sutures will quickly yield, the posterior half of the incision should not be closed lest the contents of the now opened bowel become extravasated into the loin.

Rarely will a patient be so well nourished as was Mr. Dryland's, and, being a country gentleman, his muscles were well developed. In a case of malignant disease of the rectum, a permanent artificial anus is desired, and I think in future, where the bowel lies very far from the surface, and when all attempts to procure union between the cut edges of the intestine and the integument would be futile, I should be inclined to cut out a piece of the exposed wall of the colon. In doing this great care must be used to avoid opening the peritoneal cavity. With regard to this latter complication, I believe many are of opinion that the peritoneum is more often opened than is generally supposed. Whether or not such be the case, in my own experience this cavity has only been penetrated once in six cases, and in this instance with impunity. Colotomy is an operation comparatively free from danger, is capable of affording immense relief to pain, and deserves far more consideration from the Profession than it has yet obtained.

THE

CHIEF CAUSES OF HOARSENESS AND APHONIA, WITH HINTS ON TREATMENT.

By GEORGE JOHNSON, M.D., F.R.C.P.,
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The causes of hoarseness and aphonia are numerous and diverse, but they all resolve themselves into some condition which prevents or impedes the free vibration of the vocal cords. There are five chief modes in which the vibration of the vocal cords may be interfered with. 1st. A tumour upon one or both vocal cords, or between them, may prevent their close apposition. 2. A tumour or swelling above the cords may press upon them and so damp their vibrations. 3. There may be inaction of the laryngeal muscles and a consequent want of due tension and approximation of the cords. 4. The arytænoid cartilages, the levers to which the vocal cords are attached and by which they are moved, may be destroyed. 5. A scanty and feeble respiratory stream of air may be the cause of hoarseness or aphonia.

A not uncommon cause of hoarseness is a warty growth on one or both vocal cords. Such a growth coming between the two cords prevents their close apposition in vocalising, and the voice is thus rendered more or less feeble and husky. In the 51st volume of the *Medico-Chirurgical Transactions* I have recorded seven cases in which such growths were removed by the wire écraseur.

An unequal thickening and a granular unevenness of one or both cords may interfere with the voice as much as a distinct growth from the surface of a vocal cord. This roughening of the surface of the true cords is a not uncommon result of strumous inflammation in phthisical subjects. The inter-arytænoid fold of mucous membrane is sometimes so much thickened and indurated by catarrhal or strumous inflammation as to prevent the approximation of the arytænoid cartilages. Thus the closure of the glottis is prevented, and the voice is enfeebled.

In one case the cicatrix of a syphilitic ulcer in the inter-arytænoid fold prevented the close apposition of the cords, and rendered the voice husky; it also prevented the free movement of the arytænoid cartilages and the opening of the glottis during inspiration. Thus the breath was drawn in with a loud noise—inspiration was stridulous.

Syphilitic ulceration sometimes cuts across one of the true cords, and thus makes a large gap in the glottis. This had happened to the right vocal cord of a gentleman whose voice had been reduced to a whisper by syphilitic ulceration within the larynx many years ago.

One of the most frequent causes of hoarseness and feebleness of voice is what occurs often in cases of catarrhal sore throat—I mean inflammatory congestion and swelling of the so-called

false cords; that is, the fold of mucous membrane on either side immediately above the ventricle of the larynx. The swollen mucous membrane encroaches upon that little cavity—the ventricle—which in the normal state permits the upward vibration of the true cord; but now the vibrations are damped and impeded by the contact of the swollen mucous membrane.

A chronic catarrhal swelling of the mucous membrane of the larynx is the anatomical condition which exists in many cases of so-called "dysphonia clericorum."

The voice may be rendered very feeble and husky by diphtheritic exudation within the larynx. The false membrane comes in contact with, and sometimes even covers, the cords, and thus prevents or impedes their vibrations.

In like manner a transient aphonia may result from a piece of viscid mucus within the larynx. A forced expiration or a cough expels the mucus and restores the voice.

Hoarseness or complete aphonia may be a consequence of paralysis of the muscles of the larynx, and this paralysis or weakening of the laryngeal muscles may result from various causes. It is one of the symptoms and results of that rare and fatal disease which Trousseau has described under the name of glosso-laryngeal paralysis. The laryngeal muscles may be paralysed by pressure on the recurrent nerve by a cancerous tumour or by an aneurism of the aorta. In 1863 a man (F. F.) was under my care in the Hospital with signs of extensive cancerous disease within the chest. His voice was reduced to a whisper, and, on inspection by the laryngoscope, I saw that his glottis was open to the extent of about one-eighth of an inch. The arytænoid cartilages were in contact with each other at their tips. There was no movement of the cartilages, and the glottis neither opened wide in inspiration, nor closed completely when the patient attempted to vocalise. The inference was that both pneumogastric nerves, and especially the recurrent branches, were implicated in the cancerous growth within the chest, and thus the laryngeal muscles were paralysed. He left the Hospital before his death, and the body was not examined.

In the same year (1863) another man, J. H., was admitted with symptoms of laryngitis, cough, dyspnœa, stridulous breathing, and hoarseness. Laryngoscopic examination showed a healthy larynx, with free movement of the glottis at the time of the examination. It was inferred that pressure upon the recurrent excited occasional spasm of the glottis. There were no physical signs of aneurism, but there was one very suspicious symptom. For some days before his admission there had been difficulty in swallowing solids. Four days after he came in he began to vomit blood, and he quickly died. An aneurism of the arch of the aorta, about the size of an orange, had opened into the œsophagus, and the stomach was full of blood. The left pneumogastric nerve passed in front of the tumour, and was somewhat flattened by pressure. The recurrent passed behind the aneurism in its course upwards to the larynx. The parts implicated in this disease are preserved in our museum.

In some of these cases in which a tumour presses upon the nerves supplying the larynx, there is probably a combination or an alternation of palsy and spasm of the laryngeal muscles—spasm in the early stage, when the pressure is less; palsy later, when the pressure is greater, and the nerve thereby disorganised.

In the case which I just now mentioned the nerves on both sides were implicated. There was, in consequence, bilateral palsy of the laryngeal muscles, and both arytænoid cartilages were motionless. When a tumour implicates only one pneumogastic or recurrent nerve, there may be unilateral palsy of the larynx, as shown by the fact that, during attempts at vocalisation, one arytænoid cartilage remains motionless, while the other moves, with its attached vocal cord, in the usual manner. This unilateral palsy on the right side existed in the case of a gentleman whom I lately saw with my friend and former pupil, Mr. Miles A. Wood, jun., of Ledbury. The cause of this one-sided laryngeal palsy, with consequent hoarseness and occasional dyspnœa, was found to be a cancerous tumour at the root of the neck, involving in its substance the right pneumogastric nerve. The tumour pressed upon the œsophagus, causing difficulty of swallowing, and ultimately it made its way into the œsophagus by ulceration, and the patient died from exhaustion. Mr. Wood was early led to an exact diagnosis by observing the unilateral palsy of the larynx, and the fact that the œsophagus towards the root of the neck was so narrowed that a moderate-sized bougie was arrested there.

There are cases of purely nervous or functional, or, as they are sometimes called, hysterical aphonia. The voice may be reduced to a whisper, and even that is sometimes inaudible. On looking into the larynx, we see no evidence of structural change, but when the patient attempts to vocalise we find that the vocal cords remain motionless, or that they move very little. This nervous aphonia often comes on suddenly, and it often passes away as suddenly as it came. The best treatment for it consists in the application of electricity directly to the larynx by means of Dr. Morell Mackenzie's "laryngeal galvaniser." The shock excites spasm and a scream, and the cure is sometimes very rapid. I have cured several of these cases at a single sitting, and one by a single shock of electricity. A boy, about 12 years of age, was much frightened, and nearly drowned, by falling into a pond. From that time he completely lost his voice, his intellect being unimpaired. When I saw him he had not uttered an audible sound for two years. I saw that his larynx was healthy, and I determined to apply electricity. The first shock elicited a loud scream, and at once he recovered his speech.

In most cases it is necessary to apply the electricity again and again before the cure is complete, and in some cases the treatment is unsuccessful, but these are comparatively rare. When the general health is impaired, treatment should be directed to remedy this while the electricity is being employed.

It is remarkable, but quite intelligible, that when, from any cause—a growth upon one of the vocal cords, or inaction of the muscles—the glottis remains partly open during vocalisation, the air escapes so rapidly during the expiratory act of speaking, that the patient is often compelled to draw in a fresh breath before he comes to the end of a sentence. In consequence of the patulous state of the glottis, there is a rapid escape and waste of air, and the chest is soon emptied.

There is a form of aphonia or weakness of voice which I look upon as the result of muscular fatigue and weakness. I have seen a considerable number of these cases, and most of the patients have been clergymen. The patient begins to speak in a clear and loud voice, and he continues to do so for a variable time; but after speaking or reading aloud for, it may be, a quarter or half an hour, the voice becomes feeble, and it may soon be reduced to a whisper. At the same time there is a feeling of fatigue, and sometimes positive pain in the throat. With these symptoms we may find, on looking into the larynx, no trace of structural change, or only slight congestion and redness without swelling. A common cause of this form of dysphonia is overwork of the larynx, from frequent preaching and reading in large churches. I have known it to result from over-exercise of the voice in singing, from straining of the voice by the habit of loud talking in the midst of noisy machinery, and from violent efforts in giving the word of command.

In some instances this peculiar form of laryngeal weakness has followed upon an inflammatory attack. It seems probable that inflammation may sometimes extend from the mucous membrane to the muscular structures beneath, and thus the nutrition and the tone of the muscles may be impaired. This is the more likely to happen if the larynx be much exercised in speaking or singing during an attack of catarrhal inflammation.

The best treatment for these cases consists in rest for the larynx as the organ of speech, change of air and scene, and a general tonic regimen. The daily application to the larynx of a saturated solution of tannin in glycerine often does good. Tannin lozenges, too, may help to give tone to the feeble voice, and the combination of iron with small doses of strychnia is sometimes useful. I have tried galvanism, but I have hitherto seen no benefit from its use in this class of cases.

Destruction of the arytænoid cartilages is a rare cause of aphonia. Some time since a case of this kind occurred in the Hospital. A man was admitted under the care of Dr. Beale with aphonia, stridulous breathing, and urgent dyspnœa. I saw the vocal cords touching each other, and motionless. Mr. Wood opened the trachea, but the man died. On opening the larynx an ulcerated orifice was found in the mucous membrane over each arytænoid cartilage. A small calcareous mass alone was found in the position of each cartilage. It is evident that the cartilages had become ossified and necrosed, and had then been discharged through the mucous membrane. The glottis passively closed, because the levers which move the cords were destroyed and gone.

There is yet one cause of aphonia or weakness of voice which requires mention in order to complete the sketch which I have here given. The larynx is a wind instrument, and for the perfection of its performance it is required not only that there be complete structural and functional integrity of its cartilaginous, membranous, muscular, and nervous apparatus, but the bellows must be in working order. There must be a free movement of the ribs and diaphragm, and there must be an

unimpeded entrance and exit of air through the trachea and bronchi. When progressive muscular atrophy invades the intercostal and other respiratory muscles, the voice is weakened in proportion to the diminution of muscular power and of chest movement. When, from any cause, the vital capacity of the chest —in other words, the volume and force of the tidal current of air —is either temporarily or permanently diminished, the voice, as a direct consequence and in a corresponding degree, is enfeebled. Thus, during a fit of spasmodic asthma, so scanty and feeble is the respiratory current of air, that the voice is annihilated or reduced to the faintest whisper. In cases of advanced emphysema of the lung the voice loses tone and strength in proportion to the diminution of the respiratory power. One of the most curious examples of this form of aphonia is the husky whispering voice which occurs during the collapse of cholera. Here the primary cause is the partial arrest of the circulation through the lungs. The mass of blood is stopped by the contraction of the minute pulmonary arteries, and, as but little venous blood reaches the pulmonary capillaries, there is but little demand for air to meet and decarbonise it. The respiration, therefore, becomes feeble and shallow, and, to borrow the graphic expression of Sir Thomas Watson, "the vocal pipe feebly blown through refuses to speak."

Aphonia, be it remembered, is quite distinct from aphasia. Aphonia is the result of a structural or a functional defect in the larynx, or of a deficiency in the volume and force of the respiratory stream of air. Aphasia, on the other hand, is the consequence of a break, somewhere high up, in that chain of nervous communication through which the mind is enabled to play upon the vocal instrument.

ON THE INCREASED FATALITY OF CHOLERA IN INDIA, AND ON THE USE OF OPIATES AND OF STIMULANTS.

By JOHN MACPHERSON, M.D.,
Inspector-General of Hospitals, H.M. Bengal Army (retired).

Dr. Murray's report on the treatment of cholera, to the study of which disease he has devoted a great portion of his very active life, is one of considerable interest as a record of opinions, if not as a collection of facts. Of its absolute value in the promotion of the study of the disease I am not inclined to think highly. That for such a purpose it would not be very useful, was in some degree a necessary consequence of the mode adopted in procuring the materials for the report. Still I am not aware that many facts of any novelty in the natural history or in the treatment of the disease can be culled from it. In this respect, however, it may strike different minds differently. Scarcely had it reached this country when it was eagerly laid hold of by the newspapers, and portions of the report were adduced as strongly confirmatory of certain views of theory and of treatment which have now been for a long time urged in England. They have been supported with great ingenuity and with a persistency truly wonderful, seeing that the principle of treatment, that of assisting nature to get rid of noxious matter, is one of the oldest and most elementary conceptions in the treatment of disease.

However, in the few remarks I am going to make on the report, I shall not touch on points of theory. My observations shall be confined to facts as to treatment, and the influence of some modes of practice on mortality, but my comments on them may perhaps be more intelligible after a few observations of a more general nature have been made. In the course of the last quarter of a century great changes have taken place in Medical practice in India, as elsewhere. Bloodletting and lowering treatment have, as a rule, been abandoned. Treatment of a supporting nature is adopted much earlier than used to be the case. The earlier use of quinine in moderate doses (the extravagant administration of it, against which I protested in the face of official reports, has now died out), the freer use of ipecacuanha, and other measures have led to a great diminution in the mortality of fevers and dysenteries.

A portion of the improvement must be ascribed to better barracks, and to better care of the men, and to attention to hygienic regulations, but it would be too much to hope that harassing campaigns and bad seasons will not again increase the mortality of our armies from those diseases.

But the remarkable thing is, that though more attention has been paid than ever to cholera, both in the way of trying to prevent its spreading by attention to latrines and by disinfectants, and in modifying its treatment according to the latest suggestions, the result has been entirely disheartening. The mortality of cases of cholera among Europeans appears to be steadily advancing—at all events, is confessedly higher than it used to be.

One naturally inquires, has there been any change in the mode of treatment to account for this? And some are at once ready with the reply that there has been such a change, an increased use of opiates and of stimulants. Treatment in India has varied from time to time within certain limits; but the germ of almost every mode of treating cholera that has been adopted may, I believe, be found in the records of the outbreak of 1817 and of the succeeding years. Since that period, transfusion, inhalation of gases, the use of quinine, and of certain neurines are practically the only novelties that have been introduced; but they have been used on such a small scale, that their operation, whether satisfactory or otherwise, could not affect returns of mortality.

1. In the long series of years since 1817, no classes of remedies have been employed so steadily as opiates and stimulants. Bloodletting has been abandoned, scruple doses of calomel are now rarely administered, and various other modes of treatment once popular are no longer pursued; but although opiates and stimulants are still much employed, the evil effects of overdoses of opium or of brandy have been for a very long time kept before the view of the Profession in India. And my impression is, that the use of such remedies has been slowly diminishing in frequency. The unflinching advocacy in this country of what has been called eliminating treatment has not been without its effect in India; and although Dr. Murray states in the body of his report that the eliminative or purgative theory has few advocates, I learn, on referring to his tables at the end, that 479 officers recommend that the secretions should be promoted in the second stage of cholera, while scarcely as many, or 477, recommend that the diarrhœa should be checked. I am very sure that in former times—say from five to fifteen years ago—not nearly so large a number would have recommended that the secretions should be promoted, and I think it is a legitimate inference that, on the whole, the employment of opiates must have diminished. It is quite certain that it cannot have increased. Under these circumstances, I think that all will admit that the heightened mortality of late years cannot be attributed to increased use of opium, which is the remedy most frequently used to check diarrhœa. Dr. Murray in the body of his report does not hint at any increased use of opiates or astringents. On the contrary, he states expressly that opiates are condemned and acetate of lead viewed with suspicion.

2. Can the increased mortality be attributed to increased use of stimulants? and by the word stimulants brandy and spirituous liquors are intended. On this head Dr. Murray speaks strongly and emphatically. "The use of stimulants in the stage of collapse has much increased of late years, and so has the rate of mortality. The great expenditure of spirits and wines and the high rate of mortality during the epidemic of 1867 are shown in Table No. VI. There were, including men, women, and children, 557 cases, and the expenditure above the maximum allowed by the regulations was 1954 bottles. This would give an average expenditure of three and a half bottles to each case, but the expenditure varied in practice from no excess to seven and a half bottles. The mortality in the latter instance amounted to 92·913 out of 127 cases. In this instance the disease was very intense, and there was no advantage gained by the excessive use of spirits." I was prepared to agree with Dr. Murray as to the uselessness of continuing throughout a case the excessive exhibition of stimulants, but the statement made here is so very broad a one that I hesitated to accept it. My own impression would have been that the use of spirituous stimulants has not increased. But Dr. Murray, with his means of inquiry, must have ascertained the general fact. Dr. Murray's great ease in support of his view is that of H.M. 3rd Buffs, which is the special case referred to in the above extract. I shall pass by the question whether eight and a half bottles could have been really administered per case, or whether it is not more likely that during the panic and demoralisation of a regiment apt to attend a fearful epidemic —and something of which, we know, did accompany the outbreak in H.M. 3rd Buffs—a great portion of this brandy was not consumed by the orderlies and comrades of the men in Hospital; but on glancing at Table No. VI. of his report, I was immediately struck with the fact that this same regiment, the 3rd Buffs, had almost the same rate of mortality in August, when there was no extra issue of spirits, as in September, when there was the enormous extra issue. It was 92·8 without spirits

in excess, 96·7 with eight and a half bottles per case. If spirits were so injurious, I should have expected to have found a far greater difference in the relative mortality. This consideration led me to analyse the table, and I arrived at some very curious results. Placing mortality and expenditure of spirits opposite each other, we find:—

Mortality.	Extra Allowance of Spirits.
96·7	8 bottles 19 ounces.
92·8	none
77·7	1 bottle 7 ounces.
63·4	6 „ 9 „
55·9	2 „ 20 „
45·4	4 „ 3 „

The contrasts here are very striking. You have as high a mortality as 92·8 with no issue, and as low as 45·4 with the issue of more than 4 bottles. You have a mortality of 77·7 with 1 bottle 7 oz., and one of 63·4 with 6 bottles 9 oz. In short, no steady connexion between mortality and amount of spirits expended is apparent. This induced me to make several other calculations, some of which I give.

In 266 cases, the mortality being 85·9, the expenditure was 3 bottles and a half; in 65 cases, 74·9, with no extra allowance; in 139 cases, 74, with barely more than 1 bottle; in 343 cases, 60, with 2 bottles and a half. Finally, on comparing the mortality of those who had no extra allowance at all with that of those who had, I found that their mortality was 74·9; that of those who had an extra allowance was 72·9, or somewhat less. It is therefore, I hope, abundantly clear that, whatever connexion there may be between mortality and the abuse of stimulants, and however capable it may be of being proved by other returns, it is not proved by Dr. Murray's table.

Still there remained the great fact of the immense mortality of the Buffs, and of their inordinate consumption of spirits. If the spirits afforded no solution of the case, what other explanation could be offered? We all know that cholera epidemics vary in intensity according to season and other causes. I looked at the table to see the mortality at different seasons, and was rewarded by discovering that, in the months of May and June, and partially in July, the mortality was 63; in those of August and September it was 89·1, or a difference of 26 per cent. Here was at once the solution—the one partly hinted at by Dr. Murray:—"The disease in August and September was very intense."

I presume that no one will maintain that an enormons increase of mortality, such as 26 per cent., could have been caused by treatment, especially as it has been seen that in the month of August the mortality of the Buffs with no extra supply of wine was 92 per cent., against 96 per cent. in September with the large supply of wine. A further reason in addition to the seasonal intensity of the disease has been pointed out by Dr. Bryden. No fewer than fifty-three of the fatal cases were young men within the period of one year's service, and I have elsewhere pointed out the special liability of new arrivals in India to be attacked by, and to succumb to, cholera.

I trust that I have thus made it clear that the increased rate of mortality which has of late years characterised cholera in India cannot, so far at least as Dr. Murray's tables bear upon the subject, be attributed to a growing use of opiates or of stimulants. It would be, indeed, very important to have it proved that any one mode of treatment materially influences the mortality of an epidemic. For the present I know not of any trustworthy evidence on the subject. To me it would have been just as agreeable to have been able to have attained an opposite result to what has been now arrived at; for, although I have thought opiates and stimulants have been too much decried, I have not myself used them to any great extent, and have, like most other Indian Practitioners, endeavoured to guard against their abuse. There remains for the serious consideration of those who are interested in the subject, the distressing fact of increased mortality from the disease, and of the present year having been marked by a very wide prevalence of it in its worst form in Bengal and its provinces.

Painful facts such as these should not be forgotten. That there is little evidence of treatment affecting mortality; that Europeans, with all their seeming advantages, suffer more than the native soldiers; and the Goorkas also suffer more than the natives of Hindostan; that hitherto, as in Germany, there is no proof that disinfectants have been of any value—all this is disheartening enough, but we must work on, hoping to see some day further into these problems. It is far better that we should not be wedded to particular views of theory and of treatment; above all, that we should not jump at conclusions and take facts for granted. A confession of our ignorance is the first step towards something better. I have little doubt that Mr. Bryden's recent report on the cholera of 1866-68, just published by the Government of India, will contribute much to the philosophical study of the disease, although there is a good deal in it which it is difficult to follow, a good deal from which I dissent, and a great deal which will be considered to savour of heresy in England.

35, Curzon-street, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE MIDDLESEX HOSPITAL.

STRANGULATED INGUINAL HERNIA COMPLICATING A HÆMATOCELE—OPERATION ON NINTH DAY—INTERNAL STRANGULATION ALSO PRESENT—DEATH.

(Under the care of Mr. T. W. NUNN.)

Thomas B., a fireman, aged 21, in good health, was working in a burning house, when, as he was running up the blazing stairs, he fell, and the handle of his hatchet struck him violently on the scrotum. He continued working for some time, and in the morning walked "doubled up" to the Hospital, where the House-Surgeon found him pale and faint, retching frequently, and lying with his knees drawn up, suffering much from pain in the abdomen and back as well as in the genitals. The right side of the scrotum was much swollen, the swelling being pear-shaped, tense, not fluctuating, but rather doughy to the touch, and with no impulse with cough. The House-Surgeon could pass his finger well into the external abdominal ring, which was quite free, and on questioning the man it was clear that he had never suffered from hernia, and that the whole of his symptoms were due to the blow which had distended his scrotum with blood, and probably also to contusions of the abdomen and back occasioned by the fall down stairs. He was put to bed, and an evaporating lotion applied over the scrotum.

After a night of much suffering he was ordered by Mr. Nunn a draught containing tinct. hyoscyami f.3j. every three hours; hypodermic injection of morphia if the pain were not speedily relieved; ice to the scrotum, and a castor-oil enema to be administered immediately.

During the next two or three days the vomiting continued, with more or less abdominal pain and tenderness. The bowels were open twice or thrice, and the scrotal swelling began to decrease. Sinapisms were put to the epigastrium, and on December 5 a calomel and opium pill was given every four hours with ice to suck. On the next day, however, the same symptoms persisting and the patient losing strength fast, a mixture of ammonia and bark was substituted, and a tight roller applied about the abdomen, which was much distended, but not, as Mr. Nunn thought, by general peritonitis. The bowels had ceased to act for the past day or two, and on the 7th the vomited matters for the first time were noted to be apparently stercoraceous. The scrotal swelling was now greatly diminished; beef-tea and brandy enemata were ordered to be given at frequent intervals. All the symptoms continued until the 10th; the man rapidly lost strength, and the vomited matters became distinctly stercoraceous. The breathing was now mainly thoracic, the abdomen tense, tender, and greatly distended, tongue dry and brown, and still no action of the bowels. Mr. Nunn therefore called Mr. Moore into consultation about the case, and they decided to cut down upon a fulness now to be felt in the region of the inguinal canal and explore for a concealed hernia, it being clear there was some intestinal obstruction.

Chloroform was accordingly given, and Mr. Nunn cut down in the usual way upon the external abdominal ring on the right side. The ring was quite clear but for a strip of dark omentum which lay in the canal, and looked at first like part of the original blood extravasation. On passing the finger up the canal behind the omentum, Mr. Nunn felt a small knuckle of intestine just at the internal ring, tense, but feeling quite smooth and natural, though evidently tightly nipped. The hernia knife was passed up the canal and the margin of the ring lightly nicked, releasing the gut, which was gently pushed into the belly. The bit of omentum was then tied and cut off short, carbolic acid oil (1 in 9) applied to the wound, and the patient

returned to bed. The pulse had been very feeble during the operation, and brandy and morphia were given freely afterwards. He never fairly rallied, however; the sickness continued after his return to bed, delirium came on during the night, and he sank at 7 o'clock in the morning.

The autopsy was made the same day. There was found no general peritonitis, and but a film of blood clot in the right tunica vaginalis. The small intestine was distended with fluid matters up to near its termination, where it was found to have been compressed by a tightened dragged-down portion of the omentum fixed to the internal abdominal ring and continued into the inguinal canal. The part of the small intestine that had been strangulated between the omentum and the margin of the internal abdominal ring was covered with lymph, but not ulcerated, and did not include the whole calibre of the gut. It seemed, therefore, that, after the removal of the stricture at the ring, a second cause of obstruction was left by the compression of the intestine as it lay on the psoas muscle by the omentum fixed in the ring and inguinal canal. Beyond the band of omentum passing over the intestine, this was found to be quite empty.

The main point of interest in the case was the question of the date of the hernial protrusion. Although the man denied any previous symptom of rupture, Mr. Nunn believed that it was a congenital hernia, and that, in all probability, the bowel had been forced partially into the ring during some straining connected with the vomiting, which was constant after the patient's admission.

The history of the case furnishes an additional example of the value of the rule that when there is any doubt about the cause of symptoms of strangulated hernia, it is well to cut down upon any suspicious part and settle the question.

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Medical Times and Gazette.

SATURDAY, JANUARY 15, 1870.

PROSTITUTION AND THE "WESTMINSTER REVIEW."

True to its character as a systematic flouter of Mrs. Grundy, the *Westminster Review* has undertaken to enlighten the lay public upon the subject of prostitution. Two long articles have already appeared, one in the last October number, the other in that just issued. In the former the writer paints a very exaggerated picture of the results of syphilitic infection, tracing to it a multitude of illnesses, the connexion of which with syphilis is, to say the least, very questionable. Indeed, if one quarter of his statements could be substantiated, our national physical condition, as arising from the disease kept up by prostitution in our midst, would be a very alarming one. If the object of the writer was to frighten materfamilias, for whose special benefit the article is avowedly written, we can imagine nothing better calculated to effect it. Probably the majority of husbands in families where the Review enters will have had the good sense to mislay the number before it fell into the hands of their wives and daughters. There are strong-minded females of the "women's rights" school to whom such food is daily bread, who glory on meditating, ay, and writing, on subjects which the masculine mind approaches with hesitating steps, and handles with delicacy. But all the ladies of England, happily for us, are not of this type. Doubtless there is ample room for the exercise of charity and the performance of good works on the part of the most refined of the sex in the suppression of the vices of society, and of the particular vice in question among the number; but the exhibition of a highly coloured portrait of syphilis creeping insidiously into households, tainting the blood of the husband, the lover, the wife, and the infant, is surely unnecessary to call them forth. All will admit that it is desirable to lessen, if it be impracticable to abolish, the practice of prostitution; but until the advanced doctrines of Mr. Mill have been so far accepted as to give Englishwomen a voice in the deliberations of the legislature, it appears to us that the less they are lectured upon this subject —*more* the *Westminster*—the better for their own peace of mind and the better for the peace of the domestic hearth.

We were promised in October that the next number would declare to us a sensible remedy for the evils then deplored, since the remedy of continental society and that applied by Parliament to our military and naval stations were distinctly repudiated. But the Review still hangs fire, and gives us, instead of the looked-for remedy, a *précis* of the experiments made by different governments for the control of prostitution from the time of Constantine to the present. The article is ably written. The author has availed himself freely of the information furnished by the treatises of Parent-Duchatel, Jeannel, and Acton, and altogether is one which deserves to be read and pondered over at a time when extended efforts at the control of prostitution by the State are in contemplation. We say this as to the merits of the paper as an historical summary, although it appears to us to partake somewhat of the nature of a special pleading. But where are we to look for impartial history? It invariably comes to us through a medium which either suppresses or distorts. The experience of to-day is to us worth more than all that we can be told of what happened in former times under other conditions than our own. We do not despise the facts so far as we can learn them with accuracy, but we must be cautious in applying them to existent circumstances among ourselves; and, besides this, we must recollect the difference in nationalities, which will at all times properly modify the policy of the statesman engaged in the task of redressing national evils. It is on these grounds that we must hesitate to accept all the inferences of the Reviewer.

Three kinds of policy in dealing with prostitution are noted as having been practised by governments at different times and in different states. The first is the "policy of indifference," from which, it is said, we only began to emerge when the first Contagious Diseases Act was passed in 1864. The writer is scarcely correct here, for although it is true that no commensurate efforts had been previously made to cure diseased prostitutes, or to prevent them from imparting their diseases to the other sex, yet the common law has ever had its hand upon them for the repression of disorder, and the statute book will show that Parliament has not been unmindful of its duty in applying special summary remedies to special cases. The second is the "policy of repression," which there is ample reason to believe has always resulted in evil, and an extended burrowing of domestic immorality through all classes of the community in which it has been attempted. The third is the "policy of forcible regulation." It is that adopted now in France, Belgium, and Prussia. In comparing these three systems we think it may be admitted on tolerably good evidence that the English policy, by which prostitutes have been left to their own devices, so long as they did not annoy their neighbours, has been less productive of injury than that which has endeavoured to put prostitutes down with a strong hand. Comparing our policy

with that of countries where prostitution is forcibly regulated, we have to ask two questions—namely, whether this forcible regulation has resulted in less sexual immorality, and whether it is apparent that on the whole syphilis, as a disease infecting the national health, is less rampant than it is now amongst ourselves. We confess that, so far as we have been able to study the subject by the evidence furnished us, we are far from satisfied that this is the case. We are speaking now not of the military but of the civil population of these countries. Indeed, so far as male immorality is concerned, there is good reason to think that it is greater among the young and marriageable community, where prostitution is regulated, than with ourselves. And so far as syphilis is concerned as a disease infecting the constitution and spreading among wives, infecting the products of conception and contaminating infants, we have some reason to believe that it is nearly confined among ourselves to the lower strata of society. At a private gathering of some twenty Medical men, in more or less extensive general practice among the upper and lower middle classes of society, a question was put the other day to each with a view to elicit some expression of opinion as to the necessity of State interference on their behalf, whether it frequently happened in their experience to meet with abortions, the result of syphilitic infection or manifest evidences of syphilis in the infants of the families they attended. There were but two of the whole number who answered in the affirmative, and these were men whose practice lay among artisans and the lower class of tradesmen. The others, men having a daily visiting-list of from thirty to sixty families, declared that either of these was an occurrence of absolute rarity in their experience. There is no question that great sexual and reckless immorality, such as is likely to result in syphilitic contamination, prevails most among the classes whose brutishness generally is most apparent by other signs. But while we agree so far with the *Westminster Reviewer* as to doubt the evidence of general advantage attached to these continental systems, we must not forget, as he has done, that there is no proposition made by any one to adopt any of those systems in England. We are not among those who agree in all that has been put forth by the Association for extending the Contagious Diseases Act to the civil population, but we think that the promoters of the project should have fair play. We believe that the *Westminster Reviewer* does not represent the project fairly when he suggests that the operation of the English Contagious Diseases Act is to confound all prostitutes of every grade "into one indistinguishable crowd of 'common prostitutes,'" or "to force all the prostitutes to become inhabitants of brothels, in order that the hold upon them may be more secure." There is no proof of its having had this effect in the towns to which it has been applied. The present Act only deals with "*common*" prostitutes, and we imagine that no one would dream of seeking to extend its operation to women of a more decent and respectable class. The objection that it is calculated to lead to lying and evasion is in itself no objection of any validity, for we should be glad to be shown any interference with individual freedom sanctioned by statute which has not had a similar effect. The Workshop Regulation and Factory Acts lead to no end of lying and evasion, yet they are useful and beneficial and workable pieces of legislation notwithstanding.

The Reviewer objects to everything approaching compulsory surveillance on this among other grounds, that it is "the practical expression of a conviction which implies despair of social progress, as well as the acceptance of harlotry as an everlasting accompaniment of civilisation, and which, therefore, virtually gives the lie to that vital principle of Christianity constituting its very essence." He is great in history when it suits his purpose to draw lessons from it, nor does he disdain to appeal to the recorded teachings of those whom the *Westminster Review* loves to designate "the founders of Christianity." Yet it appears to us that if there is one lesson which history and revelation unite in teaching it is this—that goodness and wickedness ever have been, and, as long as the world lasts, ever will be, mixed up in this state of our existence—that social progress and civilisation will never make goodness universal, eradicate vice, or bring the flesh into final subjection to the spirit. They teach also like a "voice for ever sounding across the centuries the laws of right and wrong. Opinions alter, manners change, creeds rise and fall, but the moral law is written on the tablets of eternity. For every false word or unrighteous deed, for cruelty or oppression, for lust or vanity, the price has to be paid at last, not always by the chief offenders, but paid by some one." (Froude.) When covetousness, envy, hatred, and all uncharitableness have been banished from the earth, we may expect to see the end of harlotry, not before. "Millenniums are still far away." In the meantime, we must deal with the evils of society as best we may, striving to mitigate them, especially towards those who are not personal offenders, by measures domestic, social, religious, or legislative, but wisely, thoughtfully, and cautiously, lest, by any action of ours, the remedy may prove more baneful than the disease. The scheme which the Reviewer proclaims as forthcoming is to be one of "justice and common sense." We shall be glad to consider it when the time arrives for announcing it. But it is for no one to claim the monopoly of these qualities.

THE WEEK.

TOPICS OF THE DAY.

It is understood that a committee appointed by the Council of the Royal College of Surgeons to examine and report on the subject of a conjoint examining board has accepted certain of the leading propositions contained in the scheme offered by the Committee of the Royal College of Physicians, of which we gave an account last week. Other of the propositions contained in that scheme are reserved for further discussion. We have not as yet heard definitely what attitude the authorities of the Apothecaries' Society are likely to assume in the matter, but the course taken by that Society in all that concerns Medical education and examination has hitherto been of so liberal a character, that the Profession have the best ground to believe that no scheme of real improvement which gives the Society fair representation and a due share in conducting examinations will fail to receive from it a favourable consideration. Hitherto we may say, therefore, that the plan of a conjoint examination for England has steadily gained ground. But there are yet serious difficulties to be overcome. It would be disastrous, both to the Profession in England and to the English examining bodies, to put the proposed scheme in action in England if one similar in every point be not accepted and brought into action synchronously in Scotland and Ireland. It would be a suicidal policy on the part of the English corporations, equally injurious to the cause of Medical education and the interests of English Medical men, to institute a high examination for this division of the United Kingdom, and to charge thirty or forty guineas for the diploma, whilst the Medical Act of 1858 allows licentiates of examining bodies whose examination remains unaltered, and whose diploma costs half or one-third of the sum, to compete for public favour with the expensively educated English Practitioner. The examinations, cheaper in requirements both mental and pecuniary, would attract students from England as well as from Scotland and Ireland, and the English conjoint board would be simply starved. Already many English students—we speak from knowledge of the facts—find a trip to the North for a diploma a more easy way of getting on the Register than through the portals of either of the three English corporations; and in the case of still higher requirements, and a higher fee for passing, this evil

would be increased tenfold. If a conjoint board is to be established in England, there must be a similar establishment in Scotland and Ireland, the examinations must be made equal in every respect, and the same fee must be charged for the diploma. Nothing less can meet the exigencies of the case. An Act of Parliament, we presume, would be absolutely necessary to effect such a thorough change.

At the time of our going to press, the Poor-law inquiry into the charges brought by the guardians of St. Pancras against Dr. Ellis, the Medical Officer of the Workhouse Infirmary, stands adjourned. It would be premature, therefore, to offer any comments on the case. We may only state as matters of fact that Dr. Stevenson, of Guy's Hospital, gave similar evidence to that already advanced in his report to the vestry, which we recently noticed, and that the Infirmary matron and some nurses gave evidence that Dr. Ellis ordered the windows and ventilators of wards to be shut, which were afterwards pronounced by visitors offensive and ill ventilated. It would be unfair, however, to lay too much stress on this evidence, as the whole business is a matter of party warfare between the interests represented by the new and old guardians of St. Pancras, and of every point on either side is made the most. Much stress in all these discussions has been laid on the fact that the patients in the St. Pancras Infirmary have had 200 or 250 cubic feet of space less than that required by the Poor-law Board. But, as is remarked by our contemporary the *Poor-law Chronicle*, until the appointment of Mr. Gathorne Hardy's Cubic-Space Committee, the Poor-law Board only required 500 cubic feet for each patient in sick wards. Evidence published in a Parliamentary return for 1866 proves that each patient in the St. Pancras Infirmary had more than the then required space. At that time there were 250 patients, whereas recently there have been only about 200. The evils which have been asserted to have arisen from recent overcrowding ought therefore, on that showing, to have been terribly more rife in former years. The then Medical officer, however, in his evidence says that the ventilation of the Infirmary was principally maintained by open windows—a plan of ventilating to which Dr. Ellis is said to have shown a reasonable aversion.

At the inspection of Haslar Hospital on the 6th inst., Mr. Godfrey Goodman, an Assistant-Surgeon of the Royal Navy, who had served continuously for seven years in the Jamaica Hospital, where he discharged important duties during successive outbreaks of yellow fever, was, by Mr. Childers's request, presented to him by the Director-General. Mr. Childers, in the presence of the assembled officers, promoted Mr. Goodman on the spot to the rank of Surgeon, and at the same time complimented him in the highest terms on his services.

The chemist named McCall, of Little St. Andrew's-street, Seven-dials, who was brought before Mr. Knox by the Secretary of the Pharmaceutical Society for infringing the Sale of Poisons Act, has been condemned to pay a fine of 40s. and costs. No doubt, if the provisions of the Act are rigidly enforced, the purchase of poisons will be rendered ostensibly more difficult. At present it does not seem as if much diminution had taken place in the number of deaths from poisoning.

Dr. Livingstone is reported to have been alive at Ujiji in July last. The news has come from Bishop Tozer at Zanzibar, who had it from an Arab trader.

By the death of Sir W. Charles Hood, M.D., the offices of Medical Visitor of Lunatics and Treasurer of Bridewell and Bethlehem Hospitals become vacant. The former is in the gift of the Lord Chancellor, and is worth £1500 a year. Sir Charles Hood's early attainment of high position and premature death at the age of 45 are another illustration of the adage that no man during his life should be called fortunate.

Mr. T. A. Shaw Stewart has been elected Treasurer of St. George's Hospital in the room of Mr. Charles Hawkins, the Government Inspector of Anatomy, who has resigned the post.

John William Wells, the chemist, residing in Poland-street, who was accused by a young woman, since dead, of the crime of attempting to produce abortion, has been acquitted by a jury at the Central Criminal Court. Doubt was thrown on the dying deposition of the girl, on the ground that she had been delirious before her deposition was taken. The post-mortem examination also appears to have disproved the allegation that death was attributable to violence.

Three children of Mr. W. F. Foster, Surgeon, of Newport, Isle of Wight, were seized in the early part of the present month with symptoms resembling those of acute poisoning. Death followed in each case. An inquest is being held by the local coroner. It appears that the children were taking a cough mixture, and it has been supposed that some mistake was made in its preparation. The scientific inquiry is in the hands of Dr. Taylor.

The Duke of Richmond, who has the casting vote for the Lord Rectorship of the University of Aberdeen, has given it in favour of Sir William Stirling Maxwell. The votes of the four nations were equally divided between that gentleman and Mr. Grant Duff, but it is said the latter gentleman obtained most votes of individuals in his favour.

VISITATION AT THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

A VISITATION of the King and Queen's College of Physicians, a very unusual event, was held in the College Hall on Friday and Saturday, the 7th and 8th inst. The hall, fitted up as a court of justice, presented, when filled with the judges in full costume, the lawyers in their wigs and gowns, the President and Fellows in their academicals, and a large number of spectators, including several ladies, a very imposing appearance. The visitors were the Right Hon. the Lord Chancellor, the Lord Chief Justice of the Queen's Bench, the Lord Chief Justice of the Common Pleas, and the Lord Chief Baron of the Exchequer. The visitation was held on the petition of Dr. Stephen M. MacSwiney, a Licentiate of the body, who claimed the Fellowship of the College by election by majority of votes, and although he is the sole petitioner, it appears that the decision of the visitors will affect three other gentlemen who are similarly circumstanced. The Solicitor-General, Mr. Butt, Q.C., and Mr. Griott, instructed by Messrs. T. and D. Fitzgerald, were counsel for the petitioner. The Right Hon. J. T. Ball, Q.C., M.P., and Mr. G. Fitzgibbon, instructed by Mr. Woodward, appeared for the College.

In the course of the proceedings it was stated that Dr. MacSwiney was, on October 18 last, duly proposed and seconded for the Fellowship of the College. On that occasion eighteen votes were recorded in his favour, and nine against him. Dr. Haughton claimed the election for him, and he subsequently claimed it himself by letter on October 22. There was some delay in answering that letter, but he was at length informed that he was not elected.

It appeared that, although an entry was met with in the College records dated November 4, 1793, of the passing of a bylaw respecting the election of Fellows and Licentiates without examination, by ballot, the elections had always, from the date of the granting of the charter by King William and Queen Mary to a very recent period, been by open voting. The bylaw in question was signed by Dr. Plunket, brother of the first Lord Plunket, and a very eminent Physician of the day. Until the year 1862, moreover, the majority of the Fellows present carried the election; but in that year a bylaw was passed that all elections should be by ballot, that, in the case of election to Fellowship or honorary Membership, one dissentient in five should exclude, but that in the election of officers, the majority should decide, the President or Vice-President having a casting

Touch the powder with strong nitric acid; the powder becomes studded with orange-coloured dots. Dissolve a fragment of molybdate of ammonium in strong sulphuric acid. On touching the powder with this solution, a beautiful purple coloration is produced. That a salt of morphia, and not opium, gives rise to these reactions, I infer from the fact that no opium can be detected by a lens or by the tests for meconic acid.

I am, &c. THOS. STEVENSON.

Laboratory, Guy's Hospital, London, January 8.

THE ALPINE VALLEYS AS WINTER HEALTH RESORTS IN CONSUMPTIVE CASES.

LETTER FROM DR. HERMANN WEBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your "St. Moritz Special Correspondent" says, in his article "Wintering in the Snows," at page 43 of your journal of to-day, that he left St. Moritz "disappointed not the least by the distinct refusal to impart information by those who were said to possess it—a refusal which was defended by the plea that this information had been obtained and was destined for the sole use of a London Physician who is known to take a considerable interest in the place." As this remark may give rise to misapprehension, I am compelled to state that it has never been my wish that any information regarding St. Moritz should be withheld from the use of other inquirers, and that your correspondent is scarcely justified in making the remark quoted, as he has not applied for the necessary information at the right quarters.

In 1868 I requested an English gentleman, a very intelligent and experienced meteorologist, to take observations for me at St. Moritz. He not only sent me, during his stay there, every month, the most accurate tables, but induced also, at his departure from the Engadin in the spring of 1869, Mr. F. Greatheed to continue these observations for me. The latter gentleman, I hear, thinking that I wanted them for a communication on St. Moritz, replied, when asked for them, that they were taken for me, and that he did not consider himself justified in parting with them. I regret this refusal, though every one will, under the circumstances, consider Mr. Greatheed's hesitation natural. If your correspondent had written to me, I should, with the greatest pleasure, have resigned to him whatever claim I had on Mr. Greatheed's observations. Valuable, however, as *meteorological* data are, *clinical facts* are to the Physician of much greater importance, and to whom did your correspondent apply for these? Surely the most natural course would have been to ask his Professional brethren for assistance, and especially Dr. Berry, the well-known intelligent Physician at St. Moritz; but I have reason to know that Mr. Greatheed is correct in stating that your correspondent has not done so.(a) He may perhaps have debarred himself from this step by his disparaging remarks on the "bath Doctors" in a former letter(b)—remarks regarding which I must entirely disagree with him from frequent Professional intercourse with these gentlemen—Dr. Brügger and Dr. Berry—extending over many years.

Mr. Greatheed has already corrected the statement of your correspondent that several of the English patients during the last winter season left St. Moritz before the winter was half over, and I can add that I have examined these patients after their return to England, and ascertained that they had derived great benefit from their stay at St. Moritz.

My remarks concerning your correspondent's complaint about want of reliable information at St. Moritz relate also to his observations in a former letter(c) regarding Davos. I can assure you that I never, during my repeated visits, have had any difficulty in obtaining the information I could expect to obtain. At my last visit, towards the end of November, Drs. Spengler and Unger gave me the opportunity of examining their patients from morning till night; they furnished to me the reports of the Doctors who had sent the patients, the notes which had been taken at the patients' arrival, together with the temperatures shown since their arrival; they allowed me to take my own notes, and will at a later period give me an account of the progress of these cases. What more can be expected?

Truly, Sir, I believe that every earnest member of our Profession will agree with me that the examination of so weighty a question as the treatment of consumption in mountain climates requires greater accuracy than that which your correspondent has thought sufficient to enable him to express an unfavourable opinion, and our judgment in such matters should not be influenced by little disturbing elements, as the "puffing spirit" of which he complains.

I am far from desiring to see the Alpine valleys regarded as the panacea and as the sole refuge for the consumptive; I wish only an unprejudiced trial by which we may gradually become enabled to judge with greater precision for which class of cases an elevated or a low, a dry or a moist, a cold or a warm, a sheltered or an exposed situation is beneficial, and also to some degree what is the relative value of high and of low temperature; of dryness and moisture of the air and the soil; of more and of less rarefied states of the air; of the presence and absence of wind; of freeness of the atmosphere from foreign admixtures, organic and inorganic; and of the many other elements of climate. Valuable information on several of these points is already contained in some of the recent works on climate, and I have myself derived much instruction from an article in the last number of the *Practitioner* (No. xix., January, 1870, p. 37), written in an unbiassed spirit, and pointing out the way in which we may treat the subject.

I am, &c.

Grosvenor-street, W., January 8. HERMANN WEBER.

(a) "St. Moritz in the Engadin," *Medical Times and Gazette*, 1869, vol. ii. p. 712.
(b) *Medical Times and Gazette*, 1869, vol. ii. p. 361.
(c) *Ibid.* p. 471.

THE TREATMENT OF SCIATICA.

LETTER FROM MR. J. CLARKE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having seen in the *Medical Times and Gazette* of December 4 and 11, 1869, a communication from Dr. Lawson on sciatica, perhaps you will be so kind as to insert the following remarks:—When I first came into this neighbourhood nearly fifty years since, I was much struck with the lameness and, in several old persons, a shortening of the limb; on inquiry I was informed by them that it was considered rheumatism. However, it was not many years before I had an opportunity of ascertaining the complaint they were labouring under; my having a severe attack of sciatica myself, led me to investigate its nature. Although I had had attacks of lumbago and rheumatism, I found sciatica a very different complaint, and one that did not yield to the same mode of treatment. Since then I have seen many cases, once in a child about 8 years old, which, owing to the negligence of the parents, is now a cripple. The diagnosis is not very difficult; merely simple pressure with the finger or thumb on the sciatic nerve as it emerges from the pelvis will generally cause excruciating pain extending down the thigh to the toes, with a tingling sensation. I have generally been able to trace the cause to cold—viz., sitting on cold stones, damp or cold ground, wet feet—and, after two or three attacks, have found it produced from over-exertion in walking or jumping. As to its treatment, I generally commence with an active purgative; if no relief, I then apply one dozen or more leeches, encouraging the bleeding. The following night I apply a large blister; when it is ready to be dressed, I sprinkle over the surface, morning and evening, a powder containing one grain of morphia with sacc. alb. pulv., repeated for three or four days. I give but little medicine, though I have been laid up myself on several occasions, and two or three times for several weeks together, once having an attack on both sides. Some years since a labouring man sent for me, having a most violent attack while at work, so that it was with difficulty he reached his home. Having seen an account of a mode of treatment with the heated button, I had one made and applied it over the part in various directions; of course it occasioned very severe pain for upwards of half an hour, when it passed off, and the man never had a return till his death, which occurred some years after from bronchitis. Encouraged by this trial, I have had recourse to it in other cases with the same result. Now there is another point in regard to treatment which I beg most strongly to urge on the Profession—viz., absolute and perfect rest in the recumbent position on a mattress—and I cannot do better here than to refer to Mr. Hilton's valuable lectures at the College of Surgeons on rest. It is a part of treatment that I think is very inadequately attended to. I am confident, after many years' experience, that it is of the utmost importance in very many cases besides sciatica, though I am aware of the difficulty of having it sufficiently attended to in country practice, and I doubt whether it is often so properly attended to in Hospital practice as it should be. I have occasionally found, in chronic

or slight cases, ease derived from mustard poultices, and I can easily imagine the benefit derived from the hypodermic treatment with morphia as recommended by Dr. Lawson.

I am, &c. J. Clarke, M.R.C.S.

Lynton, January.

"THE ANTILIGATURE FORCEPS."

[To the Editor of the Medical Times and Gazette.]

Sir,—I venture to send for insertion the following case, which presents features of much interest.

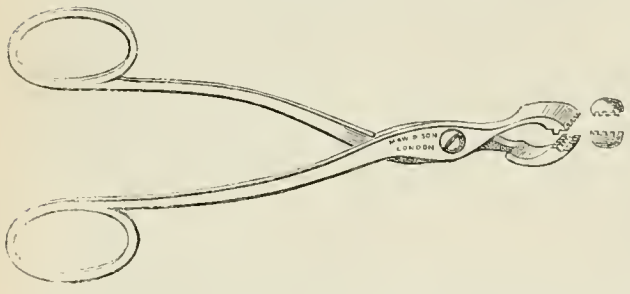
Dec. 9, Sarah B., a married woman, aged forty-six, was admitted into St. Bartholomew's, under the care of Mr. Coote, with a scirrhus of the right mamma. She was operated upon by that gentleman on the following day.

As soon as the excision was accomplished, Mr. Webber, who happened to be standing near the operator, suggested the use of the forceps he, it seems, invented many years ago. Mr. Coote, who had, it appears, seen Mr. Webber use this instrument with entire success upon arteries of very considerable size in the removal of an unusually large breast, at Brompton, ten or eleven years since, at once acceded to the proposition. The effect upon the divided vessels was instantaneous and perfect.

No blood was lost, no secondary hæmorrhage ensued, and the patient made a good recovery. Mr. Coote mentioned this very satisfactory case in his Surgical lecture a few days afterwards.

January 10, 1870. I am, &c. A Pupil.

[We have seen the forceps, and its striking effect upon dead vessels, through which, when fresh, after being pinched by the forceps, it is not easy to impel air—so complete is the dovetailing and closure of the divided end of the artery. We append a wood engraving of the forceps, which is in-



tended to produce the same effect as the gnawing by the teeth of animals in the division of the umbilical cord. A block was kindly lent us by Messrs. Maw, and next week we shall give an engraving of the "intracisors."

ON MEDICAL CHARGES.

Letter from Dr. F. E. Jencken.

[To the Editor of the Medical Times and Gazette.]

Sir,—It was with much satisfaction I read the letter on "Medical Charges" which appeared in your impression of December 4, and scarcely knew whether to be amused or grieved at the half jocose, half serious manner in which the writer endeavours to set forth his well-founded complaints, in the laudable hope of contributing in some measure to redress the hard lot of a competent, disinterested, and overworked body of men. There is no subject deserving of more calm and deliberate consideration than the oft-vexed question of Medical charges. It affects both the public and the Profession, the quality of the advice sought for by the patient, as well as the social status the Medical Practitioner should hold as a scientific and well educated gentleman.

After your short but able remarks on the letter alluded to, I should think any further comment unnecessary, did I not on the one hand consider it the duty of all who take an interest in this grave social question to assist in promoting its thorough discussion, and were there not, on the other, several points of considerable moment upon which, in my opinion, your correspondent has not sufficiently insisted. Though it cannot be denied that men engaged in an arduous country practice, or whose sphere of action lies amongst the humbler classes of large cities or populous suburban districts, are often inadequately remunerated, and are compelled in self-defence to make up for the deficiency by resorting to the more lucrative but derogatory system of deluging their patients with drugs, far in excess of what is required; it is equally true that there is a large class of people of moderate incomes, who, from the heavy domestic claims they are under, and the social position they are obliged to maintain, have actually not the means to fee a regular Physician, and are of necessity driven to resort to the lowest stratum of the Profession, or to do what is much worse—drug themselves with patent medicines or procure advice across the counter, often at considerable danger to life and health. It is from the want of proportion between the remuneration demanded by the higher ranks of the Profession and the limited incomes of a large number of the upper middle classes that a double injustice is done; for while Medical etiquette forbids the Physician and Surgeon to regulate his fees according to the pecuniary means of his patients, the bulk of the public, who represent the actual wealth of society, are, from a natural repugnance to disclose their inability to comply with the usual demands, effectually prevented from availing themselves of his services, except in extreme cases.

It is thus obvious that with the exception of the *coryphæi* of the Profession, upon whom money is lavished without reserve, a large body of men of undoubted ability are debarred from deriving a just reward for their labour and for the many years spent in professional study and anxious waiting, at a heavy cost to themselves and to their friends.

So long as the present system obtains, nothing more can be done than for each member of the Profession to adopt such palliative measures as he may think best calculated to suit the exigencies of the case. The true remedy, however, for this grave social evil would be to abolish the self-dispensing system *in toto*, to institute a uniform scale of fees adapted to the circumstances of all classes, and, finally, to place the chemists and druggists under the supervision of properly appointed commissioners whose duty it should be, amongst others, to frame a proper tariff of charges for all medicines and chemicals, thereby at once and for ever putting an end to this glaring anomaly.

A similar system exists on the Continent, and has always been found to work well, the Physician and apothecary being respected by all parties, and realising a handsome competence notwithstanding the low rate of charges to which they are restricted by the State, and from which even the leading Physicians are not exempt.

What has just now been advanced must only be taken in a general sense, and by no means applies to the emoluments of a consulting practice, the lawful ambition of every Practitioner of talent and perseverance, for no one could reasonably object in extreme cases, or to relieve himself and his Medical attendant of a weighty responsibility, to call in additional advice, even at a heavy expense; nor would he demur at reimbursing a metropolitan Physician summoned to the country at much inconvenience and loss of time. Neither is it incumbent on a Medical man to refuse a munificent offer from a wealthy patient in gratitude for his prompt and skilful attendance. It is, therefore, merely with regard to the running fees in sickness, which entail so much hardship upon the thrifty and industrious portion of the community, that a decided alteration is called for.

There is, however, a respectable but unfortunate class of society of which, before concluding, I would desire to say a few words. I allude to the reduced gentry, who either, with large families to bring up, are compelled to live upon a small pittance, or who, from long sickness, natural delicacy, or some physical defect, are prevented from earning an adequate livelihood, and are in part or wholly dependent upon the generosity of friends or the charity of the public. Here the Physician should be governed by his own natural tact and discretion, dealing with each case with judgment and delicacy and in accordance with his nobler impulses.

Concerning the Medical relief for the poor, I can only reiterate what has so often been said on the subject—namely, that dispensary officers should not only be selected from the higher ranks of the Faculty, and adequately rewarded for the arduous duties they are called upon to perform, but that the staff of midwives should also be improved, care being taken that none other should be employed but those thoroughly skilled in their business, of unexceptionable character, and able to read and write. Here, too, an increase of salary is much to be desired, together with suitable apartments, and the ordinary perquisites accorded to Hospital nurses.

Why should the poor, the thews and sinews of the land, upon

vote. The question now before the visitors is, whether the College was incompetent to make this bylaw, the charter providing that the Fellows, or the *major part of them*, should be empowered to assemble and elect to Fellowships of the College; or whether the Act of Parliament which received the royal assent on May 16, 1862, and which declares that the College may admit its Licentiates to Fellowships "under such limitations as to them may seem fit," confers upon it the power to establish such a bylaw. Should the bylaw be declared invalid, the validity of Dr. MacSwiney's election will still remain to be tried. On the second day of the visitation the Court adjourned to Friday, the 21st inst., at 11 o'clock, to admit of a full investigation of the records of the College.

HOSPITAL REGISTRATION.

TWELVE months have elapsed since it was first proposed to appoint a registrar at University College Hospital, and still the office remains unfilled. It it difficult to see the reason for this delay, with so many students as there are in the school. At present there is no systematic registration here of the Surgical cases at least, as at the other principal Hospitals, so that one cannot even obtain authoritative returns of the results of operations, although, from its position near to large railway termini and crowded thoroughfares, capital operations are unusually frequent. If all the metropolitan Hospitals were to publish annual statistical tables, the Profession would soon be in possession of some really valuable returns. But for such work special registrars are needed, and there ought to be no difficulty in making such appointments. Of course, where the registrar is expected to take detailed notes of a large number of cases, the work is pretty sure to be imperfectly carried out, and great injury is done to dressers and clerks, who probably learn as much by careful note-taking as by any other clinical duties; but where the registrar is required to superintend and be responsible for the notes taken by the students, and to arrange them for publication, the work is in the highest degree profitable.

THE REGISTRAR-GENERAL'S WEEKLY RETURNS.

THE Registrar-General begins his new year well. With a very slight increase in size, the first weekly return for the current year contains almost double the amount of information hitherto given, whilst several facts relating to causes of death and ages of the deceased are given with wonderful clearness.

"From the commencement of the present year the registered births and deaths in London and in nineteen other large cities and towns in the United Kingdom, having an estimated aggregate population of nearly seven and a quarter millions—or one-fourth of the whole population of the kingdom—will be given in the weekly return. Several additions have been made to the information hitherto published; the towns of Portsmouth, Norwich, Wolverhampton, Leicester, Nottingham, and Sunderland, all important centres of population, are now included for the first time; and many interesting particulars relative to the causes of fatal disease in the provincial towns as well as in London will be found in the tables. The Registrar-General has thus endeavoured to render the weekly return more useful to the authorities, to men of science, and to the public.

"The epidemic of scarlet fever is still maintaining its hold upon the metropolis, and especially in the poorest and most densely populated districts. The 134 deaths registered from that cause last week were, however, the fewest in number which have been recorded in any week (excepting the Christmas week) since the middle of August last. During the fifty-two weeks ended on January 1, there were altogether 5803 deaths registered in London from scarlet fever—a mortality equivalent to 183 deaths to every 100,000 of the population. The disease was therefore more fatal in London last year than in any previous year since registration commenced, the nearest approach to so high a death-rate having been in 1863, when scarlet fever killed 171 persons to every 100,000 of the then population."

The Return, in its present form, affords a marvellous proof of the celerity and exactness with which the machinery of the Registrar-General's Office works. The facts relating to seven millions of people are received, we believe, at Somerset House at ten o'clock on Monday morning. The information is then in the crude form of two or three hundred separate returns. By the evening of the same day, these are digested, commented on, and in the printer's hands. On Tuesday a revised copy is sent to each of the daily papers. The Registrar-General's Office is certainly not chargeable with trying "how not to do it." We hope that the next step in advance will be the publication of sickness as well as death returns, for which materials exist in abundance, and which the practised hands in the Registrar-General's Office could easily put into shape. We hear that very extensive improvements in the Quarterly Returns are also in contemplation.

ST. BARTHOLOMEW'S HOSPITAL.

WE understand that Dr. Farr has resigned his appointment as Physician to St. Bartholomew's Hospital. It is probable that Dr. R. Martin, who was compelled by ill-health to retire three or four years ago from the office of Assistant-Physician, will enter the ranks again, and with recovered health throw some vigour into the clinical teaching of this important Medical school.

INDIAN MEDICAL SERVICE.

WE hear that Dr. Sutherland, Depnty Inspector-General of Hospitals on the Bengal Establishment, is about to retire on account of the state of his health.

DEBATE ON THE CONTAGIOUS DISEASES ACT.

THE adjourned debate of the Association of Medical Officers of Health will be resumed on Saturday evening at the Scottish Corporation Hall.

FROM ABROAD.—SIR JAMES SIMPSON AND THE LATE DR. MORTON —THE FRENCH CHARITABLE ESTABLISHMENTS IN 1869.

CONSIDERABLE soreness seems to have been produced in Boston by the presentation of the freedom of the city by the Town Council of Edinburgh to Sir James Simpson, and the venerable Dr. Jacob Bigelow, in a recent number of the *Boston Medical Journal*, comes forward as the mouthpiece on the occasion. After quoting some of the observations made on the occasion in relation to the commercial value Sir J. Simpson had conferred on the city by the attraction of such a concourse of patients and such a large manufacture of chloroform, he says:—

"But many persons will think it a mistake in the adoption of a foreign discovery to ignore the source whence he derived it. Sir James Simpson, in a long and eloquent reply, while he complacently accepts the crown of borrowed plumes thus tendered to him, makes not the slightest allusion to the country from which they were plucked, in which country anæsthetic inhalation, with more agents than one, was established, vindicated, and successfully practised long before it was heard of in Edinburgh or any other part of Europe.

"It is not wonderful that, in the designs of Providence, medicinal agents should exist capable of averting pain by the suspension of sensibility; but the wonder is that, after mankind had borne pain ever since the creation of their race, any person should be found of sufficient courage and strength of conviction to put through the untried and formidable experiments necessary to decide whether life could continue under the inhalation of a scarcely respirable vapour, carried to such an extent as to destroy sensibility and produce apparent death. That man was not Sir James Y. Simpson. The history of anæsthetic inhalation is well known. It began in this country, and was first used in the extraction of teeth, and afterwards in capital operations at the Mass. General Hospital, and in obstetrical practice. The attention of the civilised world was immediately drawn to the great American discovery. Every known variety of ethers, and of compounds containing the elements of ethers, together with volatile substances, gases, and vapours, were at once submitted to the test of experiment. It is possible that better agents than those now in use will hereafter be discovered, but for the last twenty years the

anæsthetic practice seems to have settled mainly on two agents —viz., sulphuric ether, with which the discovery was made, and which has thus far shown itself to be the most safe and manageable, and chloroform, which is more portable and agreeable in its odour, but which experience has shown to be more frequently attended with danger in its use."

The purport of the Edinburgh ceremony seems to have been misunderstood by our somewhat irascible *confrères*. It was not performed for doing honour to the inventor of anæsthetic agents, but for testifying the high appreciation of so distinguished a townsman who had conferred so much celebrity on the University and so many tangible benefits on the city itself. Had the Profession itself, indeed, been called together for any similar purpose, the same result would have assuredly followed, and with still greater honour to the recipient, owing to the more exact knowledge possessed of his merits by well-qualified judges. Not only in relation to the discovery of chloroform, but for many other results of a laborious well-spent career, and the manifestation of consummate ability in numerous branches of scientific knowledge and research, Sir James Simpson is a man of whom we may all well be proud. The meeting of the Edinburgh Town Council was not a fitting occasion to go into the history of the discovery of anæsthetic agents. That Sir James Simpson never pretended to be their discoverer is known to all; and, indeed, as a correspondent of the *Boston Journal* admits, on sending his first pamphlet on chloroform to Dr. Morton, he wrote—"Of course the *great* thought is that of producing insensibility, and for that the world is, I think, indebted to you"—a point Dr. Morton's fellow-citizens were by no means so well agreed upon at that time as they seem to be at present. The fact is, indeed, now of little interest, save as a matter of history; for, with the exception of Boston, the entire world seems to be of accord that chloroform is a preferable anæsthetic agent to ether; and certain it is that, had invention not gone beyond the discovery of the latter agent, multitudes of persons (especially in the great wars which have since taken place) would never have enjoyed that exemption from suffering which Sir James Simpson's inventive sagacity and untiring industry provided for them.

A recent French bluebook gives some interesting facts as to the Hospitals and Hospices during 1869. The two imperial convalescent establishments at Vincennes and Vesinet have received the one nearly 12,000 and the other nearly 7000 convalescents. During the year the "Maternal Societies" have succoured 18,000 families, and the *crèches* have received 2352 infants. The services for gratuitous Medical visits have also furnished nearly a million visits and consultations, although they have only been established in fifty-one out of the eighty-nine departments. The greatest progress has been observed among the "Mutual Aid Societies," which are now 6199 in number, their members amounting to near 800,000, and their funds to 50,000,000 fr. The accounts and budgets of 1400 Hospital administrations have been examined, and a most important report prepared, not only on their financial condition, but also on their origin and organisation, and on the improvements which have taken place in them since 1852. Of 1557 of these establishments existing in France in 1869, 1224 were founded before 1790, 161 between 1790 and 1852, and 172 since this last date. The donations and legacies have followed the same progressive increase. From 1815 to 1852—*i.e.*, in 37 years—these voluntary contributions amounted to 82,000,000 fr., or an annual mean of 2,216,000 fr.; while, under the second Empire, this annual mean has nearly attained 5,000,000 fr. The administration of these establishments has also been satisfactory, as evidenced by the receipts having exceeded the expenses by 4,000,000 fr. The number of indigent insane amounted to 24,529, or 1 to 1500 inhabitants.

Longevity.—The Marquis of Pach-Badens died at Nice on Monday, aged 102 years.

MR. ERASMUS WILSON'S PROFESSORIAL COURSE OF DERMATOLOGY.

The lectures will begin on Monday, January 31, at 4 p.m., in the Theatre of the Royal College of Surgeons. The prospectus, which is just out, promises a very attractive course. Of Lecture I., on Monday, January 31, the programme is as follows:—

Introduction.—Early history of Dermatology; its language that of the fathers of Medicine—Æskulapius and Hippokrates: indications of health and disease furnished by the skin, *e. g.* kyanosis, jaundice, chlorosis, melasma, &c.; clinical records of the Asklepiadæ; dermatological nomenclature of Æskulapius and Hippokrates, objective terms relating to colour, figure, and quality, subjective terms relating to evolution, symptoms, and cause; popular origin of scientific terms; ancient knowledge of the structure of the skin; anatomy of the skin; its physiology; its pathology.

Pathological Lesions: *primary* group—rubor, macula, papula, tuberculum, tuber, bulla, vesicula, pustula, squama: *secondary* group—desquamation, induration, incrustation, excoriation, fission, ulceration, cicatrisation, discoloration. Diagnostic value of the pathological lesions; cause, prognosis, and therapeutical treatment of cutaneous diseases.

Classification of cutaneous diseases: earliest classification; classification of Celsus; classification of Mercurialis and Riolanus; artificial classification of Plenck and Willan; natural classification of Alibert; physiological classification of Rayer; pathological classification of Hebra; clinical classification.

Arrangement of the present lectures:—1. *Diseases of Inflammation—e.g.*, inflammation from common causes, specific poisons, specific constitutional causes, traumatic causes. 2. *Diseases of the Functions of the Skin and its Apparatuses—e.g.*, aberrations affecting sensation, nutrition, epithelium-formation, hair, and secreting organs, sebiparous and sudoriparous.

Lecture II., on Wednesday, February 2, begins with diseases of inflammation—inflammation from common causes, ekzema, psoriasis, pityriasis, scabies, leichen, impetigo.

Lecture III., Friday, February 4, after treating of the objective classification of diseases, goes on to erythema, erysipelas, urticaria, phlyktæna, miliaria, pemphigus, herpes, ekthyma, furunculus, hordeolum, anthrax, Delhi boil, etc.

Lecture IV., February 7, inflammation from specific poisons, exanthematous, syphilitic, elephantous, leprous, strumous, carcinomatous, traumatic, including frostbite, burn, parasites, and verminous bites.

Lecture V., February 9, will treat of neurotic and nutritive affections, and epidermic changes.

Lecture VI., February 11, will treat of affections of the nails, pigment, hair-follicles, sweat-glands, etc.

ANALYSES OF PATENT MEDICINES.—III.

SANGER'S TASTLESS ANTIBILIOUS POWDERS.

This medicine is sold in small packets, containing, in addition to the powders, a paper of directions and a paper of advertisements.

From these papers the following is quoted:—

"To those about to travel, or residing in hot climates where the liver is sure to become sluggish, these powders will be found most advantageous to keep it in order, and those who have returned from India and other warm parts will find it will relieve them from that languid, low, miserable feeling, which arises from a suppressed action of the liver, without weakening them by *violent purging or saturating the system with mercury*, which many medicines for the bile are liable to do.

"DIRECTIONS FOR USE.

"*For an adult or a person over* 14 *years.* One powder every morning for four times, then one every other morning for two doses, and whenever any symptoms of bile appears (*sic*), take one in the morning.

"*For a child.* One powder in the morning occasionally.

"These powders may be taken at any time in the day when feeling bilious, but the best time is before breakfast. The most advantageous way of taking them, is to turn the powder from the paper on to the tongue and drink a little water afterwards: but any other way will do as well, only by the one mentioned.

there is less chance of losing any, which, as the powders are small, is of consequence. They are tasteless and odourless, so that the most particular cannot have their taste or smell offended, and they are prepared of the purest ingredients, with the greatest care, so as to ensure perfect uniformity of action."

It is noteworthy that the powders are unaccompanied by testimonials of any kind—in this respect contrasting with the patent medicines mentioned in the former reports.

Three powders were carefully weighed as follows:—

No. 1 weighed	. . .	4·27 grains.
No. 2	,, . . .	5·60 ,,
No. 3	,, . . .	5·80 ,,
Mean	. .	5·22 ,,

The percentage composition of the powder was found to be—

Calomel	2·25
Organic matter	97·75
Ash	inappreciable
	100·00

The organic matter contained no active ingredient. It was entirely soluble in water, and appeared to be white sugar.

From the above data it will be seen that a Sanger's antibilious powder contains, on an average, about one-eighth of a grain of calomel. Compared with Steedman's or Stedman's (which, as will be recollected, contained from $\frac{6}{10}$ up to 1 grain or more of calomel in each powder), Sanger's deserves the title of a mild mercurial. It is, however, right to call attention to the passage quoted above, wherein the merit of the medicine is extolled in that it does not *saturate the system with mercury*. Reading this, the incautious portion of the medicine-taking public might suppose the Sanger powders to be devoid of mercury—an error which is corrected by the analysis just given.

REPORT ON THE PRESENT MILK SUPPLY OF LONDON, WITH ANALYSES OF FORTY SAMPLES.

It is unnecessary to advert to the grievously high rate of infant mortality in England, and especially in London and other large towns. The causes are manifold, and arise out of the circumstances, habits, and health of the parents, and it is in vain to expect that the poor and ignorant can, by any possibility, rear their children with as little loss as the rich and educated. Between the rich mother in Grosvenor-square, who can command the services of one or more wet-nurses for her baby, and who can keep a cow in the well-appointed stable at the rear of the mansion or at the adjacent home farm at Kilburn or Barnes, and the poor mother in Grosvenor-mews, who has to tend her two or three elder children with her own hands whilst the baby is at her ill-nourished breast, the gap is very wide indeed. The milk alone is a very important element. We have always thought that a society which should make it its business to bring pure milk at a moderate price to the poor mother's door for her weaning babies would do better work towards the saving of infant life and the mother's strength and husband's rest than many of the fussy and philanthropic societies in existence.

But neither rich nor poor, and, we may add, not even their Medical attendants, are, in all cases, sufficiently careful to secure the best available milk. "How do you feed your baby?" asks the Doctor of a mother whose child is seriously ill with diarrhœa. "Oh, Sir, with milk, with so much water and sugar." Suppose the Doctor asks, "What milk?" the answer probably is, "Oh, what is brought round by the regular milkman;" in fact, a weaning child may be fed till it dies on milk which may be a little stale or indigestible, or which may have its finer nutritive qualities impaired, and every variety of farinaceous and other food may be tried in vain, whilst a perfectly pure milk, fresh from the cow, might have settled all the difficulty at once.

Not very long ago, a Medical friend was complaining that his baby of three months did not thrive, and that he had found a wonderful difference through getting milk fresh from the cow. We were favoured with specimens (1) of the milk from the regular milkman of the house, a respectable tradesman in the neighbourhood of Russell-square; and (2) of the milk from the cow procured from Mr. Rowe, of Coram-street.

	Sp. gr. at 60° F.	Cream per cent.	Sp. gr. of whey at 60°.
No. 1.	1022·5	6	1017·7
,, 2.	1033·1	5	1027·4

No. 1 was sold for 4d. per quart, and No. 2 for 5d., and on comparing the specific gravity of the two specimens, it will be seen that, if No. 1 were worth 4d., No. 2 was well worth 6d. But it is the clinical test—the fact that on one milk the child throve, while on the other it pined—which will arrest the attention of the Medical reader. If the difference in the two milks were one of quantity of ingredients only, two pints of No. 2 plus one of water, at a cost of 5d., would be equal to three pints of No. 1 at the cost of 6d. But who shall put a money value upon the peace and quietness which are the privileges of well-fed babies and those about them?

We may say in passing that, in order to satisfy ourselves that the difference in these two milks was not temporary or casual, we procured another sample of each a fortnight later. The result will be seen at Nos. 21 and 37 in the annexed table of analyses.

In order to form something like an estimate of the quality of the milk supplied to the West-end of London, we caused a number of specimens to be procured from various milk-sellers by a trusty person who was not likely to be suspected of any analytical craft; and here we arrange the results in classes in the order of merit, judged first by the specific gravity of the milk, checked by the quantity of cream, and lastly by the specific gravity of the whey. The specific gravities were most carefully taken by the 1000-grain bottle and balance at 60°. The cream was allowed to rise in a tube ten inches deep for twenty-four hours; the whey was formed by allowing the milk to stand some days in stoppered bottles till a spontaneous coagulation occurred. It was then filtered and weighed at 60°. This method is better than that of heating the milk and adding acids or rennet, which reagents act very differently on different samples of milk, and introduce sundry sources of error. The estimation of the cream is the most uncertain part of analyses of collected samples, because it is quite possible for the vendor to give more or less at will by dipping from the surface of the milkpan.

In some instances duplicate specimens were obtained on different days, and it is curious to see the similarity of character. Compare, for instance, Nos. 8 and 9, 23 and 25, 35 and 36. Of 40 samples purchased at various periods between November 20 and January 5 from all the leading dairies and many of the inferior ones of the districts given, the first list of 12 are unquestionably instances of genuine rich milk. Of these, 3 are conspicuously good, having above 10 per cent. of cream with a gravity of over 1030.

Class I.

Samples of Milk of sp. gr. above 1030, *with* 6 *per cent. or more of Cream.*

No.	When purchased.	Where purchased.	Sp. gr. of milk at 60°.	Cream, per cent.	Sp. gr. of whey.
1	Nov. 30, 1869	Welford, Warwick Farm Dairy	1032·6	18	1026·3
2	Nov. 20, 1869	Tunk and Tisdall, Holland-park Farm	1030·2	13	...
3	,,	Holland-park Dairy, 13, Newland-terrace, Kensington	1032·3	12	...
4	Nov. 24, 1869	Coomber, 56, Margaret-street	1032·1	9	...
5	,,	Smith, 11, Wells-street, Oxford-street	1030·5	8	...
6	,,	Reform Dairy Company, Orchard-street	1030·8	8	...
7	,,	Botting, 51, George-st., Portman-square	1030·7	6	...
8	Nov. 20, 1869	Walker, 25, Exeter-street, Sloane-street	1032·2	8	...
9	Dec. 4, 1869	Walker, Exeter-street	1032·3	11	...
10	Dec. 11, 1869	Scurry, Archer-street, Notting-hill ...	1032	8	1025·7
11	Dec 18, 1869	Hickman, 12, Chilworth-street	1032·8	8	1026·9
12	Jan. 5, 1870	Haslins, 20, Princes-street, Westminster	1032·8	6	1029·1

Class II.

Samples of Milk between 1025 *and* 1030, *with* 6 *per cent. of Cream or more.*

No.	When purchased.	Where purchased.	Sp. gr. of milk at 60°.	Cream, per cent.	Sp. gr. of whey.
13	Nov. 20, 1869	Dexter, 8, Motcombe-street ...	1027·3	6	...
14	„	Knight, High-street, Kensington ...	1029·2	6·5	...
15	Nov. 24, 1869	Harslett, 4, Duke-st., Grosvenor-square	1029	12	...
16	Nov. 29, 1869	Kirby, Bayswater-road	1028·5	10	1020·8
17	Nov. 30, 1869	Robbins, 79, Seymour-place	1028·2	6	...
18	„	Lewis, 25, New Church-st., Marylebone	1025·1	6	...
19	„	Baldwin, 5, Bridge-place, Kilburn ...	1029·3	9	...
20	Dec. 4, 1869	Kemp, Exeter-street	1025·3	8	...
21	Dec. 13, 1869	Rowe, Coram-street	1029·6	8	...
22	Jan. 5, 1870	Prince's Dairy, Montpellier-square	1027·5	8	1025·7

Class III.

Samples of sp. gr. above 1025, *but with less than* 6 *per cent. of Cream.*

No.	When purchased.	Where purchased.	Sp. gr. of milk, at 60°.	Cream, per cent.	Sp. gr. of whey.
23	Nov. 20, 1869	Wilcox, Exeter-street	1032·6	2·5	...
24	Nov. 29, 1869	Hale Farm Dairy, Notting-hill	1032·1	5·5	...
25	Dec. 4, 1869	Wilcox, Exeter-street	1031·2	5	...
26	Dec. 11, 1869	Lunn, 3, Church-street, Kensington ...	1028·3	5·5	1024·6
27	„	Watson, Russell-gardens	1027·9	5·5	1023·3
28	„	Aylesbury Express Company, St. Mark's-terrace, Notting-hill	1028	5·5	1021·5
29	„	Aylesbury Dairy Company, 33, Hereford-rd., Westbourne-gro.	1028·5	5·5	1024·6
30	Dec. 18, 1869	Smith, 9, St. Leonard's-gardens ...	1027	5	1023·8
31	Jan. 5, 1870	Pierson, Down-street, Piccadilly ...	1032·5	2·5	1026·6
32	„	Wilson, Whitcombe-st., Golden-square	1027·9	5·5	1024·5

Class IV.

Samples of sp. gr. below 1025.

No.	When purchased.	Where purchased.	Sp. gr. of milk, at 60°.	Cream, per cent.	Sp. gr. of whey.
33	Nov. 30, 1869	Ariss, Shouldham-st., Bryanstone-sq.	1024·6	4	...
34	„	Crofts, Kilburn-park-road	1024·5	8	1020
35	„	James, 2, Bristol-gardens	1024·7	6	...
36	Dec. 11, 1869	James, 2, Bristol-gardens...	1024·7	5	1020·2
37	Dec. 13, 1869	Near Russell-square	1022·9	5	1019·5
38	Dec. 18, 1869	Ivall, 11, Cellbridge-place, Paddington	1020·2	4	1017·1
39	Jan. 5, 1870	Brisco, 2, Parkside, Knightsbridge ...	1024·6	6·5	1022·3

Out of the above list, we believe that the following keep their own cows in lairs near to their places of business:—Messrs. Walker, Tunk and Tisdall, of Holland Park Farm, Coomber, Smith, of Wells-street, Botting, Welford, of Warwick Farm, Maida-hill, Walker, Hickman, Harslett, Robbins, and Dexter; whilst the others have the milk brought up from the country. We have shown that this is not a mere difference of quantity, but of *qualities* that are keenly appreciated by the delicate mucous membrane of a child's stomach, which depend on the freshness of the milk and its treatment. The average of these ten dairies supplied with London milk is 10 per cent. of cream, with a specific gravity of 1031. The highest ten cases where country milk was sold allow an average of 6½ per cent. of cream and sp. gr. of 1030. The whole of these milks are probably genuine, but in quality and richness of cream the town-produced article is much superior to its country rival. Scientific men have long been aware of this, as the discussion at the Society of Arts proved. Mr. Chalmers Morton, in a paper read before that Society, said—"Suppose that absolute honesty were (as I believe the percentage of honesty on the great scale to be) a pretty constant quantity and generally prevalent, how, then, about country milk as compared with that of the London cow-house? Why, even then I believe the latter is likely to be the better of the two. 1st. It is more the interest of the cowkeeper here to feed his stock well than it would be the interest of the cowkeeper there. 2nd. Milk brought fifty miles, as very much now is, to London must be at least twelve hours old before it reaches the consumer; that from the London cow-house is barely four hours old. 3rd. The shaking of the milk along the course of fifty miles of railway, and the rattling over the roads to and from the stations, is certain, in a proportion of instances, to injure the milk, in other cases utterly to spoil it—in all, I may say, so far to injure it that it will not keep so long, nor be so useful for certain purposes. It cannot be doubted that, with the feeding which it is the interest of the cowkeeper to adopt in town, the quality of the milk must be first-rate, and analysis has often proved it so. I have no doubt that the milk yielded by a London cow is better than that which the same cow would produce under ordinary Gloucestershire or Cheshire management." Dr. Voelcker, in the discussion which followed the above paper, said "there was one remark which fell from Mr. Morton which he could thoroughly endorse—viz., that London milk, when undiluted, was better than country milk, and especially richer in butter. He ascribed this to the fact that London cowkeepers, for the most part, fed their animals with better food, especially rich in fatty matters." Dr. Whitmore said "he had inquired closely into the subject, and had not, upon the whole, found that London milk was inferior to country milk as regards its nutritive constituents, but he was induced, as the result of his investigations, to come to an opposite conclusion. As a rule, London milk contained a larger proportion of cream, more caseine, or cheesy matter, and more sugar than country milk."

For healthy children more than a year and a half old, for the tea of adults, for puddings and pastry, it cannot matter much whether the milk be fresh, unmixed, and unimpoverished or not. On this point we beg to quote from a common-sense report presented in 1865 to the Vestry of St. George's, Hanover-square, by the Medical Officers of Health. After describing the disuse of some of the cowsheds in the parish consequent on the cattle plague, they say:—

"The number of cows in the parish at present is only about 100. Cowkeepers, nevertheless, would add to their stock if they dared, because town milk fetches so high a price.

"The question of town dairies is like that of town slaughter-houses. Can the milk be brought in a sweet state from the country? At present, this question cannot be considered satisfactorily settled. When milk is brought a distance of fifty to one hundred miles, that which is delivered to the consumer about three or four in the afternoon has been milked early in the morning, eight, ten, or twelve hours before delivery, whilst that which is delivered early in the morning was milked on the previous afternoon, probably fourteen to sixteen hours before consumption. This milk may taste sweet when cold, but is apt to curdle when boiled.

"For our own parts, looking at the safety of young children during hot weather, we can but hope that a sufficient number of cows will be maintained for the present in town to give them milk sweet, newly milked, and that has not been much shaken. Spite of the outcry against London cowsheds, and the fact that some may have been kept unwholesomely, there is no doubt but that, on the whole, they contained better cows, better fed and better cared for, which gave better milk during the nine winter months, than any like number of cows elsewhere. By all means let them be removed from streets and mews; but it is clear that they ought, during hot weather, to be within easy distance of the children, for whom their milk is most essential."

We beg to re-echo these remarks. Do not keep cows in numbers in situations where they would be prejudicial to the neighbouring population; but let a good number be kept in the outskirts, and a few here and there in the more open parts of the City. The sagacious Medical Practitioner will bear us out in saying that wherever children are to be reared, there should be a cow within reach. If the place is too close for the cows, it is not fit for the children.

The papers announce the death of Catherine Cooper, widow of the late Sir Astley Cooper, in her 83rd year.

FRESH MEAT PRESERVATION.

Without doubt the due supply of food necessary for our teeming population is becoming every day a more and more serious matter. We are becoming more alive to the necessity of preventing disease, as contradistinguished from curing it, and there is no more important means of securing health than a sufficient supply of wholesome food; for this indeed may, with fresh air and pure water, be said to constitute the tripod of healthy existence. Those who are familiar with the out-patient practice of our large metropolitan Hospitals well know how many forms of disease owe either their existence or their intensity to *insufficient* food, whilst *improper* food lies at the foundation of at least as many more, having at their head what used to be the scourge of our army and navy, the dreaded sea-scurvy. But whilst meat is scarce and dear with us, it is plentiful in other parts. In Australia it is said to be not uncommon for the squatter to kill two or three sheep merely for a supply of kidneys for breakfast, whilst in the American continent oxen are at least equally plentiful. The difficulty is to make their excess supply our deficiency. No doubt salt meat is better than no meat at all; but not even salted beef and mutton can be obtained from Australia and America, for, with the high temperature there prevalent, the meat is spoiled before it is sufficiently salted; and even in cooler weather the meat preserved by salting cannot be depended on, and consequently cannot be disposed of to advantage. But meat can be preserved either with a very high or a very low temperature. Thus, it may be dried in the sun and so kept for a long time, or it may be kept in ice, as in the well-known instance of the Siberian Mammoth. The latter process is not, of course, available for warm climates, but the former is, and an attempt was made to introduce beef so prepared (charqui) from South America into the English market. One or two cargoes came over and met with a ready sale, and the commodity was rising in public favour, when the speculators on the other side of the water killed their goose which laid the golden eggs: a cargo of imperfectly prepared meat was sent over, rapidly diffused over the country, but only in a half-decomposed condition, in a short time rendering the shops of those who had purchased the stuff unbearable, and charqui was doomed in England.

The introduction of Liebig's process of obtaining an extract of meat was no doubt a great step, as it affords the means of importing the flavouring principle of meat in a highly concentrated state; but it is not the meat itself. A man could not do his work for any length of time on extract of meat alone; its true function is to give flavour to a flavourless mass of nutritive material. Thus the meat now imported from Australia preserved in tins is, no doubt, nutritive to a certain extent, but it is markedly deficient in a true meat flavour; still by the two together something like a palatable as well as a nutritious mess can be prepared.

Still, something more is a desideratum. We want the meat imported in bulk—in short, in such a form as we obtain now-a-days the greater part of our beef from Scotland—and we want a process whereby, without interfering with their flavour or nutritive quality, legs of mutton and quarters of beef can be brought from the antipodes to our doors. Many attempts at this have been made. All sorts of agents have been employed to arrest decomposition and prevent degradation changes. Some have partially succeeded, the majority have failed. But it has been those which have *partially* succeeded which have been most ruinous. Squatters have invested in expensive plant, have embarked much capital in sending out meat supposed to be preserved, but only to find it thrown back on their hands spoiled, to sell it at a ruinous loss. This, of course, could not go on, and most large cattle owners had come to look on any new scheme for the preservation of meat as a snare. Among the various agents employed by would-be meat preservers none have obtained so much favour as sulphurous acid and the sulphites. One process which was thought perfect was to cure the meat in the usual way, and before closing to introduce a small quantity of bisulphite of soda to absorb any oxygen which might be left behind; but this, too, failed. Dr. Dewar, of Kirkealdy, obtained some very fair results, especially with fish, by means of sulphurous acid; but in certain respects this agent by itself failed. Sulphurous acid is nothing if it is not a reducing agent, and the colouring matter of blood and flesh is especially liable to be attacked by it.

The latest and, as matters still go, the most successful attempts yet made in the way of fresh meat preservation have been made by Mr. John Gamgee, whose ill-rewarded exertions and unheeded warnings in relation to the cattle plague are a standing monument of English administrative incapability and national ingratitude. When ardently urging on Government the necessity of adopting the plan of extermination, ultimately adopted with success as far as regarded all cattle exposed to infection, Mr. Gamgee was struck with the importance of being able to transmit meat in a sound and saleable condition from considerable distances. He also was attracted by sulphurous acid, but, knowing the obstacle in the way, he sought for something which would prevent the decoloration of the meat. This something was supplied by his brother Dr. Arthur Gamgee's researches into the chemistry of blood. He, as others have done, found that carbonic oxide had a powerful affinity for the red colouring matter, or, perhaps, we might say the cruorin (Stokes) of the living red blood corpuscles. This substance it attacked, became combined with it chemically, constituting a definite compound characterised by an exceedingly bright red colour. Indeed, it is in this way that carbonic oxide when inhaled seems to kill; it attacks the red corpuscles, combines with them, prevents them either taking up or giving out oxygen; systemic respiration is thus prevented, and death ensues. On these facts, on the peculiar influence of carbonic oxide, and on the preservative effects of sulphurous acid, Mr. Gamgee founds his process. This process he has passed over to America to propagate, and has succeeded in convincing the United States army and agricultural authorities of its efficacy, and he is now actively engaged in King-street, Hackney-road, by means of an apparatus he has erected there, in inculcating the same on all Australian squatters he can lay hands on.

We shall try to explain Mr. Gamgee's process as briefly as possible. It is essential for it that the animals should be obtained in a live state; their noses are covered with a kind of bag, and they are thus made to inhale carbonic oxide. The carbonic oxide is prepared from oxalic acid by acting on it with sulphuric acid, the carbonic acid being, we suppose, absorbed by lime or potass. A few whiffs of carbonic oxide, and the animal falls to the ground; it is then bled and dressed in the usual manner. In the working apparatus set up by Mr. Gamgee there is a provision for causing the flesh *to set* in warm climates. This, of course, is not necessary here; still it forms part of the arrangement. The roof of the chamber into which the dead meat is placed is covered by a tank containing brine, which is made to circulate over it by means of a pump and tubes passing from the refrigerator to the tank and back again. The meat, having been hardened and cut up, is next placed in an airtight compartment, and the doors closed; from this the air is next pumped at one point, new air being introduced at another; but the air thus introduced has passed through redhot charcoal, so that the oxygen is converted entirely into carbonic oxide and carbonic acid. By this means the whole of the oxygen is removed from the chamber, its place being taken by the two gases above named, and nitrogen, the remaining constituent of the decomposed air. When this has been fairly done, the meat is ready for the admission of the sulphurous acid. Before finally closing the doors of the chamber a wooden box had been introduced, to the lid of which a leathern thong passing through an air-tight orifice in the wall had been attached. By means of this the lid is pulled off the box and its contents exposed, these contents being charcoal saturated with sulphurous acid; the acid having been prepared in the ordinary way by the action of charcoal on oil of vitriol. Gradually this gas is given off, and gradually by a process of diffusion penetrates the meat; at the same time a portion of the water of the meat is given off, and is absorbed by the sulphuric acid which by this time has formed in the charcoal. In these chambers the meat hangs for from five to twenty days, according to the size and thickness of the joints; at the end of that time these may be removed, slightly darker than when introduced, slightly lighter owing to desiccation; but sweet as when killed, and not only so, but capable, as has been proved, of remaining so for three months longer.

Two things are necessary in fresh meat preservation—first, that the taste of the meat shall be unchanged. That this is so in Mr. Gamgee's process is proved in various ways; perhaps there is none more telling to our readers than the fact that every particle Mr. Gamgee can prepare meets with a ready sale in Smithfield Dead Meat Market, where it is exposed for sale in the shop of a dealer (Bonser) whose name is responsible for first-class meat, and first-class meat only. The second desideratum is that the meat shall keep long enough to enable it to be transmitted from the place where it is reared to the place where it is to be consumed. It has been distinctly shown that by this process meat can, at certain seasons of the year, be preserved for three months, and stand a considerable sea voyage. Here we put the matter on the lowest grounds, but even these are enough. The most distant country to which we can look for a supply of fresh meat is Australia. Now crack ships make the voyage home in little more than sixty, say seventy days, leaving a sufficiently broad margin for transmission abroad and distribution at home. Processes for preserving meat, supposed to be infallible, have failed before this, and Mr. Gamgee's may fail too, though we hope not. In the meantime he has undoubtedly made a step in advance. Let us hope he will be the means of bringing meat down to twopence and threepence a pound. If he can do so, he is to be congratulated in more ways than one. It has long been said, among men familiar with such matters, that he who should introduce a successful process of preserving meat, would thereby infallibly make his fortune. We trust it may be so with Mr. Gamgee; his energy and perseverance amply deserve it.

THE

COMMON LAW OF ENGLAND IN RELATION TO CONTAGIOUS DISEASES.

There is still extant an original writ, probably coeval with the foundation of the English monarchy, and styled the writ "De leproso amovendo." The neighbour or neighbours of any man being "a *lazar* or a leper, dwelling in any town, and who will come into the church, or amongst his neighbours, where they are assembled, to talk with them, to their annoyance and disturbance, may sue forth this writ to remove him from their company." (See Sir Matthew Hale's commentary on Fitzherbert's "Natura Brevium," p. 234.)

The writ is addressed by the king to the sheriff, etc., or to the sheriffs and mayor of London, and, after reciting that such person "refuses to remove himself to a solitary place, as the custom is, and as he ought to do, to the great damage and manifest peril of the men aforesaid, by reason of the *contagion* of the disease aforesaid," commands that he should be "diligently examined in the presence of certain discreet and lawful men of the city aforesaid, who have the best knowledge of such disease, and, if they find him to be a leper, that, without delay, he should be carried away and removed to a solitary place, to dwell there," etc.

"There are," continues Sir Matthew Hale, "divers kinds of lepers; but it seemeth that the writ is for those lepers who appear to the sight of all men that they are lepers by their voice, and their *sores*, and the *putrefaction* of their *flesh*, and by the smell of them. But those who are infected with that disease in their bodies, where it doth not appear outwardly upon their bodies, *quære* whether such writ lieth to remove." (*Ibid.*, p. 234.)

Sir Matthew Hale further says, in more than one place, that this writ applies to "lazars" as well as to lepers, and, indeed, he evidently considers that the writ is only applicable to a peculiar description of lepers—viz., those who have open and putrefying sores, and who will not "keep within house."

"Lazar," says Dr. Johnson, is derived "from Lazarus in the Gospel." Now, we do not read that Lazarus was a leper, but simply that he was "covered with sores," and the meaning which Johnson attaches to the word is "one deformed and nauseous with filthy and pestilential diseases." Indeed, the leprosy or "mala scabies" is scarcely the disease against which this writ was directed, but rather, according to our former quotation, against that form of disease, no matter what its name or nature, presenting putrefying and offensive sores of a contagious character, as described in the writ itself. Chaucer uses the term "lazar" as synonymous with "begere," such as, in fact, was Lazarus of old.

By an old Scotch statute (James II., part 13, cap. 57, A.D. 1457) certain rules are prescribed with respect to shutting up infected persons in their houses, or assigning them some place without the town to reside, and providing for the support of those who "had no gudes to find themself." Many English statutes have also been passed upon this subject, one of which —viz., 2 James I., cap. 31, referring to the plague, enacts that all infected persons "wilfully going abroad, having any infectious sore upon them uncured, shall suffer death as felons. But if such persons shall not have any such sore found about them, then they shall be punished as vagrants." This stringent enactment was confined to those infected with the plague, and was doubtless at the time a necessary piece of legislation. The milder proceeding under the original writ was, nevertheless, still applicable as of old.

The carrying a child infected with the small-pox along a public way near dwelling-houses is a serious misdemeanour at common law, irrespective of any statute. In *R. v.* Vantandillio, 4 Maule and Selwyn, p. 73, Mr. Justice Le Blanc, in passing sentence, said, "There can be no doubt that if a person unlawfully, injuriously, and with full knowledge of the fact, exposes in a public highway a person infected with a contagious disorder, it is a common nuisance to all the subjects and indictable as such." Numerous statutes have been passed since the Act of James I. incorporating its regulations into the quarantine laws, the principal of which are 9 Anne, c. 2, and 6 Geo. IV. c. 78, but no further attempt has been made to embody in statutory legislation the principle enunciated in the old common law writ till the enactment of the Contagious Diseases, Diseases Prevention, and Sanitary Acts of the present day. It is scarcely necessary to refer to the provisions of those Acts, as they must be familiar to every Medical Practitioner, but the application of the principle involved in the first of them is so limited, both in respect to places and classes of individuals, that the public generally is little affected by it. The latter Acts are doubtless of more general application. Indeed, legislation on infectious diseases has always been more easy, and apparently more practical, than on those which are merely contagious. This may probably be accounted for by the fact that, generally speaking, an ordinarily cautious person may avoid contagion, but no amount of care and circumspection can escape that "pestilence that walketh in darkness," and which taints and infects the very atmosphere, the common property of all. Here legislation alone can step in, and, by a peremptory process, order removals of infected persons, cleansing and purification of localities, and even destruction of contaminated property. Some very stringent provisions are, however, contained in the last Contagious Diseases Act, which might possibly be extended in their application with advantage—as, for instance, the 4th section of the amended Act, repealing the 15th section of the original Act, extends the power of summoning before a justice women believed to be common prostitutes, "whether resident within the limits of any place to which the Act applies, or resident within ten miles of those limits, or having no settled place of abode, who have, within fourteen days from the date of the information, either been within those limits for the purpose of prostitution, or outside of those limits for the purpose of prostitution in the company of men resident within those limits." Such summary jurisdiction, though exceptional, is no new thing. The Universities of Oxford and Cambridge have always been invested with very extensive powers in this respect, not only for the protection of the morals of their *alumni*, but also out of regard to their bodily health. Thus, if a woman is taken into custody for having infringed the University rules, either by harbouring gownsmen or by parading the streets after certain hours for the purpose of prostitution, she is subjected to a Medical examination, and, if found diseased, is detained in custody until cured. If, then, the moral and physical health of our academic youth and of our soldiers and sailors be deemed a fit subject for legislation, might it not be a matter of further consideration whether the general public should not participate in the like advantages? But so partial is legislation as yet on this subject, that the meaning of the term "contagious disease," as used in the Act, is limited to the "venereal disease, including gonorrhœa."

The framers of the original writ before referred to were not so scrupulous. Both sexes were included within its ban, and, though specially directed against a particular species of leprosy, it also embraced within its prohibition all "lazars," or those afflicted with putrefying and offensive sores.

Even though an act be not unlawful in itself, as, for instance (previous to the Vaccination Act, 1867), inoculating for the small-pox, the act may become unlawful if likely to affect the health of others. In Rex *v.* Burnett, 4 Maule and Selwyn, p. 272, Lord Ellenborough so lays it down, and adds: "Though

inoculation for the small-pox may be practised lawfully and innocently, yet it must be under such guards as not to endanger the public health by communicating the infectious disease." And Mr. Justice Le Blanc, in the same case, said "that the introduction of vaccination did not render the practice of inoculation for the small-pox unlawful, but that in all times it was unlawful and an indictable offence to expose persons infected with contagious disorders, and therefore liable to communicate them to the public in a place of public resort."

But now, although by the Sanitary Act, 1866, any person suffering from any dangerous infectious disorder who wilfully exposes himself, without proper precaution against spreading the disorder, in any street, public place, or public conveyance, and any person in charge of such sufferer who so exposes him, and any driver or owner of a public conveyance who does not immediately provide for the disinfection of his conveyance after it has with his knowledge conveyed any such sufferer, and any person who without previous disinfection gives, lends, sells, transmits, or exposes any bedding, clothing, rags, or other things, which have been exposed to infection from such disorders, shall be liable to a penalty of £5, yet there is no corresponding prohibition with respect to contagious diseases, unless indeed the term "contagion" be included in the word "infection"—the real import of a word being not necessarily deduced merely from its etymology and limited thereby, but, according to some philologists, is to be adhered to in the sense affixed to it by established custom; and, indeed, probably in every case of *infection*, there is an actual contact of morbific matter, whether visible or not, and in some diseases, as the small-pox, there is a communication both by palpable matter and by imperceptible effluvia. We do not think, however, that the Legislature intended to use the word "infectious" in its most comprehensive sense, or it would not have legislated separately for "contagious diseases," and have applied a very limited definition to that phrase, though doubtless the small-pox, as being both infectious as well as palpably contagious, comes clearly within the scope of the Act. We may here add, in conclusion, that although, previous to the passing of the Vaccination Act of 1867 (30 and 31 Vict., c. 84), it was no offence to inoculate for the small-pox, now, by the 32nd section of the above statute, the production of the disease of small-pox by inoculation, or by *any means whatsoever*, is made an offence punishable with one month's imprisonment.

As a part of compulsory legislation on this subject we may instance the further provision made by the Sanitary Act of 1866 for the cleansing and disinfecting of any house, or part thereof, and of any articles therein likely to retain infection, whenever, in the opinion of the nuisance authority, such cleansing, etc., would tend to prevent or check infectious or contagious disease (s. 22). Also the power conferred by the same Act upon any justice, with the consent of the superintending body of any Hospital or place provided for the reception of the sick within the district of a nuisance authority, to direct the removal to such Hospital, etc., of any person suffering from any dangerous, contagious, or infectious disorder, being without proper lodging or accommodation, or lodged in a room occupied by more than one family (s. 26). Thus the tendency of legislation appears to be towards a more general police and State interference and direction than has hitherto prevailed respecting the public health. And, indeed, this latter section would appear to authorise the removal to the Lock Hospital, with the consent and under the conditions therein mentioned, of a person suffering from the open, infectious, or at least contagious putrefying sores of syphilis. We do not say that such was the intention of the Act. Perhaps the sooner such an intention is unmistakably expressed, the better.

The Vaccination Act, before referred to, seems for the present to terminate the legislation on the subject of the public health.

W.

CANQUOIN'S PASTE.—At a meeting of the Therapeutical Society M. Mayet described a new formula for his celebrated caustic, which he had contrived after much investigation. In the new form it retains its consistence for any time, and admits of application in any mode desired. It is as follows:—Chloride of zinc, 8 parts; oxide of zinc, 1; flour, dried at 100° C., 7; and cold water, 1. Mix the oxide of zinc and the flour, dissolve the chloride of zinc in the water, and having added the flour and oxide, rub in a mortar for ten minutes. The paste so prepared in a few hours acquires the requisite consistence, which it henceforth always retains. It may be preserved in a box covered with a layer of starch, but a stoppered bottle is preferable.—*Gazette Médicale*, January 8.

REPORT ON THE TEACHING OF THE OUT-PATIENT DEPARTMENTS OF THE LONDON HOSPITALS.

Guy's Hospital.

1. The general Medical and Surgical out-patient practice at this Hospital is in the hands of three Assistant-Physicians (Drs. Pavy, Moxon, and Fagge) and three Assistant-Surgeons (Messrs. Cooper Forster, Bryant, and Durham).

2. Out-patient Medical cases are seen on three days in the week only, so that each Assistant-Physician attends on one day in the week. Surgical cases are seen on four days in the week. One of the Assistant-Surgeons (Mr. Bryant) attends on two days in the week, the others on one day only. The visits of the Assistant-Physicians and Surgeons commence at 12.30, and last from three hours to three hours and a half. The visits of the Assistant-Surgeons, except in one case, do not last so long.

3. Specialities are well and fully represented at Guy's.

(*a*) Ophthalmic cases are seen twice a week by Mr. Bader—viz., on Tuesdays and Fridays, at 1. This visit lasts a considerable time, and is largely attended both by patients and students, and by many qualified Practitioners. Ophthalmic operations are frequently performed, and demonstrations with the ophthalmoscope given. For the latter purpose a large and convenient dark room is provided close to the consulting room.

(*b*) Cutaneous diseases are seen once a week by Dr. Hilton Fagge—on Tuesdays, at 12·30. As many as a hundred cases are often attended to during one visit, which frequently lasts between three and four hours. This clinique is also well attended by the students, as many as twenty or thirty being present in the course of the afternoon.

(*c*) The department of Aural Surgery is under the superintendence of Mr. Hinton, who attends on Tuesdays and Fridays at 1.30. There are generally a considerable number of patients to be seen, and the visit not uncommonly extends to half-past three or four o'clock. This department is popular rather with Medical men in practice than with students, whose time, it must be admitted, is tolerably well absorbed by other work.

(*d*) Diseases of women are seen twice a week by Dr. Phillips on Thursdays and Saturdays at 12.30. From 80 to 100 patients are seen in this department on Thursdays; on Saturdays not so many.

(*e*) Cases of Dental Surgery are seen once a week by Mr. Salter—Thursdays at 12.30.

(*f*) Mr. Durham gives demonstrations on laryngoscopy and rhinoscopy as occasions arise.

4. The number of cases seen daily by the Assistant-Physicians and Assistant-Surgeons is limited in accordance with an admirable method of admitting patients, which merits general imitation.

The cases seeking Medical relief are admitted into a very large waiting-room, and the clerks of the Physician of the day examine all the applicants, and distribute amongst them, according to the nature of their cases, fifty letters entitling them to Medical attendance. Twenty of these letters go to the Assistant-Physician; they are available for two months, and are especially given to cases which present some point of clinical interest. The remaining thirty letters go to the Junior House-Physician, who sits in a room adjoining that occupied by the Assistant-Physician; these letters entitle the applicant to two weeks' attendance only. Should any of these latter cases prove to be of especial or permanent interest, they are provided on another day with a letter for the Assistant-Physician, and so are made available for teaching purposes. Much the same method is adopted on the Surgical side, except that the Surgical cases are more freely dealt with by the dressers, who only refer to the Surgeon of the day the graver cases and those in which he is known to take especial interest. The Surgeons also reserve to themselves the distribution of their own letters, so that practically they select their own cases. We must not omit to state that the clerks and dressers are invariably selected from amongst the senior students. From this arrangement it follows that only twenty new cases are seen by each out-patient Physician at each visit, and these are often selected out of two or three hundred applicants. The Surgeon, on the other hand, often sees from thirty to forty or more fresh cases at each visit. In addition to the new cases, from sixty to eighty old cases are also seen. Cases sent with a note or card from a Medical man are always readily admitted to see the Physician or Surgeon in attendance.

5. The number of students attending the out-patient practice is very considerable, and it is worthy of remark that the majority of these are *senior* men. As many of them as can find places *sit* in a circle round the Physician or Surgeon, and, as the patients are admitted one by one, every case can be thoroughly understood by each student. At many of our Hospitals the students are compelled to stand during the whole of the out-patient visit—a most effectual means of limiting their attendance.

6. As to the amount of assistance afforded to the out-patient Physicians and Surgeons in seeing their patients, we have already observed that it is the duty of the Junior House-Physician to sit on the Medical days in a room adjoining that occupied by the Physician, and see such cases as are allotted to him. Each Assistant-Physician has also two clerks, and each Assistant-Surgeon four dressers (Mr. Bryant, who attends *twice* a week, has *eight*), who assist them at their discretion. For example, one of the clerks will go into the inner waiting-room, into which the patients, having letters for the Assistant-Physician, are admitted, and will at once dismiss such cases as need simply a repetition of medicines, and thus the valuable time of the principal Medical officer is further economised.

7. With regard to the nature of the cases seen in the out-patient department, and their usefulness for teaching purposes, it is obvious that when so much pains are taken to select suitable cases for treatment as we have described above, the out-patients at this Hospital must afford very unusual advantages for clinical instruction. The cases for the most part present some character of decided interest, and the time of the Medical officer and of the students is not wasted by seeing case after case of dyspepsia, or chronic catarrh, or chronic rheumatism follow one another in wearisome succession, as at many other schools. Almost every possible kind of case, Medical and Surgical, is presented in the course of a year among the out-patients at Guy's, while a very large number of speciality cases are seen in connexion with this department.

8. As to the amount and kind of teaching attempted in the out-patient department of this Hospital, we have to observe that it appears to be not quite so systematic as it might with advantage be made. One of the Assistant-Surgeons has, however, attempted, and with success, to classify and group the cases of Surgical disease which occur in his out-patient practice. This he does by giving tickets of a certain colour to all those who are suffering from the same kind of disease. Diseases of bone, for example, will all have *green* tickets, tumours of the breast *pink*, diseases of joints *blue* tickets, and so on. Tickets of the same colour are admitted together or consecutively, and in this way valuable observations can be made of the same disease in its different stages of progress and treatment. Some of the assistant Medical staff are, we understand, about to introduce a somewhat similar system into their out-patient practice.

Of one thing there can be no manner of doubt—viz., that most excellent clinical teaching is done in the out-patient rooms of Guy's Hospital, and its success is very certainly evidenced by the increasingly large attendance of the students, and especially of the senior ones.

A most excellent practice is adopted at this Hospital of confiding to each of the Assistant-Physicians the care of fifty beds in the wards of the Hospital for three months in every year.

With regard to the apartments provided for the accommodation of the out-patients they are in every respect suitable and convenient. There are several waiting-rooms well warmed and ventilated, and excellent order is maintained in them. The consulting-rooms are large and commodious and quiet, and in connexion with each there is a small room for private examinations.

Auckland, New Zealand.—The October monthly meeting of the Medical Society was held at the Museum, Dr. Stratford in the chair. Dr. Wright related a case in which a man had been bitten by a katipo, or poisonous spider of New Zealand. Soon after the bite the patient suffered from stiffness of the jaw, rendering him almost unable to articulate. He subsequently exhibited all the symptoms of suffering from a narcotic and irritant poison, and it was some time before he recovered. The author also cited three cases which had come under the care of the Rev. J. Chapman, one of which was fatal. The author considered that the poison of the katipo was similar (in its effects certainly) to that of the tarantula. It was stated that Dr. Philson had tied successfully the external iliac artery, that being the first time the operation had been performed in the province of Auckland.

GENERAL CORRESPONDENCE.

ON THE WORKING OF LAWS AGAINST SYPHILIS IN PARIS.

Letter from Mr. W. Acton.

[To the Editor of the Medical Times and Gazette.]

Sir,—We must all feel much indebted to your Paris Surgical correspondent for his article on the practical working of the laws against syphilis in Paris. The public and the Profession in England are both interested in discovering whether the French plan can be adapted to this metropolis, and, with the view of facilitating the discovery of the true answer to this question, I desire to make a few remarks on Professor Léon Lefort's suggestions.

When I was a student in Paris, I, like him, believed in the advantages of brothels. As the Professor justly observes, disease is less rife among the inmates of these establishments, and the police have a power over the women that cannot be exercised under any other system.

Having said this, however, all has been stated that can be advanced in favour of such houses. I have so recently pointed out the objections to tolerated brothels in London, particularly if modelled on the French system, that I will not now repeat my objections to them. I may, however, remind your readers that a brothel (proper) is a house almost unknown in London, the police returns only giving two for the whole metropolis, thus showing that the institution is alien to English feelings. In any future legislation, therefore, society must consider how we are to deal with clandestine prostitutes—that is, girls living in their own lodgings—as no one desires to introduce the French system or allow man or woman to profit by the prostitution of another. A further fundamental difference between the present system in France and that which I desire to see introduced into England is that, whereas in France it is the object of the police to register and confine in a brothel every woman gaining her livelihood by prostitution, all that is proposed for England is to give authority to Medical men by the Contagious Diseases Act to examine periodically all women who are known to be common prostitutes, and, if they find that they are diseased, to confine them in Hospital as long as they are capable of communicating venereal complaints to those who may have relations with them. This interference with the liberty of the subject in England seems necessary, not only for the prevention of disease in the soldier or civilian, but even for the sake of the woman herself, who will in a few years give up a life of profligacy, and gain her livelihood by some other means.

The English plan will not use up the prostitute, as must necessarily be the case if she enters a brothel; for, as I have shown elsewhere, girls once inmates of these dens of iniquity in Paris gradually descend from a higher to a lower grade of house, until they are useless for even the vilest of them. Under the foreign system there is no hope for the amelioration of the prostitute. We in England profess to believe that we can assist the girl in redeeming her position at the same time that we do so on purely sanitary grounds, without legalising vice. There are other distinctions between the present French system and the proposed English regulation, but I will not trouble your readers here with them, as they have not been alluded to by your Paris correspondent; and I should not even have referred to the above distinctions did I not feel that, in the present temper of public opinion, the motives actuating our Continental friends will be taken advantage of, and those who advocate the introduction of the Contagious Diseases Act among the civil population will be accused of wishing to introduce the French system into this country—a system which, as far as I know, no one has yet thought of, for the simple reason that we think it a very bad one and not adapted to the wants of the day.

I am, &c. William Acton.

17, Queen Anne-street, Cavendish-square.

ANALYSIS OF STEDMAN'S POWDERS.

Letter from Dr. Thomas Stevenson.

To the Editor of the Medical Times and Gazette.

Sir,—I recently made an analysis of "Stedman's Teething Powders." It may be of service to compare my analysis with that which you publish to-day. I found the powders to consist of calomel, cane sugar, and morphia. Your analyst found no morphia, but its presence may be readily detected thus:—

whom all hard bodily labour devolves, and who have no other resource but the work of their hands to depend on, and to whom loss of health is tantamount to starvation,—why should they, I maintain, be worse treated than the rest of society, who have no other recommendation in their favour than that they are better off, and in times of sickness can better afford to lie by?

Though, in political respects, England is far in advance of other countries, among which she stands pre-eminent as a commercial and industrial country, she is decidedly behind her continental neighbours in her internal administration, or, in other words, in the regulation of those intrinsic social relations by which the welfare and happiness of the individual are promoted. This deficiency arises as much from the excessive respect paid to the liberty of the subject as from the tedious nature of parliamentary inquiry, which together with the inherent conservative tendency which forms so distinctive a feature of the English character, is the cause that while measures of home and foreign policy are passed through the House, and local legislation improved, questions of vast social importance do not receive the attention to which they are entitled, and consequently fail to pass into law.

We are all aware of the difficulties against which the Medical Council have had to contend, and how successfully, in spite of the many obstacles thrown in their way, they have succeeded in grappling with the intricate questions brought under their notice. Much, however, remains to be done, and let us hope that at no distant period the relation between the Faculty and the public, especially as regards the scale of remuneration demanded by the former, may receive their earnest attention, as well as the dispassionate discussion it so fully deserves.

I am, &c.

F. E. Jencken, M.D., M.R.C.P., M.R.C.S.

Kingstown, December 13.

REPORTS OF SOCIETIES.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, December 18.

Dr. Druitt, President, in the Chair.

Mr. G. Fraser exhibited the plan of a disinfecting apparatus, consisting of a wrought-iron truck and oven. The infected articles were to be placed in the carriage at the door of the sick house. This carriage would be wheeled thence into the oven, where it and its contents are subjected to the action of heat without being taken out of the carriage. The furnace was so contrived that the noxious vapours arising might be conveyed into the furnace and consumed instead of being given off into the air. The goods after disinfection could be wheeled back without being unpacked.

Dr. Letheby made some searching criticisms upon its construction, and was not convinced that an adequate amount of heat would reach things in the interior of the truck.

It was agreed that Mr. Liddle and Dr. Woodford should inspect the working of the apparatus and report upon it.

Mr. Wm. Acton then read a paper on the question, "Supposing the Legislature should determine to recommend the Introduction of the Contagious Diseases Act among the Civil Population, would it be possible and feasible to carry out its Enactments in the Metropolis?" He stated that, as the Parmentary Commission appointed to inquire into the introduction of the Contagious Diseases Act at military and naval stations had reported favourably of the working of the measure, both in a moral and sanitary point of view, and had suggested an inquiry whether the Act could not be applied to the civil population, it was more than probable that some such proposal would come before Parliament in the next session. It was these circumstances that led him to draw up, in the form of a paper, the ideas and views he had worked out during a number of years in connexion with this subject. The matter, he said, was a most important one. The evil was one of old standing, as was fully testified by ancient history, sacred and profane. Various methods had been adopted to remedy the evil. For instance, the city of Berlin had three times since the Reformation purged the city of prostitutes, but the old evil soon raised its head again, until at length it was determined to endeavour to mitigate an evil which they could not repress. Since, then, the experience of all times shows that prostitution must always exist, the State has a right to insist that the women who practise it shall not propagate disease, and to take such measures as shall confine the evil within as narrow limits as possible. The principle of the Contagious Diseases Act was this: that when a woman was known to be a common prostitute—*i.e.*, that she frequented places of prostitution with different men—notice should be given by the police that she must be examined, and if found diseased the police must take charge of her, and confine her in Hospital till certified as cured by a competent Medical officer. Mr. Acton quoted the evidence given by Inspector Smith before the House of Lords as to the manner in which the Act was carried out at Aldershot. He said he believed there was much prostitution in the camp, and when he was satisfied that a woman was conducting herself in this way he warned her to attend. If she did not, he went before a magistrate to get an order, and served it upon her; if she disobeyed the order, he then summoned her before a magistrate. Assuming, then, that the Legislature shall sanction the extension of the Act to the civil population, in what way will the Act be best carried out? It was an error of philanthropists, argued Mr. Acton, to treat diseased prostitutes as ordinary Hospital out-patients. The system only tended to patch them up in the morning so as to ply their trade in the evening. To secure permanent benefit they must be placed under confinement until they were pronounced unable to contaminate. To secure a rapid and inexpensive cure, early detection was necessary, and it was one great evil of the present system that the woman will not seek the Hospital until she is so seriously diseased as to be unable to gain her livelihood in the streets. If the public had the same fear of persons affected with syphilis as they have of lunatics, it would not be long before this evil would be mastered. We have already had practical experience in garrison towns of the effects of the Act upon the women themselves. A woman is taught to respect herself, and becomes less disreputable. The fact of seeing periodically a man aloof from the life she leads, must have a good effect upon her. Mr. Acton next considered the expenditure that would be incurred in providing Hospitals and appliances for carrying out the Act. Quoting the statistics of the Berlin and Paris authorities, and applying them to London, he showed that, putting it at the very highest figure, the cost for the metropolis would not exceed £56,000 per annum. This sum is spent yearly in curing the venereal diseases of our troops in the eight garrison towns. It cannot then be considered an excessive expenditure to secure some half a million of young men between the ages of 20 and 40 in London from venereal diseases. Mr. Acton next proceeded to answer objections. The first objection was on the score of religion and morality. In answer to this, he adduced the facts that had come before the Parliamentary Committee, showing the benefits that had accrued in every point of view. With regard to the objection that a modest woman would be liable to arrest by an over-zealous or corrupt policeman, he answered that this was not an objection to the principle of the measure, and would be obviated by the Legislature laying down such a definition of a prostitute that no respectable woman might under any circumstances come under it; and the Medical officer would have the option of refusing to examine a woman who he had reason to believe was respectable. The objection that disease was likely to be communicated by means of the speculum he held, was not borne out by facts. Contamination was unknown to practical men who took the precautions generally known to those who attended these cases. In opposition to the assertion that syphilis had increased, Mr. Acton showed by statistics that there was a diminution of true syphilis and gonorrhœa at all the stations where the Act was in force. He concluded by an earnest appeal to those present to look upon these fallen ones with pity rather than scorn, and to use their best endeavours to lessen an evil which they could not do away with.

Dr. Drysdale said the case of the army was peculiar in being condemned to celibacy. Although he was in favour of the Contagious Diseases Act for the army, he was opposed to its introduction into the metropolis; he did not believe that the results obtained by the system in large cities, such as Paris, warranted it.

Dr. Stuart gave his experience of the working of the Act at Chatham. He said he had examined thousands, and he never knew a case contaminated with the speculum. He explained the manner in which he cleansed the speculum, and left it to the meeting to judge whether there was any danger of infection under such a system. Statistical returns, he said, ought to be received with great caution. Many causes tended to swell the numbers. For instance, each relapse was put down as a new case, and frequently soldiers with leave went into a district not under the Act and came back diseased, yet such cases

were returned as occurring within the district. He had never known a case of oppression on the part of the police. In the case of one woman, although the police had strong evidence, and he himself believed they were right, he passed her over in consequence of her remonstrance. He had no doubt that the Act was doing a great deal of good. At the same time he was of opinion that there would be great difficulty in introducing the Act into London. For instance, the Act had lately been introduced into Greenwich and its neighbourhood, and there they had been unable to find more than perhaps one half the women. He presumed a greater difficulty would be experienced in London; a few would be known and the rest would escape. Yet after a time the women seemed to look upon the visiting Surgeon as their friend. Frequently they asked his advice about other complaints. He believed they were now beginning to look upon the Act as a benefit to themselves, although at first they were very much against it.

Mr. Liddle, in reference to a stricture of Dr. Drysdale that the police had no right to take up a woman, she not having committed a felony, thought it as much a penal offence for a woman of the town to infect others with syphilis as it was to spread the contagion of small-pox. If the Act could be carried out in small places, then it could be carried out in London by dividing it into districts.

Dr. Aldis said his own experience was that these women were apt to relapse. He thought that nevertheless they ought to be satisfied if the Act were the means of reclaiming a certain percentage. It being their duty as Medical Officers of Health to check zymotic diseases, he thought it also incumbent on them to recommend the extension of this Act to the civil population of London.

Dr. Ballard thought the very sectional divisions which would be necessary in London would be productive of one of the greatest difficulties. A woman, immediately on receiving the first warning from the police, would move off into another district where she was not known. Even if she went to the Surgeon and was pronounced diseased, how was she to be made to go to the Hospital against her will without making her case public, and enlisting a certain amount of public opinion in her favour, which would prevent the quiet working of the Act?

Dr. J. Webster doubted very much the utility of applying the Act to the civil population of London. The Hospital accommodation which would be required would be very great. He also asked, if women were to be treated in this way, were men to be free from the surveillance of the police?

Mr. Kittle, police superintendent, attended from Scotland-yard, and testified his readiness to answer any questions the meeting might put to him. In answer to the inquiries of the Chairman, of Mr. Berkeley Hill, and others, Mr. Kittle said these women generally frequent one district, but if they went away to another there would be no difficulty in tracking them. The police could give the names and addresses of about 5000 prostitutes. His opinion was that that was not one-tenth part of the actual number. He did not think there were many houses where what were called dressed lodgers were kept—*i. e.*, where the landlady had such control over the women, that she owned every stitch they had on. He was not aware that there was any law that authorised the police to arrest as such a woman known to be a notorious prostitute. He did not think there were many who remained at home and had gentlemen to come to their houses. He believed that if a body of sanitary police were told off for the purpose, they could track the women home and thus obtain their addresses.

Dr. Letheby considered it was their duty to regard this matter in a Medical point of view. If there was disease and suffering, it was their duty to check it, no matter what the avocation of the invalid. Basing his calculations on the number of illegitimate births, he believed that the number of fallen women was very large. Dr. Letheby likewise refuted in detail some of the objections made to the Act. As to what was called the liberty of the subject, he did not know there was not a single sanitary regulation that did not interfere with it. As to expense, he did not consider that ought to weigh with them; and yet he believed that would be a mere trifle compared with the advantages that would accrue.

As it was now late, and many other gentlemen wished to speak on the subject, on the motion of Dr. Tripe, seconded by Mr. Liddle, the debate was adjourned to Saturday, January 15

The Medical mission of Dr. Elmslie, in Cashmere, is said to be progressing favourably, both with regard to patients and converts.

CLINICAL SOCIETY.

Friday, December 10, 1869.

Mr. Paget, President, in the Chair.

Mr. John Croft related the particulars of a case of Tumour removed from the Orbit. The patient was 49 years of age, and, when first seen, had been suffering for three weeks from an attack of pain in the right orbit, between the globe of the eye and the inner part of the roof of the orbit. The lids were pushed forward, especially the upper; the ball of the eye was very prominent, and displaced forwards, outwards, and downwards. The conjunctiva was slightly œdematous, but no conjunctivitis or sclerotitis existed. Strong light excited lachrymation, but vision was not at all impaired, nor were the movements of the globe arrested in any direction, though motion caused a slight degree of pain. On passing the finger over the upper eyelid, the patient winced slightly, and a small lump was perceptible under the skin, about midway between the inner angular process of the frontal bone and the ball of the eye. On close examination, a short vertical linear scar was discovered between the end of the eyebrow and the median line of the forehead. In connexion with the history of this scar, it appeared that the patient, when about 15 years of age, was struck on the forehead by a cricket-bat, and had since felt that this eye was being depressed and protruded, with occasional attacks of pain. He consulted various eminent Surgeons and oculists, with little or no benefit, and was eventually brought to the speaker, who recommended an exploratory incision, which was, after consultation with Mr. Paget and Sir W. Jenner, ultimately resorted to. An ill-defined matrix was reached, from which was enucleated a small hard body about the size of a cherry-stone. The matrix consisted of a soft material of a buffy colour, like partly decolorised fibrine; the wound healed rapidly, the pain was relieved, and when seen a few days ago, the eyeball was almost on a level with that of the opposite side, and a very trifling induration only could be felt in the cicatrix. A section of the foreign body removed showed it to be laminated in structure, and to consist of more or less perfect lamellæ of light buff colour, alternating with the more abundant white material of which the centre and bulk of the concretion were composed. Under the microscope it exhibited a fine granular structure, which, on the addition of hydrochloric acid, dissolved with brisk effervescence, leaving an extremely delicate film of organic matter. The speaker came to the conclusion that the lamination of the mass itself, and the colour of the lamellæ, tended to show that the concretion originated from a coagulum of blood; that it was more probably due to the result of concussion than to a phlebolith; that it is not likely to have been a vein-stone, because there was no venous obstruction; and that the coagulum formed thirty years before by the blow on the forehead did not undergo resolution, but in course of time calcified into the little mass that was enucleated. Mr. Croft desired the opinion of the President on this case, as it was obscure, interesting, and (as far as he knew) unique.

Mr. Heath remarked that veterinary pathology afforded an illustration of these growths in the shape of what was called a *corn* in the horse's foot. The hoof was cut away by the veterinarian till a clot was reached which had given rise to the disease.

Mr. Croft referred to the subconjunctival effusion of blood at each paroxysm, and, in reply to Dr. Murchison, stated that no foreign body like a nucleus was found in the tumour.

Mr. Cooper Forster read a paper "On Torsion," and said that, having been selected by the Council of the Society as one of a Committee to report upon the relative advantages of this procedure and acupressure, and no report having been made in consequence of the death of one of the Committee, he felt it right to offer the Society his individual opinion upon the question. Having made some remarks upon the advantages of acupressure, and stated that, though still practised in Aberdeen by Keith and Pirrie, it was but little used in London, the speaker remarked that he had lost two cases from bleeding when the pins were removed, and that these accidents occurred after considerable personal experience in the practice. He considered acupressure valuable, but claimed for torsion precedence over all other modes of arresting hæmorrhage, because it possessed the great advantage of not leaving any extraneous body in the wound. In proof of its efficacy he read several cases of amputation, as having occurred under his own care, in which torsion alone was employed for arresting hæmorrhage.

In addition to these amputations, Mr. Forster mentioned that he had excised the elbow-joint once, the knee three times, and the hip four times, during the last few months, besides performing other operations (about forty in number), in all of which torsion of arteries was exclusively employed. He therefore considered that a fair trial had been given to the plan, and that hence he might speak with some confidence as to the results. He confessed to reading with surprise in Mr. Nunneley's able address to the British Medical Association, remarks to the effect that "he (Mr. Nunneley) could not twist a large artery and rest comfortably in bed, lest the elastic artery should untwist itself, and the patient bleed until he slept to wake no more." Mr. Forster was convinced that, had Mr. Nunneley perused carefully an account of the manner in which vessels were closed by torsion, the notion of an artery untwisting itself would seem to be an impossibility. Drawings were shown by the speaker representing the two femoral arteries of a double amputation hardened in spirit, and divided sectionally by Mr. Howse; and the fact was particularly emphasised that the twisted part showed no signs of death, though the patient from whom the preparation was taken did not die until thirty-six hours subsequent to the operation. Mr. Forster assured the Society that in no single case recorded, or at any time under his care, had secondary hæmorrhage occurred; and the conclusion at which he had arrived was, that the greater security of torsion arose from the reduplication of the middle and internal coats, thus affording a mechanical impediment to hæmorrhage, which impediment increased day by day. But in acupressure, as he had shown in the 14th volume of *Guy's Hospital Reports*, the clot which formed above the pin was the only safeguard against hæmorrhage. As the removal of the pin a day or two subsequent to the operation was necessary, it must always be a matter of some uncertainty as to whether the clot was sufficiently adherent to afford the necessary security against bleeding. In the practice of torsion a vessel is made secure at the time of twisting—that is, bleeding is arrested with certainty, and there is no chance of its recurrence. But in cases where acupressure or the ligature is employed, there must always be some anxiety on the part of the Surgeon as to the removal of the pin in the one case, or the separation of the ligature in the other. Mr. Forster further stated that since February, 1867, he had never used a ligature to restrain bleeding from an artery.

A very excellent preparation of the arteries above referred to was handed round for examination, as also the forceps used by Mr. Forster.

In reply to a question from the President, Mr. Forster said that it was his practice to seize from one-eighth to a quarter of an inch of the artery, and in the case of large vessels to twist it four or five times. Small arteries were usually more difficult to deal with than large, because the surrounding tissues were sometimes included in the grasp of the forceps.

Mr. Croft asked if it mattered whether the artery was cut obliquely.

Mr. Bryant, after expressing his indebtedness to the author, said he had now used the plan for two years, and was most perfectly satisfied with it. He had used it for the femoral five or six times, for the brachial twice, and it was quite surprising how well the wounds united. Mr. Poland had used it for the femoral six or seven times, for the brachial twice, for the tibial frequently, and entertained the same opinion as he did of its value. His own experience as to the mode of arrest corresponded exactly with the statements of Mr. Forster. On one point information was still wanted—that was, whether the twist should be partial or if the external coat should be twisted off. Professor Humphry held the latter view, which he thought was wrong. It was important that the middle coat should have support, and want of the external coat lessened this. Experiments after death confirmed this view. The mode of twisting did not much matter. It was best to go on till the parts felt loose. Sometimes it was necessary to turn the forceps five or six times. Atheromatous vessels gave way much more readily, so that two or three turns generally sufficed; another turn was apt to lacerate. He narrated a case in point, where with the third rotation the end of the vessel felt loose. Some blood was allowed to pass the compress, and leakage followed. He then cut off the end of the vessel, made two turns with perfect closure. The case had done well. It was important to let blood in before removing the forceps.

Mr. Durham had also used the plan. He could not say he had not used a ligature. Still, he had employed torsion in all available instances—on the femoral four times, on the brachial twice. One great difficulty in its application arose from retraction of the smaller vessels. In one case, to save time, he had used ligatures. In the case of the larger arteries he used forceps with expanded extremities, which were still made with a groove in the centre, although useless. He had perfect confidence in the method. When ligatures were used the wound was closed sooner, whence secondary hæmorrhage was more frequent then than now.

Mr. J. D. Hill had used torsion for one femoral and two brachial arteries. There was no secondary hæmorrhage. He twisted off the ends.

Mr. Maunder said this method of arresting bleeding was a revival. He had found a full account of it in South's Chelius. It would be curious to know how it fell into disuse. The difficulties in its application were something considerable, as where the vessel was near a bone, in fibrous tissue, etc. There he used the ligature.

Mr. Gascoyen said he was struck with Mr. Bryant's remarks as to the effect of injecting fluids into vessels after death. Still he would ask where the old system failed. There was no chance of bleeding with it. Pyæmia was not lessened by torsion, nor was healing more rapid. One objection to torsion consisted in the long exposure necessary. In certain cases speedy removal from the operating-table was essential. It was true all learning came from the East; still those of the West were glad to learn.(a)

Mr. Heath said the reason why the practice fell into disuse was doubtless the importance of getting the patient off the table as speedily as possible before the days of chloroform. Mr. Gascoyen objected to letting the patient bleed on the table. Would he let him bleed in bed? It was interesting to contrast torsion with the effects of the carbolic acid system. Lister now allowed stumps to glaze before closing the wounds. Liston himself long ago did so with the best results. He asked Mr. Forster their relative merits.

Mr. C. Moore thought each Surgeon preferred what succeeded best in his hands. He preferred acupressure, Mr. De Morgan preferred cutting the ligature close off. Acupressure, he thought, was especially useful in amputation of the breast. He had once seen an ossified artery twice cut through by the ligature. The patient was saved by taking in some of the surrounding muscle. Although Mr. Bryant succeeded so well, one must have a good deal of experience to succeed satisfactorily.

Mr. Croft had used torsion in small vessels, not in large ones. He remarked on the bad example set by those employing torsion to the pupils, who would have no opportunity of acquiring the art of twisting arteries.

Mr. Callender said that after all we had to look to results rather than processes, to the healing of the stumps and the subsequent results. Small vessels might be twisted by ordinary forceps.

Mr. Arnott remarked on the statement that untwisting was physically impossible. In one case he saw two or three arteries untwist themselves.

Mr. T. Smith said there was a right and a wrong way of doing things. In one case he saw a good Surgeon twist off the end of a vessel, and bleeding followed.

Mr. Clover showed a pair of forceps he had invented, combining cauterisation with pressure.

Dr. Anstie asked if the rapidity of the twist had not something to do with the result.

Mr. Paget said one reason why it had not been used at St. Bartholomew's was that it had been so often given up. Twenty years ago a Surgeon told him that for fourteen years nothing else had been employed in Hamburg, yet it had been given up as being more tedious and less safe than the ligature. Acupressure as seen with Pirrie and Keith in Aberdeen greatly impressed him. There was no case of secondary hæmorrhage there. Certainly the ligature had not failed in respect of security. The test was the greatest final security and final success. Clear evidence on these points was wanted. The method might be tested by the largest number of wounds healed by the first intention. This could only be settled by careful clinical investigation.

Mr. Cooper Forster, in reply, said his intention was to compare torsion with acupressure, not the ligature. Bleeding has followed acupressure, and has followed the ligature, but cannot follow torsion. Twisting was surely the simplest thing for a man who had no assistance; the ligature required at least two pairs of hands.

(a) The allusion here is to Guy's Hospital (Mr. Forster's), being situated rather in the East of London, St. Mary's, to which Mr. Gascoyen belongs, being the most Western of all London Hospitals.

OBITUARY.

CHARLES PHILIPS CROKER, M.D., F.K.Q.C.P.I.

We regret to announce the death of the above estimable Physician, which took place on the 11th inst., after an illness of some weeks, at his residence, Merrion-square West, Dublin. Of remarkably amiable disposition and gentle manners, Dr. Croker most deservedly held, during a period of forty years, a high place in the esteem and confidence of both the Profession and the public. He was long the colleague, in the Physicianship of Dr. Steevens's Hospital, of the late Sir Henry Marsh, Bart., and has latterly been the Consulting Physician of that Institution, as well as of the Rotundo Lying-in and the City of Dublin Hospitals. In 1836 and 1837 he was elected President of the King and Queen's College of Physicians in Ireland, of which body he had been a Fellow since the year 1828. He was B.A. and M.D. of Dublin University, and was Physician to St. Patrick's, or Swift's, Hospital, the Hospital for Incurables, and the Female Orphan House. He was a member of the Royal Irish Academy, the Royal Dublin Society, and some other learned societies. He contributed some papers to the *Dublin Quarterly Journal of Medical Science*.

ROBERT BOWIE, M.R.C.S.

This gentleman, who was the oldest member of the Profession in Victoria, died on October 2 last, at Melbourne. He was engaged in active practice nearly to the hour of his death. His death was wholly unexpected, although he had recently complained on one or two occasions of some slight uneasiness in the cardiac region, but it did not appear sufficient to excite apprehension. The immediate cause of his death was a sudden attack of angina pectoris. Dr. Bowie was born in Perthshire, Scotland, on March 17, 1788. He was the first Medical Superintendent of the Yarra Bend Lunatic Asylum, which he conducted with consummate ability in spite of much difficulty and opposition. The *Australian Medical Gazette*, from which we abstract the above particulars, says of him:—"Naturally of a robust constitution, the deceased gentleman was vigorous and active to the last. Endowed with an acute intellect, enriched by an extended observation vouchsafed to few, Dr. Bowie was eminently successful as a Practitioner. He had been a constant and valuable contributor to the pages of this journal. Genial and warmhearted in private life, he won the esteem and good opinion of all who knew him."

NEW BOOKS, WITH SHORT CRITIQUES.

Half-Yearly Abstract of the Medical Sciences. London: Churchill and Sons. Pp. 372.

Braithwaite's Retrospect of Medicine. London: Simpkin and Co. Pp. 408.

*** With Christmas come the annuals — pictorial, poetical, and what not; professionally come bills and suchlike volumes as those above cited. They undoubtedly have a use and a value, especially to the busy Practitioner. Both contain material evidence to the fact that our own columns are not filled with ephemeral matter—the mere news of the day—but with something more substantial, and of a more abiding value.

Chemistry for Schools. An Introduction to the Practical Study of Chemistry. By C. Haughton Gill, Assistant Examiner in Chemistry at the University of London, late Teacher of Chemistry and Experimental Physics in University College School. London: Walton. Pp. 315.

*** This is one of a series of books recently issued by various authors, with special reference to the examinations of the University of London. On the whole, we think well of the book. Perhaps it is rather too mathematical for beginners, but for advanced students there is nothing like *accurate* science. A special feature of the book are its capital illustrations.

On the Administration of Chloroform and Nitrous Oxide. By Charles Squarey, M.B. Lond., M.R.C.P., Assistant-Physician to the Hospital for Women, Soho-square. London: Walton. Pp. 44.

*** Dr. Squarey's little work is plain, sensible, practical—the result of experience mostly gained as Resident Medical Officer at University College Hospital. Dr. Squarey apparently intends it for the use of beginners, but older hands will not do amiss to glance over the directions and precautions he gives. But what has the chemical constitution of chloroform or nitrous oxide to do with their anæsthetic properties? The administration of these substances has no reference to their discovery. Perhaps Dr. Squarey will take the hint in his next edition.

Clinical Notes on Diseases of the Larynx investigated and treated with the Assistance of the Laryngoscope. By W. Marcet, M.D., F.R.S., F.R.C.P., Assistant-Physician to the Hospital for Diseases of the Chest, Brompton, etc. London: Longmans. Pp. 135.

*** This little work contains, first of all, certain preliminary observations on laryngoscopy and the formation of voice. Next come some good plain directions as to how to use the laryngoscope, with some notes on simple laryngitis; but the two most important chapters are those on hysterical aphonia and laryngeal phthisis. In connexion with both of these affections, Dr. Marcet gives some most interesting and instructive cases. There are also some very good illustrations.

The Causes and Treatment of Imperfect Digestion. By Arthur Leared, M.D., M.R.C.P., Senior Physician to the Great Northern Hospital, etc. Fifth Edition, revised and enlarged. London: John Churchill and Sons. Pp. 276.

*** Dyspepsia is such a common and such a troublesome complaint, that a sensible work on the subject is always sure to succeed, and of the success of Dr. Leared's book there can be no question. In the present edition two chapters have been added, one on the mineral waters suited for dyspepsia, the other on the relations of dyspepsia and sleeplessness. With regard to the waters, we hardly think Dr. Leared lays sufficient stress on the value of a combined chalybeate and laxative water, such as is supplied by some of our own half-forgotten springs—forgotten only on account of the present easy access to their more fashionable Continental allies.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, January 6, 1870:—

Jolliffe, John, jun., Godolphin-road, Shepherd's-bush.
Mulligan, Michael Joseph, Thrapston, Northamptonshire.
Roberts, Evan, Upper Dorset-street, W.
Wadsworth, Godfrey Bingley, Westbourne, Hants.

The following gentlemen also on the same day passed their First Professional Examination:—

Aikin, Charles Edmund, Guy's Hospital.
Derry, Bartholomew Gidley, St. George's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bellamy, Edward, F.R.C.S.—Surgeon to the Magdalene Hospital.

Braidwood, P.M., M.D. Edin.—Demonstrator of Histology at the Liverpool Royal Infirmary School of Medicine.

Buck, T. A., M.B.—House-Physician to the Hospital for Women, Soho-square, *vice* W. A. Cox, M.R.C.S., resigned.

Hardyman, C. E., M.R.C.S.E., L.S.A., late House-Surgeon at St. Thomas's Hospital.—House-Surgeon to the Worcester General Infirmary.

NAVAL APPOINTMENTS.

Admiralty.—Thomas Beswick Purchas, Esq., M.D., has this day been promoted to the rank of Staff Surgeon in her Majesty's Fleet, with seniority of December 6, 1869.

The following appointments have been made:—W. H. Adam, Surgeon to the *Indus*, and Dr. John Craw, Assistant-Surgeon to the *Royal Adelaide*.

BIRTHS.

Blatherwick.—On January 5, at Rowmore-cottage, Dumbarton, the wife of C. Blatherwick, M.D., of a daughter.

Childs.—On January 5, the wife of A. P. Childs, M.D., F.R.C.S. Eng., of a son.

Collins.—On January 1, at Euston-place, Leamington, the wife of Dr. Collins, of a daughter.

Dwelly.—On January 8, at Rye-lane, Peckham, the wife of Dr. Dwelly, of a son.

Fisher.—On January 5, at Bucklands, Apsley-road, Clifton, the wife of S. Winter Fisher, M.D., of a son.

Hills.—On January 9, at Thorpe Asylum, near Norwich, the wife of W. Charles Hills, M.D., of a son.

Hochee.—On January 10, at Eastend, Finchley, the wife of James Hochee, Surgeon, of a daughter.

Sutton.—On January 6, at the Norwich Borough Asylum, the wife of Frederick Sutton, Medical Superintendent, of a daughter.

Young.—On January 8, at Bridgnorth, Shropshire, the wife of H. J. Young, M.D., of a son.

MARRIAGES.

BROWN—BROWNE.—On January 5, at Christ Church, Surbiton-hill, Charles Robert Brown, M.B., of Beckenham, Kent, to Ellen, eldest daughter of Frederick Browne, Esq., of Hollyfield, Surbiton-hill.

HOLLOWAY—SYMMONS.—On January 5, at Wormingford, Essex, James Lewis Holloway, Staff Surgeon-Major, youngest son of the late Benjamin Holloway, Esq., of Lee-place, Oxon., to Minnie, youngest daughter of the late B. F. Symmons, Esq., of Bures St. Mary.

JAMES—JAMES.—On January 5, at Edgbaston Old Church, John James, of Aberclyn, Brecconshire, only son of the late John James, Esq., of Presteign, Radnorshire, to Annie Maria, third daughter of Edward James, Esq., M.D., Edgaston, Birmingham.

DEATHS.

BEALE, LIONEL BLAKISTON, eldest son of Dr. Lionel Beale, F.R.S., of 61, Grosvenor-street, aged 8.

BRODDES, WILLIAM MINTON, M.D., at Myndtown-house, Shrewsbury, on January 10, aged 52.

BRAITHWAITE, Dr. EDMUND, eldest son of George Mott Braithwaite, Esq., formerly of 7, Old Manor-street, Chelsea, near Launceston, Tasmania, of brain fever, after ten days' illness, on April 26, 1869, aged 40.

FISCH, RICHARD SWAN, M.R.C.S.E., at Ridglands, Wimbledon, S.W., after a short illness, on the 5th inst., aged 46.

MURRAY, SARAH CATHERINE, widow of Thomas Murray, Surgeon 2nd West India Regiment, at 76, Delancy-street, N.W., on January 6, in her 80th year.

TOMPSON, WILLIAM A., M.R.C.S., on January 9, aged 62.

TUCKER, JOHN KINSMAN, B. A., of Magdalene College, Cambridge, and of Guy's Hospital, London, at Greenwich Hospital, while too ardently pursuing Medical studies, on January 6, aged 23.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ANDOVER UNION.—Medical Officer for No. 1 District. Candidates must be qualified in accordance with the general orders of the Poor-law Board, and be registered. Applications and testimonials to Thomas Lamb, Esq., Clerk to the Union, Andover, on or before January 20, 1870. Election on the 28th inst.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon; must possess at least one qualification, and be registered. Applications and testimonials to the Secretary on or before January 24. Election on the 26th.

BOROUGH OF IPSWICH LUNATIC ASYLUM.—Resident Medical Superintendent. Applications and testimonials to the Town Clerk's office, Ipswich, addressed to "The Lunatic Asylum Committee," on or before January 15, 1870. The Asylum will be ready for occupation in April or May.

BOURNEMOUTH DISPENSARY AND COTTAGE HOSPITAL.—Honorary Surgeon, vacant by the resignation of E. Lacy. Applications to the Secretary, W. W. Humby, Esq.

BRITISH LYING-IN HOSPITAL, ENDELL-STREET, LONG ACRE.—Honorary Physician. Applications and testimonials to the Secretary.

CHARING-CROSS HOSPITAL (WEST STRAND).—Registrar; must be qualified and registered. Applications and testimonials to H. Woolcott, Esq., Secretary, on or before January 19, 1870.

CHELSEA, BROMPTON, AND BELGRAVE DISPENSARY, 41, SLOANE-SQUARE.—Surgeon to the Western District. Candidates must be Members of the Royal College of Surgeons of London, Edinburgh, or Dublin. Applications and testimonials to the Secretary, on or before February 3, on which day candidates will be required to attend at 7 p.m. Election on February 17.

EAST LONDON HOSPITAL FOR CHILDREN.—Resident Medical Officer. Applications and testimonials to the Hon. Secretary on or before Jan. 18.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, KING'S-CROSS, N.—Junior Surgeon. Applications and testimonials to the Secretary, G. Reid, Esq., at 46, Great Coram-street, on or before February 9.

HOLBEACH UNION.—Medical Officer for the Sutton-bridge District. Candidates must be legally qualified and registered. Applications and testimonials to Mr. E. G. Ayliff, Clerk, Holbeach, on or before February 5. Election on the 7th.

HIGHWORTH AND SWINDON UNION.—Medical Officer for the Second District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on before February 1, election on the 2nd.

HIGHWORTH AND SWINDON UNION.—Medical Officer for the Fourth District and Workhouse. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on or before February 1, election on the 2nd.

ISLE OF MAN HOSPITAL AND DISPENSARY.—Resident Medical Officer; must be legally qualified. Applications and testimonials to John Moore, Esq., Hon. Sec., Douglas, on or before the 19th inst.

LEICESTER INFIRMARY AND FEVER HOUSE.—House Surgeon and Apothecary; must be a Member of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be L.S.A. Applications and testimonials to the Secretary at the Infirmary on or before February 1. Election on the 12th, at 1 o'clock p.m.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary on or before February 26.

MALE LOCK HOSPITAL.—House-Surgeon. For further information apply to H. J. Ker Porter, Esq., Secretary, 91, Dean-street, Soho-square, W.

MIDHURST UNION.—Medical Officer for the Milland District. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. E. Albery, Clerk, Midhurst, on or before January 24. Election on the 25th.

NORTHAMPTON GENERAL LUNATIC ASYLUM.—Assistant Medical Officer; must be registered, and have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before January 15. Election on the 26th.

NORTH STAFFORDSHIRE INFIRMARY, HARTSHILL, STOKE-UPON-TRENT.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary at the institution on or before January 29. Election on February 3.

NOTTINGHAM DISPENSARY.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

ONGAR UNION, ESSEX.—Medical Officer for the Fourth District. Candidates must be duly qualified and registered. Applications and testimonials to C. Mott, Esq., Chipping Ongar, Essex, on or before January 18. Election on the same day at 12.30 p.m.

ROSS UNION.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, or a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and also L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary on or before February 5. Election on the 9th.

SUNDERLAND INFIRMARY AND DISPENSARY.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

WESTMINSTER HOSPITAL.—Resident House-Surgeon; must be registered. Applications and testimonials to the Secretary on or before January 22. Election on February 3.

WORCESTER GENERAL INFIRMARY.—Apothecary. Applications and testimonials to the Secretary on or before January 15.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Kendal Union.—Mr. W. Armistead has resigned the Burton District; area 13,448; population 2714; salary £32 per annum.

Ongar Union.—Mr. Charles Davenport has resigned the Fourth District; area 4676; population 1302; salary £33 16s. per annum.

Worcester Union.—Mr. Hilary Hill has resigned the Third District; area 3965; population 11,841; salary £100 per annum.

APPOINTMENTS.

East Ward Union.—Thomas Sayer, M.B. Edin., M.C. Edin., to the Kirkby Stephen District and the Workhouse.

Hoxne Union.—Joseph Packard, M.R.C.S.E., L.S.A., to the Hoxne District.

Pewsey Union.—Charles H. Lawrence, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Fourth District.

Pontefract Union.—Erasmus Stone, L.R.C.P. Edin., M.R.C.S.E., to the Second District.

WE hear that Dr. R. Douglas Powell has resigned the office of Physician to the Evelina Hospital for Sick Children.

DR. HENRY MORRIS has been appointed Surgical Registrar and Pathologist to the Middlesex Hospital.

FEVER is reported to be very prevalent at Ripley, Yorkshire, and in the neighbourhood.

DR. OLIVER, an English Physician practising at Charlotteville, United States, was shot dead last month by Mr. George Ayres, who charged him with having seduced his daughter whilst visiting his house some months before.

THE total collection, including special sums, during the year 1869, for the General Hospital, Sanatorium, and other institutions in Birmingham, amounted to £4,469. 6s. 8d.

SOUTH DEVON HOSPITAL.—At a general meeting of the Governors of this Institution held on the 5th inst., Mr. C. Whipple was elected House-Surgeon, Mr. John Whipple, consulting Surgeon. A vote of thanks was carried unanimously to the latter gentleman on his retirement from the office of Surgeon to the Hospital.

CHRISTMAS WITH SICK CHILDREN.—The Children's Ward of the Queen's Hospital, Birmingham, on Christmas-day presented a scene of the most cheerful and pleasant aspect. The little patients were amused in every way, and with every kind of toy conceivable. As the *Illustrated Midland News* says, "It is not the children's ward at all, but a bit of fairyland, with four charming fairy godmothers looking after the smaller people."

SCARLET FEVER IN DUNDEE.—During the past year nearly 600 children died of scarlet fever in this town. At a meeting of the Police Commission held on Wednesday last, a strong feeling was entertained that some measures ought to be adopted to prevent, if possible, the spread of the disease. One of the members suggested that the schools should be closed, as many cases of infection had occurred through children who had been ill of fever mixing amongst others. The clerk stated that they had no power to shut the schools. It was remitted to the Sanitary Committee to take up the matter and enforce cleanliness.

Vaccination.—The Chepstow Board of Guardians have ordered their relieving officer to warn all parents who have failed to have their children vaccinated that, unless they do so, and send in a certificate of successful vaccination within a month, they will be prosecuted.

Preston and County of Lancaster Royal Infirmary.—This institution was opened on Thursday last for the reception of in-patients. It is replete with every accommodation for the patients and officers, and embraces all the improvements of the present day.

Josiah Hurst, a butcher at Bolton, was sent to prison for three months, by the magistrates, on Saturday last, for having in his possession the carcase of a cow so diseased as to be perfectly unfit for human food. The animal had been purchased by the prisoner for 45s.

Hospital for Chest Diseases, Victoria Park.—In-patients since opening of the institution in 1855, 6557; out-patients last year, 13,905. Receipts for the year, £9436 6s. 7d.; expenditure, £7379 8s. 11d.

Académie des Sciences.—M. Claude Bernard, in resigning the President's chair to his successor, M. Liouville, congratulated himself that during his year of office he had not had the sad duty of accompanying any of the Academicians to their last resting-place. Indeed, so satisfactory has the sanitary state of this learned body, although composed of veterans, been during 1869, that not a single member has even been seriously ill.

Hunterian Museum.—An interesting addition to the craniological collection has just been made by the Rev. John Walker, of Bradwell Rectory, Great Yarmouth, who has presented the veritable skull of that celebrated criminal Eugene Aram. It was exhibited to the members of the British Association, at the meeting in Newcastle, by Mr. Richardson, Surgeon to and founder of Harrogate Hospital, and by him given to the gentleman who has now presented it with full particulars of its history to the Museum of the College of Surgeons.

St. Thomas's Hospital.—At a meeting of the electors of the borough of Southwark last week, Colonel Beresford, one of the candidates, stated in his observations against free trade (pointing to St. Thomas's Hospital, now in the course of erection, as a good proof of what was done abroad), that the whole of the carpenter's work of that great building was being made in Sweden and sent to this country ready to be fixed into its appointed place.

The Spread of Scarlet Fever.—On Wednesday, at Liverpool, examples were made by the borough justices of two persons who had wilfully increased the risk of the spread of scarlet fever by dealing in infected bedding. A man named Benjamin Hill, who had neglected to have disinfected the bedding on which his wife had died of the above disease, was fined 10s. and costs; and Mary Murphy, furniture broker, was fined 20s. and costs for purchasing the bedding.

In the Wilton County Court, Somerset, a farmer named Pile obtained £50 damages and costs from one William Crocombe, in consequence of damages sustained by the improper and unskilful use of a preparation used by him in dipping plaintiff's stock of over 600 sheep. The sheep were dipped on August 25, and two days afterwards 70 of the sheep were found dead, and within a week 200 died. It appeared that the principal ingredient in the wash was arsenic.

Sale of Poisons.—A druggist at Bolton sold a blacksmith six drachms of laudanum which he took in a state of drunkenness. He died, and it transpired on the inquest that the sale of the "poison" had not been properly entered in a book. The coroner, in commenting on the case, said "the jury had no power to make the druggist in this case criminally responsible, but he hoped the public prosecutor would take the matter up."

"British" Medical Benevolent Fund.—At the meeting of the Medical Benevolent Fund, held on Tuesday, Dr. G. C. Jonson presiding, the modification of name as above was unanimously decided upon, some confusion having frequently arisen from the similarity of names of this and another well-known Medical charity. The report, some of the details of which have recently appeared in our columns in a letter from the officials appealing for assistance, was adopted, and, with the financial statement, ordered to be printed for distribution. Votes of thanks were passed to the Treasurer, Hon. Secretaries, Mr. Churchill for his kindness in giving a room for the meeting, and to the Medical Press for their advocacy of the claims of the fund.

University of Cambridge.—The Professor of Anatomy (Professor Humphry) gives notice that the course of lectures on Practical Anatomy will be continued on Monday, January 17, at one p.m., and daily at the same hour. The course on Anatomy and Physiology will be continued in the New Museums on Thursday, Jan. 27, at one p.m., and on Tuesdays, Thursdays, and Saturdays at the same hour. Microscopical demonstrations will be given in the old Anatomical Museum on alternate Mondays at six p.m., commencing Feb. 17. With the assistance of Mr. Garrod, of St. John's College, demonstrations of Physiological Chemistry will be given in the old Anatomical Schools on Saturdays, at twelve noon, commencing Feb. 5.

"Palmam qui meruit ferat."—At the inspection of Haslar Hospital, on the 6th inst., Mr. Childers did an act which will be appreciated not only by the Medical officers of the Navy, but by the whole service, and is worthy of being recorded. The Director-General had reported a short time ago to the Admiralty the important services rendered by Mr. Godfrey Goodman during the prevalence of successive outbreaks of yellow fever at Jamaica Hospital, where he had served continuously for nearly seven years, and this officer was accordingly noted for promotion when he had passed the usual qualifying examination, which he did a few days ago. Mr. Childers, at the conclusion of his visit at the Hospital, had Mr. Goodman presented to him, and in the most complimentary manner promoted him on the spot, in the presence of all the assembled officers, thus affording a prompt and noble recognition of his services.

Health of Scotland.—3162 deaths were recorded in the eight principal towns of Scotland during the month, of whom 1547 were males, and 1615 females This number is 587 above the average mortality of the month during the last ten years, allowing for increase of population, and is the highest number recorded for any month of December since the commencement of the Registration Act in 1855. Of the 3162 deaths, 1367, or 43 per cent., were of children under 5 years of age. In Aberdeen, 31 per cent. of the persons who died were under 5 years of age; in Perth, 33 per cent.; in Edinburgh, 34 per cent.; in Paisley, 42 per cent.; in Greenock and in Leith, 43 per cent.; and in Glasgow and in Dundee, 47 per cent. Four males and nine females had passed their 90th year, the eldest being a garden labourer, aged 98 years.

Cruelty to Fat Animals. — It is stated in the *Chamber of Agriculture Journal* that the tricks and dodges that are resorted to to reduce unfortunate fatting wethers within the 200 lb. limit are not very commonly known. The animals are walked, they are sweated, and even starved. One pen of sheep, it is stated, which took a prize in the Agricultural Hall last month, were kept for forty-eight hours without food.

Harveian Society of London.—The annual meeting and *conversazione* was held on Thursday, the 6th, when the retiring President, Dr. E. Headlam Greenhow, gave an eloquent address on the discoveries and improvements in Medicine and Surgery since the foundation of the Society in 1831. The following gentlemen were elected officers of the Society for the year 1870:—*President:* W. F. Cleveland, M.D. *Vice-Presidents:* Frederick Cock, M.D.; James R. Lane, Esq.; J. Z. Laurence, Esq.; Charles Royston, M.D. *Treasurer:* Henry William Fuller, M.D. *Hon. Secretaries:* J. Brendon Curvengen, Esq.; W. H. Day, M.D. *Council:* John Hall Davis, M.D.; W. Tilbury Fox, M.D.; William Hickman, M.B.; M. Berkeley Hill, Esq.; J. Holmes Jephson, M.D.; Newton B. Lee, Esq.; Duncan Menzies, M.R.C.P.; Edmund Metcalf, Esq.; Thomas Morton, M.D.; Edwin Etty Sass, Esq.; R. S. Sisson, M.D.; J. G. Westmacott, M.D.

Naval Medical Department. — From the official Navy List just published, it appears that there is one Director-General of the Medical Department of the Royal Navy; eight Inspector-Generals of Hospitals and Fleets, two of whom were advanced to that rank during the past year, three were on full pay, the remainder were on half-pay, but three of the latter were in receipt of good service pensions. Of the Deputy Inspector-Generals of Hospitals and Fleets two only were unemployed. There were ninety-eight Staff-Surgeons, one of whom was promoted to that rank during the past quarter, making ten in all advanced to that rank during the year; forty-six were unemployed, and fifty-two were serving on full pay. Out of 172 Surgeons sixty-five were on half-pay and 107 on full pay. Only nine promotions took place during the year, four of which were during the past quarter, and of the 235 Assistant-Surgeons 217 were on full pay, eighteen only on half-pay, and eighty-four of them had passed their

examinations for the rank of Surgeon. During the year 1869 only thirteen candidates passed for Assistant-Surgeons in the Royal Navy. It may not be generally known that the Courts of Examiners of the Colleges of Surgeons have ceased to examine candidates for this branch of the public service. The next competitive examination of candidates for admission into the Medical service of the Royal Navy will be held at Chelsea Hospital on February 7 next.

Small-pox and Vaccination. — Dr. Lankester is circulating some "facts and reasons in favour of vaccination and the vaccination laws," in the form of a hand-bill, by desire of the Vestry of St. James, Westminster. He says:—"Whilst small-pox kills so great a proportion of the unvaccinated whom it attacks, the inoculation of cow-pox—*i.e.*, vaccination—seldom or ever produces any consequences of an injurious nature. The authenticated fatal cases of erysipelas so produced are not more numerous than those which follow the prick of a pin. There is no proof that those who have been vaccinated suffer from scrofula or any similar disease as a consequence of vaccination alone. According to the Registrar-General's returns, these diseases have diminished in frequency since the introduction of vaccination. That which follows after a thing is not necessarily caused by it. It is a matter of necessity that persons who have been vaccinated should have diseases after this operation as well as before it, but these cannot rightly be attributed to vaccination. The laws of our country demand that every one should be vaccinated, because persons who are unvaccinated are liable to take small-pox and die. The law does not allow the right of a man to catch small-pox or to expose his children to it, as it does not allow him to kill himself or his children. It has been recently made unlawful for a man to accumulate dirt and filth which may become the means of spreading disease and death among his neighbours, and similarly the law does not allow a man to make his body, or those of his children, hotbeds for the development of the deadly small-pox, which may spread to his neighbours. Although very rarely the eruptions of other diseases have, through the carelessness of Medical Practitioners, been mistaken for cow-pox, yet it would be as reasonable to ask for the abolition of railways because of railway accidents, as to demand the abolition of vaccination on account of such accidental occurrences."

The Phillips Prize of the Société Médicale des Hôpitaux de Paris.—Essays for this prize (2000 fr.) must be sent in to M. Lallier, Secrétaire, 22, Rue Caumartin, before April 1, 1870. The subject is—"Investigate and demonstrate in what degree tubercular meningitis is curable or preventible, and what are the means most suitable to attain these ends." The Society recommends the following points to the notice of candidates:—1. The collection of the cases which at various times have been published under the name of hydrocephalus, cerebral fever, and granular or tubercular meningitis, especially those which have been related as cures—examining whether they have really been cases of tubercular meningitis, the extent they had reached, and the reality and mode of their cure. If possible, new cases to be added. 2. The examination of families in which the disease has prevailed, so as to ascertain how far certain of their members have escaped or succumbed—deducing if possible a preventive mode of treatment. 3. The examination of the antecedents of those who have become subjects of the disease, to ascertain whether in them there had been prior manifestations of it, and how these had been removed, in reference to curative or preventive treatment. 4. The examination of the Medical constitutions under which tubercular meningitis becomes almost epidemic, seeking to discover in them other than diasthetic causes, in relation to the treatment to be adopted. 5. A comparison of the frequency of the disease in town and country, with reference to prophylactic Medicine.

Good News for Dissectors.—In the *Times* for Jan. 7, there is an account of Gamgee's new process for preserving meat, which may afford a valuable hint to anatomists. The process consists in the exposure of the fresh carcase, cooled to 50° Fahr., to the fumes of carbonic oxide and nitrogen, and afterwards leaving it in a chamber filled with the vapour of sulphurous acid, for from seven to twenty days, according to the size of the animal. Meat so prepared keeps good for from three to twelve months, at a cost of two or three pence for a sheep, or a shilling for a bullock. Why should not unclaimed bodies be so preserved during the summer, so as to keep up a good supply of subjects for the dissecting rooms in the winter? The expense of the plant and method are said to be inconsiderable, and if it be found to be available for human subjects without disturbing the natural appearance of the parts, the boon to anatomists of a constant supply of fresh bodies capable of preserving their freshness for many weeks will be very great.

"Excellent Manure!"—The special correspondent of the *Times*, writing from Egypt, says:—"Such odd things as are happening here! Mutton fattened on ancient Egyptians! It's a fact—a horse chestnut is not a chestnut horse, but, by a sort of *sorites* inverted, we may arrive at the idea of a *gigot* which shall consist in great part of the dwellers in Memphis. The other day at Sakhara I saw nine camels pacing down from the mummy pits to the bank of the river laden with nets, in which were femora, tibiæ, and other bony bits of the human form, some two hundredweight in each net on each side of the camel. Among the pits there were people busily engaged in searching out, sifting, and sorting the bones which almost crust the ground. On inquiry I learned that the cargoes with which the camels were laden would be sent down to Alexandria, and thence be shipped to English manure manufacturers. They make excellent manure, I was told, particularly for swedes and other turnips. The trade is brisk, and has been going on for years, and may go on for many more. It is a strange fate to preserve one's skeleton for thousands of years, in order that there may be fine Southdowns and Cheviots in a distant land! But Egypt is always a place of wonders."

A Homœopathic Hospital in New York.—A meeting was held, at the latter end of last month, at the Union League Club Theatre, for the purpose of inaugurating the movement for the establishment of a homœopathic Hospital. Several speakers addressed the meeting in support of the cause, amongst whom was Mr. W. Cullen Bryant, the poet. The following extract from the speech of Judge Barrett will give an idea of the style of the addresses:—"The principal recommendations of the system are—first, that it has a definite law of cure, which the other systems have not. Another principle is that it is not important to find out what the name of the disease is; homœopathic Physicians do not diagnose—they simply prescribe medicines suitable to the symptoms exhibited. And another recommendation was the system of small doses, in which even allopathic Physicians are beginning to imitate them. In conclusion, Judge Barrett earnestly besought support for the institution. It was right that homœopaths should have at least one institution in this great city wherein they can put their sick poor; and when they have such a Hospital there will be a fair opportunity of testing the merits and success of the two schools." It is remarkable in such a "go-ahead" place as New York, where homœopathy is said to be rampant, they have not yet established a Hospital. We expect that in America, as in England, there is more talk than wool.

A society has been formed in New York, entitled the "Women's Parliament," says the *Nation*. The word "parliament," we understand, does not contain the germ of any pretensions to the character of a legislature, but is used in the primitive and literal sense of a conference, or council, for discussion. The body has nothing to do with the suffrage movement, of which, indeed, it speaks disrespectfully, holding that until women are able to maintain their ground with men in all walks of life the ballot will be of no use to them, and that, in order to hold their own, they need to be trained to work of all sorts, to learn the art of transacting business, and of managing their own affairs without male help. It proposes, therefore, to occupy itself with such questions as women's education, work, wages, dress, amusements, health, clothing, vices, temptations, legal disabilities, and so forth—a tremendous programme, but full of interest. "Harmonies" and "affinities" it refuses to discuss, and refuses to say what particular act of Congress will, in its opinion, finally establish the reign of truth, justice, and purity on earth, and drive the male rascals into the great alkaline desert.

Of the 41,000 Chinese in California, 4800 are women, 3000 are children, 1307 are old and decrepid, 80 are in the state prison, 103 are in different gaols, leaving 31,700 active adult males, of whom some 14,000 are in San Francisco; and in the same city there are 2506 Chinese women and 750 children.

Longevity of Women.—The United States' Secretary of Interior mentions in the report he has made on the last financial year that the last surviving American soldier of the revolutionary war died in the year, but that 888 widows of such soldiers still survive and receive pensions.

A Singular Cause of Death.—In the *Californian Medical Gazette* for October, Dr. Thorne details a case of death from hæmorrhage from complete division of the external and internal jugular veins, and the superior and inferior thyroid

and vertebral arteries. The left pleura was also opened, and the cavity was full of blood. The accident was caused by the bursting of a glass bottle while being filled with carbonic acid water—the so-called soda-water of the shops. The gas is injected under a pressure of 125 lbs. to the inch.—*New York Medical Journal*, December.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Scientific Doctor, A. C. P., Old Peter, and others.—Next week.

M.D., L.F.P.S.—We will inquire at head-quarters and let you know.

Obstetricans.—The Dr. Charles Murray mentioned in the report of Mr. Baker Brown's case of intra-abdominal fibroid tumour is Dr. Gustavus C. P. Murray, Physician-Accoucheur to the Great Northern Hospital.

C. H. R., Dublin.—We are greatly obliged to our correspondent for the trouble he has taken in the matter of the chlorodyne formula. The formula he sends, with a very slight alteration, is that we mentioned as Ogden's, and given in Royle and Headland's "Materia Medica."

CHRISTMAS FESTIVITIES FOR THE SICK IN HOSPITAL.

An entertainment was given on Wednesday evening at the Charing-cross Hospital to the patients. R. Few, Esq., one of the trustees and vice-presidents of the Hospital, presided. Many governors and friends of the Hospital with their families also attended. The Board-room was tastefully decorated with evergreens, amongst which various appropriate mottoes and devices were placed. The entertainment was nominally that of a Christmas tree, but it really included much more than is usual on such occasions, music and singing being introduced between the distributions of presents to the patients, nurses, and servants. Those patients who were able to get to the Board-room or to be carried there were present, and those who were too ill to attend had their presents carried to them in the wards. The patients appeared to enjoy the entertainment most heartily. The music by the Misses Alice and Marion Severn and Messrs. Montague Severn and Lovell Phillips was very good. Altogether the evening's amusement was a great success, and reflects much credit upon the chaplain, who arranged it, and the ladies who assisted him in carrying it into effect.

Parent.—The cost is about £200.

Inquirer.—It rests with the General Medical Council, to whom application should be made.

A.B.—There are free scholarships at Charing-cross Hospital. The rules can be obtained by application to the secretary.

DONATIONS TO THE BRITISH MEDICAL BENEVOLENT FUND.

The Treasurer and the Honorary Secretaries of the British Medical Benevolent Fund beg to acknowledge, with thanks, the following sums, which have been forwarded to them as the result of the appeal published in the Medical journals:—

Donations.

	£	s.	d.
"Adolescens"	2	0	0
Badley, J., Esq., F.R.C.S., Dudley	10	0	0
Dale, G. T., Esq., Pembridge-place, W.	2	2	0
Dyer, Dr., Ringwood, per G. C. Jonson, Esq.	2	2	0
Gull, Dr., Brook-street, W.	25	0	0
Jackson, Dr. A., Southsea	3	3	0
Renshaw, Dr. C. J., Ashton-upon-Mersey	5	0	0
Spackman, F. C., Esq., Faringdon	1	1	0
Turner, Mrs. Turner, Avon, nr. Ringwood, per G. C. Jonson, Esq.	5	0	0
Webber, C. S., Esq., F.R.C.S., Upper Berkeley-st. West, W.	2	0	0

Annual Subscription.

Clogg, S., Esq., East Looe	10	6	

Further donations or subscriptions will be duly acknowledged.

Nemo.—The oration was printed and published.

Treatment of Stricture.—Will Dr. W. Cleugh try the experiment and let us know the result?

ALCOHOL AND GOUT.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me to propound a problem—viz., "Why are drunkards free from gout?" I know dozens of human pigs who swill ale, gin, whisky, wine, or brandy, and sometimes all at a sitting, and never have gout, having instead *delirium tremens*. I know many others, who not only were never drunk, but who are strictly temperate, that suffer from gout severely. Amongst these I must reckon a poor man who has been a teetotaller for twenty-two years. His most virulent enemy has never accused Disraeli of drinking to excess, yet he has had more than one fit of *podagra*, and we may say the same of the late Earl of Derby. I ask the question in the interest of the gouty, having an idea—a crude one—if you will, that gout ought not to be treated upon a strict ascetic plan. I know in the same family one brother who is simply a drunken beast, and three who are temperate and meutally above the average; all inherit gout, yet only one of the four has *podagra*, and he is not the tippler. Doubtless every one of your readers knows a similar instance.

To vary my question, let me put it thus—"Why is it that gout is rare among the drunken beasts who abound in every large city, and yet common amongst the intellectual who are temperate or even abstemious?" *Alcoholismus* is very unlike *podagra*. I am, &c. M.D.

⁂ It is not alcohol, or distilled spirits, but ill-fermented and heavy liquors, as beer and port wine, that give gout. The vast majority of gouty subjects encountered in Hospital practice here in London are beer-drinkers.

Will *A Student of Physic and Astrology* send us his name (of course, in confidence)? We cannot publish unauthenticated statements reflecting on any person or persons.

Glove and Sock Poisoning.—The victim from the effects of poisonous dyes in the lining of a glove was a person of entirely sound constitution, and presented not a trace of any morbid diathesis. The hands are still in a frightful plight. We believe he has received compensation from the manufacturers. Dr. Webber brought a patient of his to the office of the *Medical Times and Gazette* who has suffered for some time from acute eczema of the hand. All the skin on the palmar surfaces had become blistered and was peeling off. The feet and lower part of the legs were in the same condition. He attributed it to wearing gloves lined with claret-coloured flannel, coloured by one of the new dyes obtained from the coal tar—aniline—from which a number of very beautiful dyes are obtained. The mordant used to fix the dyes is a preparation of arsenic. This gentleman was naturally very much annoyed by the condition of his hands. Medical officers of to use them for some weeks, and advice, and is worthy of being Oilin[illegible] General had re[illegible]

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The mode of "oili g a gristly stricture" proposed by Sir H. Thompson has, in my hands, answered its intended purpose admirably, and will doubtless do so in those of other Practitioners if it be carried out carefully and in accordance with Sir Henry's directions.

Were Mr. Chenhalls and Mr. Clough to give the method a trial, they would find it perfectly free in practice from the objections they have raised against it in theory. I need hardly add, however, that this does not in any way detract from the merits of their respective proposals.

Lincoln, January 10. I am, &c. T. SYMPSON.

Portraits of Hewson.—The original engraved portrait of this eminent physiologist is so scarce that we never saw but one copy. That was in the collection of Mr. T. M. Stone. It was made from a painting by Vandergucht, and has been admirably re-engraved by H. Robinson for Professor Gulliver's edition of Hewson's works. The original engraving is the more interesting, as the great American philosopher, Dr. Franklin, who was the intimate friend of Hewson, declared it to be an excellent likeness. "There is," says Mr. Gulliver, in the introduction to Hewson's works, p. xix., "an indistinct representation of Hewson's bust in the background of the pleasing picture by S. Medley, in the library at Bolt-court, of the early members of the Medical Society of London, established in 1773, the year before Hewson's death."

VIS MEDICATRIX.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The ancients and moderns also who contend for the existence of this principle as favouring health and resisting disease, I presume, view it in a comprehensive sense as life in opposition to death, and not as an isolated and independent function. When you ask—"How does a cut finger heal?" I think, with many other questions which might be asked, that the existence of such a principle, whether called a natural instinct, vital process, or *vis medicatrix*, is proved. A cut finger cannot be healed by the mere appliances of the Surgeon. A great law of self-preservation pervades all nature, though nature, in very many instances, becomes prostrate, or dies under foes too strong for her. Our senses all resist external aggressive annoyances, and, by the same rule, our internal organs do the same. The elimination theory now set up cannot stand inquiry, it appears to me, without admitting the *vis medicatrix*. Its absence or its paralysis, under divers circumstances of taints, or when correlative changes of healthy forces become altogether morbid, does not affect the question; for if our remedies liberate the oppressed functions and we restore health, the *vis medicatrix* acts with us. I am, &c. QUÆSITOR.

Protoplasm.—The size of the red blood-corpuscles has no relation to the food of the animal. That there is such relation was propounded in this country, we believe originally, by Prof. Owen in the *London Medical Gazette*, Dec. 20, 1839, p. 475. But the inaccuracy of this view was shown in the appendix to Gerber's Anatomy, p. 5. And Prof. Gulliver clearly showed in his ninth lecture, reported in the *Medical Times and Gazette* of January 17, 1863, that the relation of the size of these corpuscles is to respiration and animal heat. The smaller the corpuscles the greater the surface of a given bulk, just as the extent of the aggregate surface of a cubic inch of small shot would be much greater than the extent of the aggregate surface of the same bulk of large shot. And thus, *cæteris paribus*, the high temperature of animals might be inferred from the smallness of the red corpuscles of its blood. The subject is very interesting; scarcely touched on, much less followed to its legitimate conclusions, in our systems of physiology.

CONSUMPTION IN ICELAND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Nothing more forcibly illustrates the difficulties attendant on the propagation of new views, assuming my own to be new and true, than that any one could take up with the vulgar prejudice of which Drs. Leared and Hjaltelin have made themselves the mouthpieces, as to the imagined immunity of Icelanders from tubercular phthisis. What could be more glaringly inconsistent and self-contradictory than the averments of Dr. Hjaltelin? What logician could lend them his assent? In 30,000 cases, he does not say of what, a single tubercle was not to be encountered. Ten per cent. of the deaths in Iceland, avers Dr. Schleisner, are owing to phthisis. No deaths whatever, according to Dr. Hjaltelin, ensue from this cause. Are we to side with Schleisner and common sense, or with Hjaltelin and what is really no sense at all? In 30,000 cases, the latter affirms, there was not an example of tubercle. Who can lend credence to such a statement, unless, indeed, Dr. Hjaltelin's piercing vision could penetrate the bodies of his subjects, or, *mirabile dictu*, he had performed 30,000 autopsies? Such, then, is the halt of insufficing testimony on which

Dr. Leared relies for his all-confident assertions. The advocates of human interests are none too many. Let Dr. Leared, instead of bolstering up pernicious popular delusions, urge the introduction of sound sanitary views and practices. Let him ask the Danish Government to make Iceland a free port, to remit the taxes on salt, timber, and other necessaries, as well as to reconstruct the dwellings of the people in accordance with the dictates of science and humanity. These, with open windows at night (Whymper slept in the open air in Alaska with the thermometer 50 degrees below zero), would at once set free the Icelanders from the plague of tubercle and tubercle-induced maladies. Let him further advise them to get rid of their dogs, cats, and swine, as well as to bury their own daily excreta deep in the soil; so should they get rid of the cysticercus scourge, which, coupled with tubercle, now so sadly preys on their poor vitals. Remove the cause, and you remove the effect. Remove cysticerci, and you get rid of the hydatid disease, *hydatids sygdomer*. Avoid rebreathed, and consequently irrespirable, air, and you free these suffering Icelanders not only from *gin kloft trismus nascentium*, but also from the yet worse inflictions of phthisis and scrofula. Consumption is a perfectly artificial, and, as I hold, perfectly avoidable malady—one only to be put down, as I believe, by the means which for [illegible] strenuously and persistently carried out.

injurious nature. [illegible] am, &c. H. MacCormac, M.D.

so produced are not more numer[illegible]

[illegible] There is no proof from—

Dr. J. N. Vinen; Mr. H. Woolcombe [illegible]ula or [illegible]awford; Dr. S. W. Fisher; Mr. E. Bellamy; Dr. Despine; Mr. S. J. Stratford; Old Peter; Dr. T. Stevenson; Mr. J. Hazard; Dr. Hermann Weber; C. H. R.; Mr. Lawson Tait; Mr. Hardyman; Mr. W. Burnett; Dr. Collins; Dr. Braidwood; Mr. T. Sympson; Dr. Clement; Dr. Edwin Lankester; Dr. J. B. Curgenven; Dr. W. Clough; Dr. Felce; Dr. John Whitmore; Mr. F. Sutton; A Scientific Doctor; M. D.; Dr. T. A. Buck; Dr. Henry Osborn; Mr. W. W. Humby; Mr. C. J. Fox; Mr. J. Chatto; Dr. F. Churchill; Dr. George Johnson; Dr. Ballard; Mr. C. F. Maunder.

BOOKS RECEIVED—

The Westminster Review, No. 73—Report on the Sanitary Condition of the Punjaub, 1868—Despine's Psychologie Naturelle, 3 vols.—Transactions of the Odontological Society of Great Britain—Holmes's System of Surgery, 2nd edition, vol 2—Le Gros Clark's Lectures on the Principles of Surgical Diagnosis, especially in Relation to Shock and Visceral Lesions—Duncan on Aggregation in the Dublin Lying-in-Hospital—Cheadle's Report of the Department for Diseases of the Skin at St. Mary's Hospital, 1868—Report of the Board of Management of the Preston Royal Infirmary.

NEWSPAPERS RECEIVED—

Western Daily Standard—Nature—Auckland Daily Southern Cross—Australian Medical Gazette—Illustrated Midland News—Preston Chronicle—The Trelawny and Public Advertiser—Medical Press and Circular—The Examiner.

APPOINTMENTS FOR THE WEEK.

January 15. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.

Metropolitan Association of Medical Officers of Health, 7½ p.m. Adjourned Discussion on Mr. Acton's paper—"Supposing the Legislature should determine to recommend the Introduction of the Contagious Diseases Act among the Civil Population, would it be possible and feasible to carry out its Enactments in the Metropolis?"

17. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Meeting.

18. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 4 p.m. Anniversary.

Pathological Society, 8 p.m. Dr. Peacock, "Malformation of the Heart—Aneurism of Left Ventricle—Chronic Ulcer of Stomach." Dr. Crisp, "Diseased Brain." Dr. Moxon, "Tubercle of Spinal Dura Mater—Thrombosis of Renal Veins—Primary Hydatid of the Heart." Dr. Down, "Paralysis with Apparent Hypertrophy." Dr. Bristowe (for Dr. Fergus), "Perforation of Vermiform Appendix;" "Cancer of the Ovary," etc.

Royal Institution, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

19. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

20. *Thursday*.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Dr. Wynn Williams, "On Puerperal Fever."

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

21. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal Institution, 8 p.m. Prof. Tyndall, "Haze and Dust."

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 8, 1870.

BIRTHS.

Births of Boys, 1247; Girls, 1184; Total, 2431.
Average of 10 corresponding weeks, 1860-69, 2117·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	838	859	1697
Average of the ten years 1860-69	766·9	777·9	1544·8
Average corrected to increased population	...	...	1699
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	4	14	2	14	...	1	5	5
North ...	618210	2	3	30	1	10	...	...	1	2
Central ...	383321	...	1	16	...	2	...	3	1	...
East	571158	5	11	33	2	15	2	2	6	7
South	773175	1	11	41	...	26	2	7	5	5
Total	2803989	8	30	134	5	67	4	13	18	19

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·450 in.
Mean temperature	45·2
Highest point of thermometer	50·9
Lowest point of thermometer	37·2
Mean dew-point temperature	41·6
General direction of wind	S.W., S.S.W., & W.S.W.
Whole amount of rain in the week	0·79

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 8, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending Jan. 8.	Deaths Registered during the week ending Jan. 8.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2431	1697	50·9	37·2	45·2	7·33	0·79	2·01
Portsmouth ...	122084	12·8	74	60	51·5	36 6	45·2	7·33	0·75	1·90
Norwich	81087	10·9	54	42	49·5	34·5	43·8	6·56	0·47	1·19
Bristol	171382	36·6	121	123	52·1	38·3	45·5	7·50	0·89	2·26
Wolverhampton ...	72990	21·5	35	34	49·2	35·0	43·6	6·45	0·70	1·78
Birmingham ...	369604	47·2	253	215	50·7	36·0	44·2	6·78	0·79	2·01
Leicester	97427	30·4	79	57	50·0	33·0	43·6	6·45	0·85	2·16
Nottingham ...	88888	44 5	46	60	...	...	...	...	...	...
Liverpool	517567	101·3	321	278	53·9	36·9	43·5	6·39	1·05	2·67
Manchester ...	374993	83·6	259	263	51·8	34·0	43·4	6·33	1·48	3·76
Salford	121580	23·5	108	88	52·5	33·0	43·6	6·45	1·34	3·40
Bradford	143197	21·7	117	61	50·5	36·4	43·3	6·28	1·22	3·10
Leeds	259527	12·0	89	150	52·0	37·0	44·4	6·89	0·76	1·93
Sheffield	247378	10·8	202	134	51·0	35·0	43·8	6·56	1 26	3·20
Hull	130869	36·7	89	52	49·0	31·0	41·2	5·11	0·55	1·40
Sunderland ...	94257	19·6	45	42	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	82	84	46·0	34·0	40·6	4·78	1·14	2·90
Edinburgh	178970	40·4	130	128	46·7	35·0	40·5	4·72	1·30	3·30
Glasgow	468189	92·5	435	420	44·6	35·5	39·8	4·34	1·79	4·55
Dublin (City, etc.*)	321540	33·0	153	174	51·5	31·2	42·1	5·62	0·92	2·34
Total of 20 Towns										
in United Kingd'm	7209603	33·6	5123	4162	53·9	31·0	43·2	6·22	1·00	2·54
			Week ending Jan. 8—							
Paris	1889842	...	...	1106	...	...	...	...	...	...
			Week ending Jan. 1—							
Vienna	605200	...	...	284	...	...	28·4	-2·00	...	...
			Week ending Jan. 6—							
Berlin	702437	...	647	398	...	...	34·3	1·25	...	...

The barometrical observations of the week, as recorded at the Royal Observatory, Greenwich, were as follows:—Mean height of the barometer, 29·450 in. The barometrical readings increased from 29·24 in. at the beginning of the week to 29·73 in. on Tuesday, the 4th inst., decreased to 29·59 in. on Wednesday, increased to 29·69 in. on Thursday, decreased to 28·91 in. on Saturday, and was 29·18 in. at the end of the week.

The general direction of the wind was S.W., S.S.W., and W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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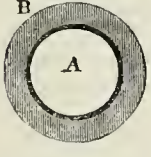
HAINES'

PATENT LEAD-ENCASED BLOCK-TIN PIPE,

Fig 1



FOR

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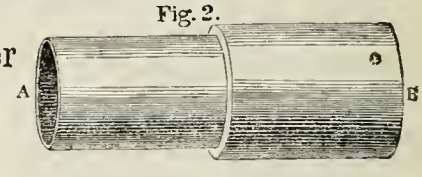
AND OTHER POTABLE LIQUIDS.

SAME PRICE AS COMMON LEAD PIPE.

Fig. 2.



THIS Pipe is endorsed by the highest Medical and scientific authority as the best, and as a most advisable substitute for lead pipe for conveying water to be used for drinking or culinary purposes. A, in Figs. 1 and 2, represents the interior pipe of pure Block Tin, and B the exterior casing of Lead; the two metals composing the Pipe being so united at their surfaces of contact as to constitute a physically homogeneous body, inseparable except by heat sufficient to melt them, and entirely insusceptible to galvanic action.

The following is a copy of a report made on this pipe by Dr. LETHEBY:—

The Laboratory, Medical College,
The London Hospital, London,
23*rd Dec.*, 1869.

Messrs. WALKER, CAMPBELL, & CO., 59, Bridgewater-street, Liverpool.

GENTLEMEN,—*I duly received the specimens of your Lead Encased Block-Tin Pipe, and find on experiment that the coating of Block-Tin completely protects the Lead from the action of water; in fact, pure distilled water, which acts freely on ordinary lead pipe, has no action whatever on the Tin Pipe encased with lead. In this respect, therefore, it is of great hygienic value.*

I remain, yours truly, **HENRY LETHEBY.**

MANUFACTURED SOLELY BY

WALKER, CAMPBELL, & CO.,

59, BRIDGEWATER-STREET, LIVERPOOL.

ORIGINAL LECTURES.

ON APHASIA, CONSEQUENT ON EMBOLISM OF THE LEFT ARTERIA FOSSÆ SILVII.

By Dr. NIEMEYER,

Professor of Clinical Medicine in the University of Tübingen.

III.

We at last come to the third question, "What is the nature of the disease?" The symptoms already discussed are not sufficient for the decision of this question. I cannot often enough repeat that the fact is and must always be the same, no matter from whatever cause the nerve fibres and ganglion cells in a certain part of the brain may have been destroyed and have lost their function. The hemiplegia and aphasia which we see in our patient must be the same, whether there be a sanguineous effusion, an abscess, or some new formation in place of the normal nerve elements at the spot which we have assumed to be diseased, and it is only the etiology, the mode of commencement, and the course of the disease which can afford information as to its nature; in cases of localised disease the participation of other parts of the brain will also, to some extent, assist us in this respect. Taking the points just mentioned into consideration, we shall not only be able to exclude with certainty various forms of localised disease, but we shall arrive at a positive diagnostic result in the case of the patient before us.

We have decidedly not to do with localised inflammation. The primary occurrence of inflammation of the brain resulting in abscess is one of the rarest occurrences; and as, in our case, no injury to the head has preceded the disease—as the patient has also not suffered from otorrhœa consequent on caries of the petrous bone, or from caries of any other of the bones of the skull—as, in short, all etiological points are absent, which, as we learn from experience, almost exclusively cause inflammation and abscess of the brain—this disease may be positively excluded, and the more decidedly so since the apoplectic phenomena which formed the commencement of the disease, and the sudden onset of the paralysis, do not correspond with our ideas of the beginning and course which circumscribed encephalitis commonly assumes.

For the exclusion of new formations we cannot use the absence of etiological conditions as we could for the exclusion of abscess of the brain, because the etiology of new growths lies in such deep obscurity that the appearance of any affection of the brain without known causes itself gives rise to a presumption in favour of new formation; but the commencement and the course of the disease speak with the utmost decisiveness against the existence of new growth. It scarcely ever occurs that apoplexy is the first symptom which, in cases of tumour of the brain, calls attention to the existence of cerebral disease, although apoplectic symptoms may be observed during the course of the disease, suddenly arising by sudden enlargement of the tumour or by extravasation within or around the same. The same may be said concerning sudden appearance of paralysis which is from the first complete. If by any acute enlargement of the tumour or by hæmorrhage within or around it (by which sudden paralysis and apoplexy may occur) complete paralysis should occur, it would in time get better or disappear. Finally, the absence of headache speaks against tumour of the brain, however little value may be attached to headache for purposes of differential diagnosis of diseases of the brain, yet it is seldom or never absent in localised brain disease, which, as a tumour does, gradually increases, exercising an increasing pressure on the sensitive parts of the brain, and particularly on the fibres of the trigeminal nerve within the meninges. There are cases in which the development of syphilitic growths within the brain first manifests itself by apoplectiform attacks; but, as our patient manifests not the slightest suspicion of syphilis, we need not take the trouble to exclude this disease.

In thrombosis of the arteries of the brain apoplectic symptoms and the sudden occurrence of hemiplegia are so often observed as initial phenomena, that Bamberger rightly gives prominence to the extreme difficulty of distinction between thrombosis and hæmorrhage into the brain. The symptoms and course of the disease are not opposed to the assumption that we have to do with a case of thrombosis of the arteries of the left hemisphere resulting in softening of the brain. We had only recently a case in our clinic which almost exactly resembled our present one, with regard to the symptoms as well as its acute onset and its course; it was that of an oldish woman, in whom the post-mortem examination revealed plugging of the left carotid and left arteria fossæ Silvii by an autochthonous thrombus, as well as an advanced stage of softening of the brain, particularly of the left corpus striatum. However, in our present case the dependence of the symptoms on thrombosis of the arteries of the brain can be positively excluded; for autochthonous thrombi are never formed in arteries whose walls are normal, but the fibrine is deposited on the tunica internalis when it projects into the lumen of the vessel, and the thrombus at first attached to the wall increased by repeated coagulation of fibrine until the artery is occluded. The disease of the arterial walls, which gives rise to roughness, is the endo-arteritis deformans, or, as it used formerly to be called, atheromatous degeneration of the walls of the vessels in the widest sense of the term. This only occurs at a more advanced age, and its existence in a girl of 16 must be thrown aside as altogether improbable.

Abundant hæmorrhage into the brain almost always produces an apoplectiform attack, and the paralysis to which it leads is, as a rule, not gradually, but suddenly developed. These symptoms are manifested in the shortest time to the highest degree and to the greatest extent possible. The commencement and course of the disease in our patient up to the present time coincide therefore with the phenomena with which so-called apoplexia sanguinea used to occur. We are not able to exclude hæmorrhage into the left hemisphere with the same degree of certainty as we could spontaneous thrombosis of the cerebral arteries. True, it is the same kind of degeneration of the arterial walls, the endo-arteritis deformans, which leads to an abnormal brittleness in the arteries of the brain, thus forming the basis of most cases of hæmorrhage, in the same way as it leads to roughness of the inner wall and consequent thrombosis; but, besides endo-arteritis deformans, simple fatty degeneration of the arterial coats occurring in ill-nourished anæmic persons, convalescents, etc., of any age, also leads to morbid brittleness of the walls, and under certain circumstances to rupture of the same. Hence, cerebral hæmorrhage is not so exclusively observed at an advanced age, as is the case with the kind of softening of the brain discussed above; it occurs, although rarely, in young persons, and even in children.

The point which prevented our thinking of cerebral hæmorrhage, which led us with confidence to form a differential diagnosis, is the state of the heart. Our patient has passed through two attacks of rheumatic fever; in both attacks many joints have been affected—a fact which, as is well known, in some measure justifies the supposition that endo- or pericarditis has complicated the disease. She herself says that in the first attack she suffered from palpitation, and during the second attack from distress; we could not ascertain whether since the time of last attack she has had subjective symptoms of organic disease of the heart, but the objective result of our physical examination of her chest made it certain beyond question that a serious organic disease of the heart was present, and rendered it more than probable that this affection was the result of endocarditis, which had complicated the rheumatism. The apex of the heart is dislocated outwards, the dulness abnormally widened; at the apex we hear a loud systolic murmur, and the sounds over the pulmonary artery are exaggerated. The systolic murmur at the apex proves that the mitral valve vibrates abnormally, and such abnormal vibration is most frequently met with in those conditions of the valve in which the capability of preventing the regurgitation of blood into the auricles during the ventricular systole has been lost. That there exists in our patient such insufficiency of the mitral valve is evident from the influence which this defect has exercised on the pulmonary circulation and the right heart; the dislocation of the apex outwards, the abnormal lateral extension of the dulness, and the exaggerated pulmonary artery sounds indicate a plethoric condition of the pulmonary circulation and dilatation or hypertrophy of the right ventricle. The defects which physical examination shows to exist in the valves lead us to assume that the cerebral phenomena are not dependent on hæmorrhage, but on occlusion of the left arteria fossæ Silvii by immigration of embolus. We must consider it a rule that in an individual suffering from inefficiency of the valves, a sudden attack of apoplectic symptoms with hemiplegia of the right side should be diagnosed as due not to hæmorrhage into the left ventricle, but to occlusion of the left arteria fossæ Silvii by embolus. Since the vessels have been carefully

examined at every post-mortem examination in individuals who have died with apoplectic symptoms, the cases of so-called intravascular apoplexy have disappeared from our statistics, and we may assume that in those cases of supposed apoplexy of former times, in which no extravasation has been found in the brain at the autopsy, occlusion of the vessels has existed and has been overlooked. That, with the presence of insufficiency, and more particularly if it be combined with a very roughened state of the diseased valves, fibrinous coagula precipitated on the rough surfaces, or pieces of the diseased valves themselves, are very frequently carried away by the blood-current, is manifest from the common occurrence of infarctions of embolic origin in the kidneys, and still more commonly in the spleen. Now if such an embolus, instead of passing on to the kidneys or spleen, be carried into the carotid, and if it occlude that vessel, the lumen of which is too narrow to allow the embolus to pass, this vessel, according to the pretty numerous series of cases of embolism of the cerebral arteries collected, is in by far the majority of cases the arteria fossæ Silvii, and usually the left. This latter fact is explained by the mode of origin of the left carotid being more favourably situated than the right for the ingress of foreign bodies with the blood current. In addition to the frequency of embolism in valvular diseases, the circumstance that all valvular imperfections, with the exception of aortic insufficiency, diminish the pressure on the walls of the systemic arteries, and therefore the tension of their walls, speaks against the supposition of rupture of the coats of a vessel in the valvular disease under consideration. Why in our patient, whose pale appearance and whose small pulse are evidences of an emptiness of the arteries, should a vessel have ruptured in the brain? There is another point which confirms our diagnosis. The apoplectic symptoms and the onset of paralysis were preceded by rigors and vomiting, and on percussion we can discover enlargement of the spleen. This aggregation of symptoms, rigors, vomiting, and splenic enlargement, in an individual with valvular disease, sufficiently warrants, according to my experience, the diagnosis of infarction of the spleen consequent on embolus carried into the splenic artery, and particularly so if the enlarged spleen be tender on pressure—a symptom which could not be observed in our case on account of its having come under our notice a few weeks too late. The rigors, etc., occurring two days before cerebral hæmorrhage would be quite unintelligible, whilst, with coagula or fragments of valves, they are well compatible.

The sudden hemiplegia occurring after plugging of the arteria fossæ Silvii is easily explained; for, at the moment when this artery, originating beyond the great anastomosis of the circle of Willis, becomes occluded, the supply of blood to the respective hemisphere ceases, and, at the same time, the function of the latter also ceases. But the loss of consciousness in the attack—the apoplectic phenomena which experience teaches us nearly always accompany embolism of the arteria fossæ Silvii—are difficult to explain. The most probable hypothesis, to my mind, is that of œdematous swelling of the respective hemisphere, and pressure exercised on the opposite hemisphere by overcoming the resistance of the falx. I have, at least, constantly found œdema to a great extent within the territory of the occluded vessel in cases of embolic plugging of peripheric arteries.

Lastly, when we consider the lengthened period which has elapsed since the occurrence of the embolism, we may express a decided opinion that, within the district supplied formerly by the now occluded arteries, alterations of nutritition have taken place resulting in necrotic softening.

Our final diagnosis, therefore, is—Insufficiency of the mitral valve; extensive necrotic softening of the left hemisphere, in which the corpus striatum and thalamus as well as the third convolution are implicated, consequent on embolism of the left arteria fossæ Silvii, the embolus having been carried away by the blood current from the diseased mitral valve; and infarction of the spleen of similar origin.

An effectual treatment is out of the question, since we have no means of establishing a collateral circulation through the brain and of repairing the necrosis of the anæmic portions of the brain which has decidedly taken place. We are likewise restricted to pure symptomatic treatment with reference to the heart; urgent symptoms calling for immediate remedy, as, for instance, dyspnœa, do not exist. We are, therefore, limited to keeping up the strength of the patient by means of appropriate diet.

During the few weeks after the patient's admission into the clinic, no noticeable change took place in her condition; her appetite was fair, sleep good, and her bowels acted well. She paid attention to what occurred around her, and knew everything that was going on; but the hemiplegia remained unaltered. With regard to the aphasia, a slight change for the better was noticed, the patient being able to utter certain names with some distinctness, but only if the same had been repeated before her. On March 12, the patient was seized with a violent rigor, the temperature, measured in the rectum, increased—39·7° C. (103·46° Fahr.) in the morning, 41·1° C. (105·98° Fahr.) in the evening. She frequently vomited half-digested food; the spleen, which had decreased to nearly its normal size, again enlarged and became painful on pressure. Until March 19 this attack, unmistakably one of renewed infarction of the spleen, passed over without serious damage. In the night of the 20th to 21st, the nurse heard the patient moaning, and, on looking at her, found her to be retching and vomiting slimy masses in a state of perfect insensibility. The paralysis had extended to the left arm and left leg, both of which fell down heavily when raised, and she was unable to swallow. Applications of ice and enemata took no effect. After increasing tracheal gurgling, death occurred at three in the afternoon.

The post-mortem examination (performed by Professor Schüppel eighteen hours after death) confirmed our diagnosis in every particular.

The chordæ tendineæ of the mitral valve, which extend from the posterior papillary muscle to that cusp near the aorta, were torn, and the corresponding part of the valve was fringed with light red masses four to five lines in length, and partly with calcareous concretions.

The left arteria fossæ Silvii was, half an inch from its carotid origin, filled with an irregular calcareous mass, one line in length; the vessel around this embolus and the part beyond it were much contracted. The thalamus and corpus striatum, of the left side, as well as the island of Reil, and the gyrus on the outer side of the island belonging to the third frontal convolution, were flattened, softened, and of an opaque grey-yellow colour. The spleen was considerably enlarged, containing in its anterior and upper part several recent and one older embolic patches.

The fatal catastrophe was the result of a copious hæmorrhage into the left hemisphere, which, on the one side, had broken up the optic thalamus and corpus striatum, opening into the lateral ventricle, and thence extended into the third and fourth ventricles, and, on the other side, it had penetrated the cortex above the corpus callosum, and thus entered the subarachnoid space.

Whether the hæmorrhage was caused by rupture of a vessel in the softened part, or by a fresh embolism, could not be ascertained. The hæmorrhages, frequently abundant and difficult to explain, which are observed to occur within the territory of arteries occluded by embolism, are certainly in favour of the latter view.

ON ATRESIA VAGINÆ.

CLINICAL REMARKS AT THE SAMARITAN HOSPITAL, JANUARY 12, 1870.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to Her Majesty's Household.

GENTLEMEN,—A young woman will be placed on the table directly; and as soon as she is under the influence of the vapour of bichloride of methylene which Dr. Junker is administering, I propose to make an opening in the direction of the vagina, in front of the rectum and behind the bladder, where there is no opening now, into a tumour which can be felt by a finger passed into the rectum, and which I believe to be the uterus greatly distended by menstrual fluid which cannot pass away owing to the vaginal atresia.

I use the term *atresia*, rather than *occlusion* or *obliteration*, because it more accurately expresses the actual condition in this and similar cases. Occlusion or obliteration of a canal almost implies that the canal was once open, but has been afterwards closed. In many cases this has actually occurred. But in others, so far as we can ascertain, the canal never has been open. There has been a congenital defect, an absence of opening—ἀ and τρῆσις.

I only saw this young woman yesterday for the first time, at the request of my colleague, Dr. Day. He had at once detected what I believe we shall find to be the true state of the case; although three other Medical men of considerable experience had considered the tumour felt by the rectum to be a fibroid tumour of the uterus, which by its pressure downwards had occluded the vagina. I am not surprised at this diagnosis, for

the tumour felt by the rectum is extremely hard and nodular; yet I can detect an elastic yielding to pressure which, taken with the fact of the absence of vaginal canal, and the excessive suffering at the menstrual periods, leaves scarcely a doubt in my mind as to the accuracy of Dr. Day's diagnosis.

Now that the patient is well under the influence of the anæsthetic, and held in the lithotomy position, I pass a sound along the urethra into the bladder, and find the bladder pushed considerably higher and more forward than usual. With the index finger of my left hand in the rectum, I feel just beyond the sphincter a hard, round, irregular swelling depressing the anterior wall of the rectum, pushing it towards the sacrum and extending forwards towards the pubes. The labia and nymphæ are well formed. There is no hymen, but about an inch beyond the labia, the vagina—which at the orifice appears to be well formed—ends in a mass of dense unyielding tissue, so dense that the tumour distinctly felt by the rectum cannot be felt through this septum. Keeping my finger in the rectum, pressing my thumb against this septum, and holding this long narrow knife with its back towards the bladder, I very cautiously pass it through the closed end of the vagina into the swelling against which my finger in the rectum is pressing. The knife passes a full inch before resistance ceases, and now you see a little viscid, dark-red, treacly substance oozing down the blade of the knife. I am quite safe, therefore, in enlarging the opening by a notch on either side as I withdraw the knife; and now, on introducing this conical silver canula, you see the thickened menstrual blood passing away. It is so viscid and ropy that I draw it in long cords, like glue, from the open end of the canula; and now that several ounces have come away—and pressure on the abdomen above the pubes helps it away more rapidly—I inject warm water, to which a little iodine has been added, until the whole of the dark fluid is washed away and the iodine solution returns nearly pure. On withdrawing the canula and passing my finger to make a little more dilatation, I feel what I believe to be the dilated uterine cavity; but there is no distinct cervix to be made out. The hard mass through which the finger passes is probably the upper portion of the vagina contracted and blended in one indistinguishable mass with the cervix uteri.

I shall not insert any dilator, or tent, or drainage tube to-day, but the iodine injections will be repeated at intervals of six or eight hours; and, on any sign of the opening closing, either a laminaria tent or a silver canula will be made use of.

These are not very common cases, and it is curious that I had to do an operation almost precisely similar to this last week on a young woman now in the Hospital, and for the third or fourth time. She was sent to me by Sir Henry Thompson some two years ago, and I did what I have done to-day, evacuating some twenty ounces of fluid. For five months she remained quite well, and menstruated regularly; then the vagina closed again, and after three months I had to repeat the treatment. I followed it up by tents, but they caused a good deal of pain. After four months' regular menstruation, we had another closure. So this time I have kept the vagina open by a silver canula, made with flanges, which open and keep it in position. None of the operations on this patient have been followed by any febrile symptoms or much pain. We have kept her two or three days in bed as a matter of precaution, and have used the iodine injections; but she has always been able to return home almost immediately. Even now nothing like a normal uterus can be felt by the rectum, and on passing the finger along the opened vagina it enters an irregular ill-defined cavity, which offers no distinct resemblance to the canal of the cervix or the uterine cavity. Probably the uterus had been so long distended before the vagina was first opened that it has never properly contracted, or there may be some congenital malformation of the uterus contemporary with the vaginal atresia.

In these two cases the closure of the vagina is higher up, more complete, and accompanied by a more abnormal condition of the uterus than in the class of cases most commonly met with in our out-patient rooms and in private practice. The commonest case of all is a mere adhesion of one labium to the other—the labia majora or minora, or both. Sometimes this is noticed in an infant soon after birth—often not until the child is two or three or eight or ten years old, and then a nurse or mother washing the child observes the defect. Nothing can be simpler than the treatment. By firm pressure with a thumb on either side the labia are squeezed outwards—torn apart—and a connecting filamentous medium is seen to separate, with little pain to the patient, and with scarcely a drop of blood. A great service is rendered to the girl, and the mother is relieved of great anxiety. I once saw this condition after puberty leading to retention of the menses, and on separating the adhering labia a well-formed crescentic hymen was seen, over which the menstrual fluid freely escaped. I fancy that many of the so-called cases of *imperforate hymen* are such cases of *atresia vulvæ* as I have just noticed. In early infancy or childhood vaginitis or infantile leucorrhœa is easily set up by inattention to cleanliness. The mucous membrane is blistered, and the apposed raw surfaces unite, just as they occasionally unite after labour, and have to be separated before sexual intercourse can be resumed. But we do occasionally, though rarely, see true cases of an imperforate hymeneal membrane. The membrane completely closes the orifice of the vagina, and prevents the escape of the menstrual fluid, which, retained behind, dilates the vagina, the uterine cavity, and the Fallopian tubes, possibly leading to fatal rupture, peritonitis, or hæmatocele. Sometimes, on separating the labia, the distended hymen appears as a red, tense, fluctuating cyst. But, if I may judge from my own experience, as well as from the literature of the subject, a true imperforate hymen is much less common than either a vulvar or a vaginal atresia, though more common than a true congenital absence of vagina—a very rare malformation, in which the rectum and bladder are only separated by their own walls, an instance of which may now be seen in a woman in this Hospital in Dr. Routh's ward. In this case the urethra is so widely open that it may easily be mistaken for the vagina; and it reminds me of a lady whom I saw some years ago with Dr. Farre, who had been married several years, but whose vagina was almost closed by a dense hymeneal membrane; and it was quite certain that marital intercourse had always taken place by the dilated urethra. We afterwards found that in this lady the vagina and uterus were both perfectly formed. About the same time I saw a young married lady with Dr. Farre to whose parents a written opinion of considerable authority had been given against her marriage on the ground of malformation. As she was engaged to be married, Dr. Farre was consulted. He differed from the opinion which had been given, and, knowing that I was interested in such cases, kindly asked me to see the patient with him. When she was under the influence of chloroform, I made a careful dissection (after a short incision along the raphe of the perineum) in front of the anus, working with a probe and a blunt silver knife, and separating the bladder and rectum from each other for some little distance until we came into a perfectly well-formed vagina and felt a normal uterus. I scarcely remember an instance in which such complete relief to a very distressing family trouble was so readily afforded. The patient married, and has had two children since. In another case, where a marriage was stopped by an occluded vagina, I believed the cause of the occlusion to be a fatty tumour which had formed in the right recto-ischiatic space, and I removed this tumour. It weighed nearly a pound. But the removal did no good further than to admit of a more complete examination, which led to the discovery that there was congenital absence of the uterus. I obtained Dr. Farre's valuable opinion in this case, and we both certified that there was no uterus, and that marriage ought not to be permitted.

Dr. Farre kindly assisted me in the diagnosis of another case which had puzzled me excessively. Dr. Irvine, of Stanmore, brought a young woman to me with a large abdominal tumour; and on making a vaginal examination (as I thought) I could feel no uterus. I then found that my finger had passed quite easily along the urethra into the bladder, and that the vagina appeared to be absent. At least a finger in the rectum and another in the bladder appeared to be separated only by thin layers of membrane. Yet menstruation was said to be quite regular and free from pain. At first I thought that the menstrual fluid must come away through the bladder; but on examination during menstruation we found a minute aperture behind the urethra just in front of the anus, from whence the fluid exuded. Taking this as a guide, I made a very cautious dissection until I came into a well-formed vagina, and felt a normal cervix uteri, which could not be felt through the rectum, as it was concealed by a large fibroid tumour, which grew from the right side and posterior part of the fundus uteri. I mention these cases merely as illustrations of different forms of atresia of the vagina. In works on congenital malformations of the female genital organs, you may find other varieties described.

In conclusion, I will just say a word as to the treatment of the menstrual retention which is dependent on any of the forms of atresia of the vagina. I suppose no one can doubt that a passage for the retained fluid ought to be made, and, if possible, so kept open that subsequent retention cannot occur. We know that this cannot be done without some risk. In some cases acute pelvi-peritonitis, or pelvic cellulitis, or uterine phlebitis, with high fever, pain,

and vomiting, have followed opening of the canal and evacuation of the fluid, and have ended in death. But there are numerous cases on record where death has occurred after a similar train of symptoms before any operation had been performed. The fluid secreted and retained distends the uterine cavity and the canals of the Fallopian tubes, and escapes into the peritoneal cavity, either by rupture of one of the tubes or through the open end of the canal, or in some more indirect way it leads to a peri-uterine hæmatocele or a pelvic abscess; a Graafian vesicle maturates and bursts, it is not grasped by the fimbriæ of the tube, and blood is effused into the cellular tissue between the ovary and the uterus; or there is general congestion of the venous plexuses in the neighbourhood of the uterus, and one of the veins gives way. To some such danger as this any woman is daily and hourly exposed, in whom a mechanical obstruction interferes with the escape of the menstrual fluid, and I think we ought to remove the obstruction as soon as possible.

It has been supposed by some that puncture by the rectum might be safer than opening the closed vagina—that the entrance of air and consequent putrefactive changes in the fluid not completely evacuated would be prevented by the closure of the sphincter ani; and several successful cases have been recorded where this practice has been adopted. I have before now expressed my opposition to this view. I cannot see that the intestinal gases which would enter from the rectum into the emptied cavity can be less injurious than atmospheric air. Of the two I should prefer the air without the fæcal gas. And then the patient is left with a closed vagina—she is simply relieved for a time from the consequences of menstrual retention. Whereas if you open the closed vagina you afford the same immediate relief, and render an additional service which may be a permanent relief. By a little care the opened canal may be kept open; and, if it should close through want of care, it may be reopened. It cannot be done without some risk, but the risk of leaving the patient alone is vastly greater.

ORIGINAL COMMUNICATIONS.

HISTORICAL LETTER ON THE

INTRODUCTION OF ANÆSTHETICS IN DENTISTRY AND SURGERY IN AMERICA,

AND ON THEIR

FIRST EMPLOYMENT IN MIDWIFERY IN GREAT BRITAIN.

By Sir J. Y. SIMPSON, Bart., M.D., D.C.L.,
Professor of Medicine and Midwifery in the University of Edinburgh.

In the last number of the *Medical Times and Gazette* there is copied the chief portion of a letter published at Boston by Dr. Bigelow, senior, and referring to the history of anæsthetics in America and in this country. Early in this year I forwarded the following communication to Dr. Bigelow in reply:—

"Edinburgh, January 3, 1870.

"Dear Sir,—There has been sent to me from America a Chicago newspaper containing a letter of yours which is alleged to have been published in a late number of the *Boston Medical and Surgical Journal*. In this letter you speak of the bestowal upon me, some months ago, by my fellow-townsmen of the rank of an honorary burgess of Edinburgh, and you comment, in terms of bitterness, upon the subject, and upon what I said—or rather upon what I did not say—on that occasion. I feel assured that if you or any one else had felt as nervous and timid as I did on rising to address the public meeting which witnessed the presentation you would not be astonished at anything I did allude to, or did not allude to; or that I failed in adverting to numerous matters to which I might and ought to have adverted.

"The *gravamen* of your charge is this:—In his extempore address to me on the occasion in question, the Lord Provost thought fit to allude to some of my Professional investigations, and specially to those bearing on Anæsthetics, Acupressure, and Hospitalism. He spoke of the application of *chloroform* to the assuagement of human suffering as among the 'greatest Medical discoveries in modern times.' In replying on the spur of the moment to these among other remarks, I stated simply in a sentence the amount to which chloroform was now used for anæsthetic purposes by adverting to the great extent to which it was manufactured by one single firm at the present day. I might, if there had been time, have added evidence of the extent to which it has superseded all previous anæsthetics, by stating the amount of its manufacture by other firms here and elsewhere. But I had many other subjects to advert to besides chloroform, and only a few short minutes within which I was expected to include them all. According, however, to your views, I am very deeply blameable for not taking up a subject which the Lord Provost did not allude to—viz., the history of anæsthesia. You hold that I should have entered to a greater or less extent into some historical notice of anæsthetic agents. The history of them has always taken me a full hour in my University lectures; and in these lectures I have year after year paid heartily every due compliment to the most important part borne in the consummation of the practical application of anæsthetics by America, particularly by the cities of Hartford and Boston, and specially by the energy and genius of Dr. Morton. Surely, however, it would have been sadly out of place on such an occasion, and before such an audience, to have shown that, before I discovered the application of chloroform to anæsthetic purposes, numerous other agents had been previously suggested and used for the same object—as sulphuric ether by Drs. Jackson, Morton, and Marcy; as carbonic acid by Dr. Hickman, in imitation of the experiments performed for ages on the poor dogs at the Grotto del Cane; and as nitrous oxide (an agent extensively employed as a dentist's anæsthetic at the present hour), and first proposed for 'destroying physical pains' during 'Surgical operations' by Sir Humphry Davy. Or should I, in your opinion, have even gone still further back in therapeutic history, and described what, doubtless, as a former lecturer on Materia Medica, you are well acquainted with—namely, the other soporific vapours and measures employed by different olden Surgeons in Greek, Roman, and mediæval times, with the view of rendering their operations painless to the patient? In that way I could have easily shown that the idea of making a patient anæsthetic before subjecting his body to the knife or cautery was a kind of knowledge familiar even to non-professional writers of mediæval and of later times, and that some theological writers—like Origen, for example, in the third century(a)—allude to the artificial production of anæsthesia in Surgery as a well-known practice; while in reference to Scotland I might have cited Abbot Bower, who lived and wrote about the year 1400, within ten miles of Edinburgh, as telling us by what means the anæsthetic Surgery was accustomed to be effected in those days, and what they gave to patients—'secandi, ut possent sine dolore secari;' or I might have adduced the monk Jocceline as alluding, with circumstantial details, to an alleged instance of it in the hagiology of Scotland as early as the sixth century. All this, and much more, might have been mentioned; but all this would have been in my opinion—though not apparently in your opinion—totally misplaced and grievously out of order; just as any historical disquisition on the previous employment of the ligature, torsion, etc., in hæmorrhage, would have been when I briefly alluded to acupressure.

"In the way of a climax, you terminate one of the paragraphs in your letter with the statement that I was not the 'first man' to inhale a vapour to such an extent as to destroy sensibility. Most certainly I was not; and certainly I never was foolish enough to claim to be so. In the course of my investigations I have, however, experimented upon myself with various vapours, the innocuous or the poisonous effects of which upon the body were previously altogether unknown and unascertained; and I have sometimes suffered in consequence. As a Professor of Therapeutics, you must surely be well aware that the first experiment of breathing a vapour to such an extent as to destroy sensibility was made neither in America nor in our own days. Without adverting to the acknowledged fact that it was accomplished with the vapours driven off from hypnotic vegetable extracts by the older Surgeons, from Hugo de Lucca and Theodoric downwards, let me remind you that Sir Humphry Davy boldly—and notwithstanding he had witnessed occasional deaths in animals from it—made the experiment to which you advert many times upon himself in the last year of the last century with nitrous oxide, and further found that headache and other pains disappeared under its influence.

(a) In the proceedings of one of the councils of the English Church held at Exeter in the year 1287, the statement of Origen is cited—"Origenes et dicit—'Quando volunt medici incidere aliquos, vel urere, dant eis bibere aliquem potum, qui facit eos profunde dormire, ita quod amentes fiant, et sic non sentiant.'" (See Wilkins's *Concilia Magnæ Britanniæ et Hiberniæ*, vol. ii. p. 162.)

"About forty years ago Faraday in this country, and Godman in America, showed, as the result of their observation and experience, that the effects of the inhalation of the vapour of sulphuric ether were quite similar on the nervous system to those produced by the inhalation of the vapour of nitrous oxide gas—a truth subsequently proved by many pupils in many chemical and other schools in your country, as well as in mine,(b) by their inhalation of ether. Your remarks, as far as I understand them, imply that it is your belief that Dr. Morton was the 'first man' of 'sufficient courage' to breathe 'a vapour' so as to produce a state of anæsthesia. But you must know as well as I do, from the official documents laid before the Senate of the United States, that this is doubtful even as regards the course of matters in America; for it appears in these documents (1st) that Dr. Jackson avers that he breathed for this object sulphuric ether earlier than Dr. Morton, (2ndly) that before Dr. Morton made the ultimate experiment upon himself in 1846 he made it first upon others, and particularly upon his pupil Mr. Speirs, and (3rdly) that two years previously (or in 1844) Dr. Marcy, of Hartford, had successfully excised a tumour from a man who had been rendered anæsthetic for the purpose by the vapour of sulphuric ether; whilst at that same early date, in the same city, Dr. Horace Wells had extracted teeth from a dozen or more patients rendered insensible by inhaling nitrous oxide gas(c) according to Davy's suggestion.

"There has lately been raised, I am told, in Boston, a monument in commemoration of the employment of anæsthesia in Surgery in that city in 1846. But have the erectors of this monument cut upon it the names of either of your fellow-citizens, Dr. Morton or Dr. Jackson, as the first investigators, or the names of Warren and Heyward as the first Boston Hospital Surgeons who operated upon patients under the influence of sulphuric ether? Or have they generously inscribed upon its sides any allusions to the fact that two years previously anæsthetics had been inhaled successfully in dentistry and Surgery in the neighbouring city of Hartford? I have been assured that there does not yet appear upon the monument the name of a single American chemist, dentist, or Surgeon. Why is it so? You have the monument. Have you not had the man or men?

"You commence the concluding paragraph of your letter by averring that anæsthetic inhalation 'began' (to use your own words) 'in this country [America], and was first used in the extraction of teeth, and afterwards in capital operations in the Mass. General Hospital and in obstetrical practice.' Your words so far affirm that anæsthetic inhalations, besides being first employed in America in dentistry and Surgery, were in your country also 'first used' in 'obstetrical practice.' You must excuse my saying that this last assertion is unaccountably incorrect. The use of anæsthetic inhalations in obstetrical practice was begun and extensively followed out in Edinburgh weeks, or even months, before it was tried in Boston or in America. The first case of midwifery in which sulphuric ether was adopted as an anæsthetic occurred here under my care on January 19, 1847, and was soon afterwards reported in the journals of the day. On March 1, 1847, was published by me in the *Edinburgh Medical Journal* an essay on the subject, containing a series of obstetrical cases, and a longish discussion of the question of the applicability of anæsthetics to midwifery. It was not, however, according to the published evidence of your townsman, Dr. Channing, till April 7 that the first case of the employment of anæsthetics in midwifery occurred in America, and the second did not take place till May 5. (See Dr. Channing's 'Treatise on Etherification in Childbirth,' p. 26.) But before the date of these two cases the practice had been fully established in Edinburgh and elsewhere.

"Perhaps you and I, as parties implicated, are not adequate judges as to whether your statement on this point is candid and creditable, or utterly the reverse. But I willingly leave the decision of this to the feelings and verdict of an honourable Profession.

"You think I am greatly blameable because, in the way of omission, I did not advert to the previous application of sulphuric ether in America as an anæsthetic when the employment of chloroform was referred to. I think, on the contrary, that you are infinitely more blameable, because, without the slightest reason or ground—and in the way not of omission but of deliberate commission—you have in this letter of yours attempted to appropriate for your city and country what indubitably belongs to my city and country—namely, the credit of the first introduction and establishment of anæsthetic inhalation in obstetrical practice.

"I have the honour to be, yours truly,

"To Dr. Jacob Bigelow, Boston." "J. Y. Simpson.

The official documents on the modern history of anæsthesia in America referred to in the preceding letter are contained in a thick but, I believe, unpublished volume of seven or eight hundred pages, and entitled, "Statements supported by Evidence of Wm. T. G. Morton on his Claim to the Discovery of the Anæsthetic Properties of Ether, submitted to the Honourable the Select Committee appointed by the Senate of the United States:" Washington, 1853. There is added a "Report to the House of Representatives of the United States of America vindicating the Rights of Charles T. Jackson to the Discovery of the Anæsthetic Effects of Ether Vapours, and disproving the Claims of W. T. G. Morton to that Discovery." Those interested in the question will find the whole volume full of curious and important matter in the way of memoirs, documents, affidavits, examinations of witnesses, Congress and Senate speeches, etc.

(b) I have elsewhere shown, in treating of the therapeutic history of sulphuric ether, that its employment by inhalation—first pointed out by Dr. Pearson in 1796—in asthma, etc., is mentioned by many writers on Materia Medica before 1846, as by Duncan, Murray, Brande, Christison, Thomson, Pereira, Nysten, Barbier, Wendt, Vogt, Sundelin, etc., in Europe; and its powers of producing effects like intoxication, or like the influence of nitrous oxide gas, are mentioned in America by Godman (1822), Samuel Jackson (1833), Wood and Bache (1834), etc. (See *Anæsthesia, or the Employment of Chloroform and Ether*, p. 100. Philadelphia. 1849.)

(c) When, however, in December, 1844, Dr. Horace Wells conceived the idea that the inhalation of nitrous oxide gas would render dentistry anæsthetic, he was evidently unaware of the previous suggestion of Sir Humphry Davy. The idea occurred to him in consequence of his witnessing some person or persons at a public lecture and exhibition of "laughing gas" at Hartford strike and injure their limbs against the benches without suffering pain. On the subsequent day Dr. Wells himself breathed deeply and fully the gas, and had a molar tooth extracted from his own mouth by Dr. Riggs without pain. This was *the first* anæsthetic operation in America. Thus, in that country the idea itself of producing artificial anæsthesia by the inhalation of nitrous oxide gas, and the reduction of that idea to actual practice, occurred at Hartford on December 11 and 12, 1844. (See official documents, Appendix, p. 91.)

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

(*Continued from page 7.*)

Part III.

SUPPURATION OF THE KNEE-JOINT ENDING IN A NATURAL RECOVERY OR ANCHYLOSIS.

There are few cases of joint disease that cause more anxiety to the Surgeon than suppuration of the knee, for suppuration of the joint means its partial, if not complete, disorganisation; and when such a result takes place, either as a consequence of disease or accident, small hope exists of a recovery with a movable articulation, and great fears rise up respecting the preservation of the limb or even the life of the patient.

As long as suppuration in the joint can be prevented, so long a reasonable hope may be entertained of a recovery taking place either with a movable joint or with a useful stiff one. The cases that have been related demonstrate these points.

When suppuration sets in, the prospects of recovery with a movable joint are very poor, although they are not out of sight. The probabilities of a cure with anchylosis are good, and the possibility of some operative proceeding being demanded to save the limb or even the life of the patient is always imminent.

In the present chapter I propose to consider the two former terminations of suppurative disease of the knee—recovery with movement or with anchylosis—reserving the cases in which operative proceedings are demanded to save life or limb for a separate consideration.

And, first of all, let me briefly relate a case or so of recovery with a movable knee-joint after suppuration. The first case is a good one of its kind, for the suppuration of the joint was clearly due to the breaking down of the pulpy disease of the synovial membrane, which had followed upon the extension of inflammatory mischief from the articular extremities of the bones. Articular ostitis was the primary disease, and the pulpy disease of the synovial membrane secondary, the breaking down of some of this lowly organised inflammatory synovial tissue being the direct cause of the suppuration.

Recovery took place in this case with movement of the joint after the abscess had been opened by a free incision.

Such a result is not one that can be usually looked for; it probably can never take place when the suppuration of the joint is directly due to disease in the articular extremities of the bones, for under such circumstances it is too probable that an abscess in the bone or some necrosis exists to complicate the case and to cause the suppuration, the articular cartilages as a consequence rapidly undergoing degeneration and disease, and recovery with movement becoming nearly an impossibility.

Whenever suppuration takes place in a joint as a result of synovitis or synovial disease of any kind, the hope of recovery with a movable joint may be entertained. Under less severe circumstances it may even be looked for, but even after profuse suppuration it may be seen.

In the following cases such a result was secured:—

Case 26.—*Disease of the Knee-joint ending in Suppuration—Treated by Free Incision—Recovery with Movable Joint.*

William S., aged 13, came under my care in February, 1865, for some disease of the right knee-joint. It had existed for three years, and had appeared with pain of a dull aching character in the part for at least six months before any visible enlargement of the joint had appeared. The swelling gradually increased after that time, and the pain continued. He had been under care for some months at a metropolitan Hospital.

When I saw the boy the knee was much enlarged from a thickening of the synovial membrane over expanded epiphyses. There was increased heat in the joint, and pain on pressure; there was little movement in the articulation, but what existed was smooth. An abscess was clearly forming over the inner condyle of the femur.

A splint was applied to fix the joint, fomentations were ordered to the abscess, and tonics given.

On March 1 the abscess was opened freely, several ounces of unhealthy pus and synovial fluid making their escape. The wound healed kindly, and the swelling of the soft parts over the bone gradually subsided, and on December 15 it was noted that all evidence of disease of the synovial membrane had disappeared. The splint was, however, kept on, as it was thought unlikely that any other result than a stiff joint could possibly be obtained.

On September 3, 1866, the splint was removed, and to the satisfaction of all, the joint was found to have recovered, and to be partially movable. By December 17 the mobility of the joint had much increased, and on January 4, 1867, he was pronounced perfectly cured.

He was seen again on March 22, 1868, with the parts quite well, the expanded epiphyses having much contracted.

On May 2 he hurt the joint by a blow, and some slight indications of mischief reappeared, but these subsided in a few days under rest and fomentations, and in three weeks he was again well. In August, 1869, the joint was still sound.

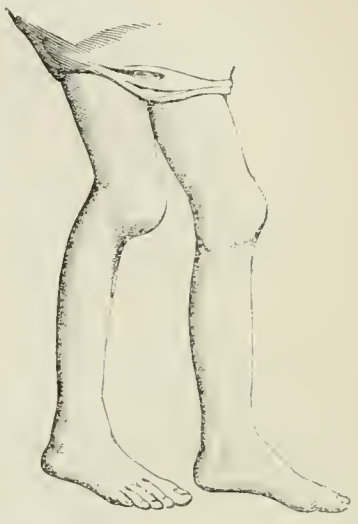
In the case I am about to relate this result was secured under circumstances of singular difficulty. In both knees suppuration, evidently from synovial disease, had taken place, and the boy clearly had had a hard battle for his life. In both, the tibia and fibula were displaced backwards, in one completely, and in the other partially. In both, the patella maintained its natural position, and the ligamentum patellæ passed beneath the condyles of the femur, and thus maintained the bones *in situ*. In both there was good—I had almost said complete—movement in the joint, for extension and flexion were almost complete. The boy walked well, the weight of the body being really supported upon the ligamentum patellæ, but the movements of the joint were attended with a peculiar crackling sensation. The knees were, however, only weak to the boy, for with a stick he could walk steadily. I have given a drawing of this boy's legs, but it displays a far too favourable aspect of their condition.

Case 27.—*Disease of both Knees—Dislocation of the Tibia and Fibula backwards off the Femur after Suppuration of the Joints—Movement and Power to Walk.*

James H., aged 14, came under my care at Guy's Hospital on May 28, 1868, for an abscess in the upper part of his thigh. On looking at his legs a strange deformity became visible, which his mother told me had come on after severe disease of both knee-joints three years previously. At this time he had suppuration in both joints, abscesses forming and discharging posteriorly; they remained open for about two years, and the boy's health was "very bad"—indeed, they had no hopes of saving the lad. After the abscess had healed he got up and began to move his legs, the present deformity having gradually appeared.

The right knee was the most deformed, the tibia and fibula being completely dislocated backwards off the condyles of the femur. These condyles were clearly visible in front, and the head of the tibia could be as easily felt in the popliteal space. The patella was in its natural position, and it was the ligament of this bone that seemed to support the body when the boy stood.

On the left side the parts were very similar, but the dislocation was not quite so complete. In both joints there was free movement, but there was a peculiar crackling of the parts with every movement. The boy walked without a stick with a peculiar gait. The following drawing taken from a photograph will show these points:—



Such results as these cases illustrate are so rare that they are given here as clinical curiosities. They should, however, be in the mind of the Surgeon when treating a case of suppuration of the knee-joint from synovial disease.

We will now pass on to consider the more usual terminations of suppurative joint disease. Such are recovery with anchylosis, with the different forms of malposition of the bones.

(*To be continued.*)

CASE OF

ACUTE MANIA SUCCESSFULLY TREATED WITH HYDRATE OF CHLORAL.

By GEORGE CRAWFORD, M.D., C.M.

On December 2, 1869, I was requested to visit a Mrs. P., aged 56 years, the mother of a large family, who was said to be wrong in her mind, and after doing so found it to be only too true.

Part of the history of this person appears to be as follows:—About fourteen years ago she became insane, and after remaining at home for several weeks became quite unmanageable, and had to be removed to a lunatic asylum, where she was an inmate for nine months, and having partially recovered was taken home, and soon got better, and continued well for nine years. At this time another attack came on equally as severe as the first, when she again had to be sent to the asylum, where she remained for about five months, and then got all right.

Upon these two occasions sleep was almost an impossibility, everything in the shape of medicines having been tried to produce that effect, but without any apparent advantage.

On the present occasion, at the time I was called she had been ill for five weeks, and during that time I was told by her daughter, who had been with her in her previous attacks, had not slept five minutes at any one time, and that her symptoms now are exactly the very same as they were in her former illnesses. Large doses of opium and morphia had been given her to induce sleep and quietness, but instead of these they only seemed to make her more talkative and restless, if worse could be. During the five weeks her appetite remained in a ravenous condition, eating at some times twice the quantity she could do in health. Owing to the constipating effects of

the opium and morphia, she had to be frequently purged with other medicine, but all did not do her a particle of good.

After what had been done in the case, I considered it a good one for chloral, and determined to give it a trial.

I may state that, before giving the chloral, her pulse was 130 per minute, and the temperature of the body very high.

I gave her twenty-five grains in two ounces of water at bedtime for three consecutive nights, and its effects were quite marvellous. The first night she did not sleep much, but the talking was entirely stopped. The second night she slept for nearly nine hours perfectly sound and tranquil, and even during the following day she had several hours of refreshing sleep. The third night was equally as quiet, with as much sleep, and on the following day said she was quite better, and did not require any more of that medicine which made her so sleepy. Immediately after the first dose the pulse began to fall, until at the end of the third day it was down to 90, and during the same time the temperature gradually became natural. She did not complain of nausea, headache, or any other unpleasant feeling during the time she was taking it.

Since that time till now she has remained perfectly well, sleeping at night, taking her food, and attending to all the duties of the household as formerly.

Port Glasgow.

NOTE ON THE

FOOT-AND-MOUTH EXANTHEM—CASE WHERE IT WAS CLOSELY SIMULATED IN THE HUMAN SUBJECT.

By LAWSON TAIT.

This disease seems now to be slowly dying out in South Yorkshire, apparently from want of pabulum. Although we have been using the milk constantly for nearly eight months, no cases of sore mouth have been seen in Dispensary practice which could be in the least degree attributed to the use of milk, nor have I heard of any which have occurred in the private practice of others. Only one case is known of any affection resembling that seen in the mouth of the cow, and that came under my own care.

E. D., aged 5, enjoyed good health until the afternoon of Friday, November 26, when she shivered and became feverish. On Monday she complained of pain in her mouth, and, as her mother states, could not hold her spittle, but "slavered" it over her chin. On Tuesday spots were seen in the mouth, and on Wednesday when I saw her she had numerous irregular patches on the tongue, palate, gums, and mucous surfaces of the lips, perfectly identical with those I had seen in the mouths of cows suffering from the foot-and-mouth disease. Her temperature was 101·4°. My friends Dr. Holdsworth and Mr. M. E. Naylor, M.R.C.V.S., both perfectly familiar with the appearances in the cows' mouths, saw the case with me, and recognised the perfect resemblance. I ordered the mouth to be rinsed with salt and water frequently, and some to be swallowed. On Thursday most of the "sloughs" had separated, leaving healthy surfaces, and her temperature was reduced to 99·6°. On Friday she was perfectly well.

The remarkable point about the case is that, the family having a great dread of being infected by the foot-and-mouth disease, not a drop of milk had been used by any of them for nearly three months previous to the occurrence of this case. The child, who is remarkably intelligent, declared that she had not been near any cows, and had not tasted milk for a very long time—how long she could not say; and the most careful inquiry confirmed her statement.

Wakefield.

An Old Story.—About four weeks ago a little German girl, in Brooklyn, Ohio, was taken with lock-jaw, and in a few days she was thought dead and was buried. On the evening of her burial the mother went to the grave, and, with her ear pressed close to the ground, thought she heard a noise, and believed her child to be moving in her coffin. She immediately procured a spade, and began to dig up the earth. Soon she came to the coffin, and, hurriedly taking it from the earth, opened it, and found the body of her child, nine hours after burial, as warm as if it were living, and lying on its side. She took the child to her house, a physician was called in, and every restorative applied to bring the child to life. It was too late, and in a few hours the body was buried again.—*New York Evening Post.*

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

NECROSIS OF TIBIA INVOLVING THE KNEE-JOINT.

(Under the care of Mr. HUTCHINSON.)

We mentioned a few weeks ago the case of a boy with necrosis of the tibia, in whom Mr. Hutchinson had removed sequestra from the upper part of the bone. The knee-joint was not at the time involved, but about three weeks after the operation it became the seat of acute suppurative inflammation. This told so much on his already enfeebled health, that amputation was deemed the only resort, and that operation was accordingly performed on Wednesday week. The boy was so ill that some anxiety was felt as to his getting through it, but with the help of brandy freely given beforehand he bore it well. The specimen was one of much interest. Mr. Hutchinson had remarked that he had very rarely, in cases in which, with necrosis, joints became involved, found that the disease had made its way directly through the epiphysis. Nearly always a sinus passed over the surface upwards into the joint. This case supplied another illustration of this rule. The epiphysis itself was quite sound. On the outer side of the head of the tibia a periosteal abscess had opened into the tibio-fibular joint, and this chancing, as is not unusual, to be continuous with the synovial membrane of the knee, the latter had become involved. Both these joints contained greenish pus, and their lining membrane was coated with adherent lymph. The boy is doing very well since the amputation.

LARGE POPLITEAL ANEURISM.

(Under the care of Mr. HUTCHINSON.)

In Talbot ward there is an interesting case of popliteal (or tibial) aneurism. The patient, a man of 30, was admitted eight days after he had twisted his left leg, the twist having caused almost immediately a pulsating tumour just below the popliteal space. The aneurism was large, and pulsated strongly; the knee could not be extended. Flexion treatment was first tried, and then compression, first by tourniquet and weights, and afterwards by the digital method. The man suffered a good deal of pain during this treatment, and although the aneurism ceased to pulsate, yet it had enlarged, and still filled out very decidedly, when, after compression, the femoral artery was liberated suddenly. The leg was swollen, and the foot numb from pressure on the nerves. Under these circumstances, believing that the cessation of pulsation was in part due to increase of size, Mr. Hutchinson decided to tie the femoral. After the operation the tumour consolidated and greatly diminished in size (from 14½ to 13 inches). At present it is again increasing, and there are some signs indicative of suppuration of the sac, which latter may probably require to be evacuated. In some clinical remarks on the case, Mr. Hutchinson said that he regretted not having resorted to the ligature in the first instance, and expressed his belief that in not a few cases the modern methods did not on the whole tend to the advantage of the patient. Whilst seeming to be milder than the ligature, they are often attended by risks quite as great. In the present instance the tumour almost ceased to pulsate during the first twenty-four hours, and thus the temptation to persevere became great.

CASES OF ADDISON'S KELOID AND OF ALIBERT'S KELOID.

(Under the care of Mr. HUTCHINSON.)

In the same ward there are two interesting examples of keloid, one of Addison's keloid (morphœa), the other of cicatricial keloid, or more properly, perhaps, keloid of cicatrix. In the latter the disease occurs in the scars of a large burn; some of the bossy indurations are nearly half an inch thick. There is another example of the same malady under the same conditions in the women's ward. The subject of Addison's keloid is a little boy who was sent into the Hospital by Mr. M'Carthy. Both legs are in a parchment condition (scleriasis), and there are patches in other parts. A feature in his case, perhaps unique, is the formation of little pea-like indurations in connexion with the fasciæ and periosteum of subcutaneous

bones. These two varieties of keloid are of course entirely distinct. Respecting that which occurs in scars, Mr. Hutchinson teaches definitely that it is never met with under other conditions, and that it is indeed a growth in scar-tissue, and which cannot possibly occur in healthy skin. He asserts also that, after long duration, it usually gets well spontaneously.

TWO CASES OF STRICTURE OF THE URETHRA TREATED BY THE LAMINARIA DILATOR.

(Under the care of Mr. H. A. REEVES.)

Mr. Reeves has been for some time past engaged in the attempt to supply a mode of dilating strictures of the urethra by laminaria, free from the unpleasant consequences which have hitherto attended the use of this agent. The old laminaria bougies had an unfortunate tendency to swell behind the stricture rather than within it, and the Surgeon was compelled to cut down upon the retained or broken bougie before the urethra could be cleared. In Mr. Reeves's instrument a short bit of laminaria is securely fastened to a small-sized catheter, in such a manner that the whole apparatus may be readily withdrawn when the dilatation is completed. The process is as yet only on its trial, but we are sure that our readers will be interested in its results so far, and we shall hope to publish a larger series of cases in due time.

Edward B., aged 42, was admitted into the London Hospital early in December last, under the care of Mr. Couper, who kindly transferred the case to Mr. Reeves. The patient had suffered from chronic rheumatism, and his father from gout—points which Mr. Reeves thought might bear upon the tendency to urethral disease. When 14 years old he fell astride the jib-boom of a ship, but no ill effects followed. He had suffered from gonorrhœa many times, but not during the past twenty-two years. Ten years ago he first perceived a difficulty in passing water, with gradual diminution in the size of the stream. Three years ago, complete retention coming on, he applied to a neighbouring Practitioner, who passed a small catheter, and afterwards split the stricture. He states that this proceeding was followed by bleeding, but that it cured (?) the stricture. He got on pretty well after this until three weeks before he came to the Hospital, when a small instrument was passed to relieve retention, and was followed by bleeding. Although he could partially empty his bladder, he suffered so much from the straining, and the stream was so small and tortuous, that he sought and obtained admission. The bladder was found much distended, with a very tight stricture in the membranous portion of the urethra, and the propriety of tapping was entertained, but Mr. Couper succeeded in passing a No. 3 instrument, through which sixteen ounces of offensive urine were withdrawn. Three days later, Mr. Reeves took charge of the case, and with some difficulty introduced a No. 2 laminaria dilator. This was kept in the urethra for fifty minutes, and on its withdrawal a No. 10 catheter was passed easily, and allowed to remain in for two hours. The man was discharged next day with a No. 10 catheter, and he has since attended pretty regularly twice a week, a No. 11 catheter passing easily. The cystitis has now almost entirely gone.

The other case was that of an out-patient who had suffered for eight years from a stricture following gonorrhœa. He had been treated by gradual dilatation, but, as usual, the canal had again narrowed. A No. 3 laminaria dilator was passed through the stricture, which was situated at the junction of the bulbous and spongy portions of the urethra, and allowed to remain in for forty minutes, at the expiration of which time it was withdrawn, and a No. 10 catheter passed. He now passes a No. 12 for himself, and he has been cautioned to do this occasionally to prevent the return of the stricture.

Mr. Reeves states that these are but two of a series of cases of organic urethral stricture treated by the above method, and unaccompanied by spasm when the treatment was commenced, and all have been dilated within an hour and a half to No. 10. There has been neither bleeding nor discomfort of any kind, beyond some slight itching as the laminaria has begun to swell. Indeed, Mr. Reeves says that some of the patients who have undergone various other kinds of treatment have expressed themselves in terms of great astonishment and satisfaction at the painless and speedy result, and he considers the plan specially worthy of the notice of Hospital Surgeons, since patients need not be detained more than one or two days, if, indeed, they be admitted into Hospital at all. We understand that Mr. Reeves is shortly to read a paper upon the subject before one of the Medical societies, when the plan will no doubt be discussed in detail.

ROYAL ORTHOPÆDIC HOSPITAL.

OPERATIONS.

The present absurd fashion of high-heeled boots for ladies seems likely to invest the form of club-foot known as talipes equinus with a peculiar interest for Surgeons practising in aristocratic neighbourhoods. Those of our readers who have not seen much Orthopædic Surgery, and who wish to repair their loss in the speediest manner, should pay a visit or two to the Hospital in Oxford-street. They may rely upon a courteous reception by the Surgeons, and they will see more of the ordinary run of this branch of Surgery in a week here than in many years' attendance at a large general Hospital. For instance, on Thursday, January 13, we saw half a dozen club-feet and a hare-lip put right in about half an hour. Mr. Tamplin operated on the first case, a very young infant with a double hare-lip, removing the intermaxillary portion, and bringing together the remaining pared edges in the usual manner. The other patients were attended to by Mr. Brodhurst and Mr. John D. Hill, in the absence of Mr. Adams, and were all cases requiring the division of the tendons of the tibialis anticus and tibialis posticus, or of the tendo-Achillis, excepting one, in which the plantar fascia was divided. The mode of procedure was, therefore, much the same in each instance. The child was lifted on to the table, the foot examined by the Surgeon, a small cut made through the skin with a narrow sharp-pointed knife, a small blunt-pointed tenotome introduced, the faulty tendon cut through, one of the Surgeons holding the foot in suitable position, a pad of lint strapped over the puncture, and a metal splint bandaged to the limb, when the child gave place to the next patient in waiting. There was hardly any expression of pain, although all the patients were children, and no anæsthetic was employed. The nurse in attendance had her table laid out in a manner calculated to lose as little time as possible. Over a long tin hot-water bottle were laid several short strips of plaster, tiny pads of lint were placed in order beside them, a dozen sharp- and blunt-pointed tenotomes with very narrow blades were put out upon a strip of lint, and a few neatly padded splints and small rollers completed the arrangement. The splints used at this Hospital are exceedingly handy. They are made of block-tin, of various lengths and widths, with the corners rounded off, faced with a layer or two of lint, and having calico stitched over all. The advantages of these splints are that they are very light, occupy little space, and are readily moulded to any bent limb without any soaking or warming.

In the wards of this Hospital are many interesting cases of deformity under treatment, to which we shall refer on an early occasion, as we think they will furnish many valuable hints as to the management of the various apparatus used in this class of patients.

VIENNA CLINIQUE.

PERINEPHRITIS WITH EXTENSIVE SUPPURATION; DEATH.—RUPTURE OF AORTA.—LOCAL TREATMENT OF CROUP BY LACTIC ACID.

(Notes from the clinic of Prof. Oppolzer, Vienna.)

Inflammation of the fibrous capsule and the surrounding cellular tissue of the kidney is generally a secondary affection, resulting from inflammation of the kidney substance and ureters, from stone and subsequent perforation; less frequently, it is caused by inflammation in neighbouring parts, as the liver, the psoas muscle, etc. According to our experience, idiopathic perinephritis seldom occurs, and is always difficult to diagnose. Under all circumstances the disease is dangerous, as, if suppuration form, the abscess may open into the bowel, the cavity of the peritoneum, the lungs, or the bladder. The most favourable termination is when the matter makes its way outwards and opens externally.

Case.—The patient, aged 37, of strong build and well nourished, was seized, eight days before admission, with severe pain in the upper part of abdomen, extending backwards towards the spine. His condition on admission was as follows:—Abdomen rather distended and very tender in its upper part; liver and spleen neither enlarged nor painful; temperature of body not increased; thoracic viscera normal; tongue coated; urine normal; bowels not open for five days; pulse 78. A purgative relieved the bowel and the pain. After some days the pain returned, especially in the left lumbar region. Under treatment (opium, etc.) he improved, and pain diminished; but

though the tongue was clean, bowels regular, appetite good, the patient was unable to stand or even to sit up long in bed. Soon appeared a fresh symptom—viz., pain in right thigh.

On February 4, twenty-four days after admission, he was seized with severe pain in region of the spleen, extending to the left iliac crest. The abdomen became so distended as to interfere with respiration, though the pulse was normal and the tongue clean. The distended abdomen and the quickened respiration increased the difficulty of diagnosis, especially as there was no constitutional disturbance. The appetite fair. The bowels regular. The urine was throughout normal, without a trace of pus.

February 19.—Pain came on in left side of thorax, with dulness on percussion over lower lobe of lung. Cough and moist sound. Respiration more distressed. At the same time a small very tender swelling appeared in left lumbar region.

The patient continued much in the same condition till March 11, when he was suddenly seized with severe shivering and pain in the region of the heart and left side of thorax. The cough increased. No breath sounds were now audible over lower part of left lung. Crepitus in right lung. In the left lumbar region was a soft elastic swelling, and œdema of the lower extremities came on. The disease was now diagnosed as a retro-peritoneal abscess in left lumbar region, with pleurisy of the left side.

On March 19 the constitutional disturbance much increased; severe diarrhœa supervened; the appetite fell, and the œdema increased. Towards the end of the month the dyspnœa became more urgent. The extremities more swollen. The swelling in left lumbar region somewhat diminished.

28th.—Suddenly a suffocating cough. The swelling in loin disappeared, and it was evident the abscess had burst into the lung. The suffocation and dyspnœa became worse, and the patient died the following day.

Autopsy.—Skull thickened; brain soft and pale, and its cavities filled with serum. Right lung normal; left pleural cavity contained about two pounds of serous fluid mixed with blood and pus, and the pleura was lined with a blood-coloured exudation. The base of the lung was adherent to the diaphragm. Upon detaching the lower lobe of left lung a rent was seen in the diaphragm, through which the spleen was visible. The lung tissue was compressed, airless, thickened, friable; the heart rather hypertrophied, otherwise normal; underneath the diaphragm was a cavity containing thickened cheesy pus; the walls of the cavity were formed partly by the base of the lung, externally by the eleventh rib, which was denuded of its periosteum, below by the spleen and left kidney. In the peritoneal cavity a moderate amount of serous fluid; the intestines were in parts matted together. The spleen was adherent to the inferior border of the stomach and to the convex surface of the kidney. The left kidney was adherent to the diaphragm, and on separating the adhesion the cellular tissue and the tunica albuginea of the kidney were seen to form part of the wall of the abscess. The peritoneal investment of the kidney was thickened, and adherent to the fibrous tunic, and in some places the adhesion involved the substance of the kidney, in the periphery of which three cheesy deposits the size of a hazel nut were found. The surrounding parenchyma was white, hard, and friable. As similar yellowish-grey deposits were seen in the right kidney adherent to the fibrous capsule, and without any important changes in the surrounding parts, we must regard the affection of the kidneys as the primary disease, and the perinephritis as a secondary affection.

RUPTURE OF THE AORTA FROM ATHEROMATOUS DEGENERATION—SUDDEN DEATH.

The patient, aged 45, of strong constitution, was seized one afternoon with a sudden fainting fit, from which condition he passed into a very excited state, and behaved as if he were demented. On coming to himself, he asked where he was—whether he had been shot—whether he was going to die. Clutching at his neck and chest, he uttered a piercing cry, sank down, and died in half an hour. Sixteen years before he had been kicked on the back of the head by a horse, and his intellect since that time had been somewhat impaired. With that exception he had enjoyed good health. On the morning of the day he died he had been engaged in some moderate exercise.

Autopsy.—A tolerably thick layer of fat beneath the skin all over the body. Some adhesions of the brain membranes, especially towards the base of the skull, where the bone was thickened. Lungs were perfectly healthy. The pericardium contained about a pint and a half of dark fluid and partly coagulated blood. The heart itself was empty, but the left ventricle contained a fine-webbed coagulum, from which some filaments extended into the aorta, and passed thence through an opening of two lines breadth into the cavity of the pericardium. This opening was like a rent, and was situated half an inch above the semilunar valve at the bottom of a sac-like pouch, about the size of a hazel nut, in the posterior wall of the aorta, which was at this point of a dark brownish-red colour. The aorta was distended and flabby; its tissue had undergone atheromatous degeneration, and had lost its elasticity. The inner tunic of the pouch wall was, as it were, eaten away and rough. There was a communication between the pouch and the pericardial sac by means of the rent in the wall of the former. The tissue of the pouch was extremely soft and marrow-like, and the pericardium was thickly coated with a dirty yellow fat. The coats of two large arteries had lost their elasticity, and had undergone fatty degeneration. The abdomen: The omentum and mesentery were loaded with fat; the liver much enlarged, and its edges rounded; the kidneys completely enveloped in fat.

THE LOCAL TREATMENT OF CROUP.

(By ADOLPH WEBER.)

A knowledge of the power possessed by lactic acid to dissolve fibrinous exudations induced the author to try it in cases of croup. At first he used it only after the operation of tracheotomy, partly with a view to keep the tracheotomy tubes clean, and partly hoping that the lactic acid might affect the membranes which extended downwards into the bronchi. The results were so favourable in both respects that he proceeded to try it in severe cases of croup before having recourse to tracheotomy. Since then he has not once had occasion to operate, and has not lost a single case of croup. In some very severe cases in which inspiration and expiration were equally obstructed, and the condition of the fauces indicated an abundant fibrinous exudation in the trachea, the difficulty of breathing was completely relieved within seven to ten hours of using this remedy, and two or three days after no trace of the local affection remained.

During the treatment there was not, as is generally the case, an expectoration of tough membranous sputa, but gradually the whistling barking inspiration and expiration were replaced by distinct rattling noises; the voice, before quite suppressed, began to assume a hoarse timbre, and considerable quantities of loose white frothy phlegm were expectorated during the fits of coughing, until at last the struggle for breath quite ceased, and the disease assumed more the character of a catarrhal affection of the throat.

The treatment consists in the local application of the remedy to the windpipe by means of inhalation. The patient is made to inhale a solution of lactic acid (15 to 20 drops in half an ounce of water) at first every half-hour, and afterwards, when the respiration improves, every hour or every two hours a solution of 10 to 15 drops in half an ounce of water.

The inhalation is discontinued as soon as the dyspnœa has subsided, and to promote expectoration camomile-tea is exhibited.

In using the inhalation care must be taken that the vapour does not affect the eyes or face.

With this treatment was conjoined the internal exhibition of carbonate of soda every half-hour or every hour, which was thought to exert a beneficial effect upon the exudation.

Tavignot's Belladonna Collyrium. — Distilled water 125 and watery extract of belladonna 8 parts. To obtain dilatation of the pupil in central opacity of the cornea, drop two or three drops into the eye every other day. The employment of this collyrium may be continued for almost an indefinite period without impairing the sensibility of the retina.—*Union Méd.*, January 15.

Words instead of Figures in Prescriptions.—A correspondent in the *Union Médicale* points out the danger in French prescriptions of writing the quantities in figures instead of words. The same danger attends in a much less degree our own prescriptions, but will be as great when, as we shortly shall, we adopt the decimal system, unless we attend to the alteration suggested. For a child 18 months old this prescription was made up—viz., calomel 0·05, opium 0·005, sugar 0·25. To be divided into five powders. The chemist mistook the 5 milligrammes of opium for centigrammes, and the child having taken four of the powders died. All mistake would have been rendered impossible by ordering — calomel 1 centigramme, opium 1 milligramme, sugar 4 centigrammes. Send five.—*Union Méd.*, Dec. 30.

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Medical Times and Gazette.

SATURDAY, JANUARY 22, 1870.

ALIMENTATION.

A French Physician has published a book which he entitles "A Treatise on Alimentation," (a) about which we intend to say no more than this—that it contains nothing original, but may be taken as a tolerably fair representation of doctrine upon the subjects of which it treats after an eclectic fashion. But our remarks will have reference to an aspect of the subject of dietetics which writers who, like the one we have just mentioned, claim to write from a scientific stand-point, almost invariably ignore. Ever since the period when Prout and Liebig gave a stimulus to the study of vital chemistry, such prominence has been accorded by authors to the chemical relationships of food and diet, that a non-professional reader might be led to infer that the science of alimentation was nothing more than a branch of the science of chemistry—that given the average waste of the body and the demands made for reconstruction and growth under different circumstances of age, sex, labour, etc., there could be no difficulty in determining for any individual not only how much he ought to eat per diem, but what his food should consist of, so as to supply the proper quantity of fatty, albuminous, saccharine, and saline matters for the preservation of his health and strength. Now it is far from our wish to throw discredit upon investigations of this character, or any doubt upon their practical value, especially when they are applied to the construction of dietaries for public institutions, soldiers, ships' crews, prisoners, Hospitals, and suchlike. We do not see how very egregious errors are to be avoided except by taking good heed to the teachings of chemistry. What we wish to impress is that the science of chemistry is no more the science of dietetics than it is the science of physiology. The wants of the system and the capabilities of disposing usefully of any article of diet cannot be more fully settled for any individual by the system of chemical averages, than can the capabilities of an individual for the performance of any mental or bodily process be determined on any *à priori* grounds whatsoever. More than this: no system of chemical inquiry applied to an individual will give the conclusion sought. In fact, the truth must be recognised and have full weight given to it in any system of dietetics claiming a scientific basis, that individuals do, apart from any *à priori* considerations, when free to choose, actually select for themselves such articles of food and drink in such quantities, actual and relative, as are best fitted for the supply of their needs and for maintaining the health both of body and mind. And they do this by the exercise of a self-regulating power or capacity with which we are endowed in common with the brute creation. For want of a better name we call it "instinct." It is the basis of all our dietetic habits. Chemistry can do no more than endeavour to explain its selections and operation, and to formularise. It is of the first importance to recognise this order of things, and no system of dietetics can truly be said to be scientific which overlooks the very basis upon which the science of alimentation is founded. For, after all, there are many curious things that chemistry cannot explain, and many facts which it cannot formularise, but which must be recognised as scientific truths, nevertheless, by any one who presumes to direct the dietary arrangements of another, whether in health or disease.

Let us take an illustration from the following general rules for the scientific alimentation of young people from the period of weaning to that of puberty, as given us by M. Jules Cyr:—

"The meals ought to be tolerably frequent, but not large—at least four in the day, but not more than two of them with meat; no undiluted wine or *café noir*, no liqueurs or any other kind of exciting drink, little fruit—at least, uncooked fruit—little vegetables, especially if they are of a dry character, little bread at a time, but in nearly equal quantity at each meal, and always with the addition of some other aliment."

Now we hold that, with young people, if the meals are frequent enough and the food plain, with variety enough and choice enough for the maintenance of health, they may mostly be left to determine the quantity required each one for himself. There was a capital rule inculcated in our young days—that everybody should leave off with an appetite; and the excellence of the rule lay in this—that it was quite impossible for a second person to determine when the time for leaving off arrived. And the rule about fruit is most unequivocally opposed to the instinct of the generality of boys and girls—at least, of English ones—and its enforcement in a boys' school without a due supply of pocket-money for "trash" would be effected at the peril of the nearest apple-orchard. And, however naughty, no one can affirm that the boys would be physiologically in error. Nor in like manner can it be maintained that the craving of growing children for sugar which leads them so incessantly into the "tuck-shop" is of the nature of a morbid longing, which should be restrained for their bodies' health. Boys and girls know better; and so also, in the management of the diet of the sick, he would be a most unwise Physician, scarcely deserving of the name, who refused to lend at least a considerate ear to the fancies of the disordered system. A story used to be told in our student days, not delicate enough for repetition, which, however, carried with it a valuable moral, about one of the Gregorys, whose almost invariable broad *habeat* was naturally expected by his class to follow even the most out-of-the-way demand from the occupant of a Hospital bed. We would say to the Medical tyro of the present day, "Go and do thou likewise."

(a) "Traité de l'Alimentation dans ses rapports avec la Physiologie, la Pathologie et la Thérapeutique." Par le Dr. Jules Cyr. Paris: Baillière. 1869.

THE WEEK.

TOPICS OF THE DAY.

The Court of Examiners of the Royal College of Surgeons have presented to the Council of that College a report on the subject of Medical education which is likely to have no small influence on Medical teaching in this country. We may state that the recommendations of the Court have been received and adopted by the Council, and will undoubtedly be carried into practice. The object of the recommendations is to make the system of teaching more practical and thorough, and at the same time to prevent the waste of the students' time and the temptation to non-attendance and idleness occasioned by a curriculum wherein the student is compelled to attend, or at least to pay for, second courses of lectures which are mere repetitions of the first. Another recommendation of the Court of Examiners is to the effect that during every course of lectures class examinations be instituted, and that students

shall be compelled to produce evidence of having attended these examinations. It will be remembered that the Court of Examiners of the Apothecaries' Society have recently issued a like regulation, necessitating examinations in the courses of lectures required by candidates for its licence. We believe, indeed, that a requirement of class examinations is not a new thing on the part of the Royal College of Surgeons—that it was at one time in force, but from some cause, probably one originating with the teachers rather than with the College, has been allowed to fall into abeyance. The members of the Court of Examiners of the College have certainly deserved praise for the improvements which they have voluntarily introduced in their examinations, and these new recommendations evince a determination on their part that the education of the student shall be of a kind which may enable him to pass a good practical trial of proficiency. It has been the fashion in some quarters to depreciate the efforts made by existing examining bodies in the cause of Medical education by referring all recent improvements to the influence of the General Medical Council, or by giving the credit to the teachers and lecturers. It would be easy to show that almost every improvement carried into effect or recommended by the General Medical Council had been before its existence put in force, or at least attempted, by some English examining body. The Society of Apothecaries instituted preliminary examinations long before the Act of 1858. The Royal College of Surgeons, as we have stated, at one time endeavoured to enforce class examinations, and clinical examinations were introduced in this country, we believe, by the examiners of the University of London. The fact is that Medical examination has always been abreast, and often ahead, of Medical education, except by some picked professors at positively energetic schools. It will continue to be so as long as the lecturer's chair is used as a mere stepping-stone to Hospital appointments and practice, and the delivery of lectures and teaching, and the attendance on lectures and learning, are supposed to be identical.

The consideration of Mr. Gay's motion for the fuller and earlier publication of the proceedings in the Council of the College of Surgeons, is postponed until the next meeting of the Council.

We make no apology for repeating the caution we gave last week to the more sanguine friends of the conjoint examination scheme. The benefits of such a scheme are undoubtedly very great, but they are completely contingent on its synchronous and unreserved adoption by the three divisions of the United Kingdom. It is the more necessary to state this clearly, as we hear that both in Scotland and Ireland the proposal is likely to meet with powerful opposition. To the Scottish Universities as Medical Examining Boards, the formation of a conjoint board for Scotland with a high-priced diploma and a high class of examination would mean the next thing to annihilation. At present the Universities have many advantages over the corporations, but if the latter are welded into a new and higher form, these advantages will no longer exist, and the applicants for University degrees will be vastly diminished. The same is true of Ireland, where, moreover, between certain of the examining bodies, there already exists bitter antagonism. No conjoint board can be formed without the sanction of the Medical Council. This is expressly provided in section 19 of the Medical Act of 1858, but the Council is utterly powerless to enforce conjoint action on the examining bodies. Looking at the present constitution of the Medical Council, it is highly probable that they would sanction a conjoint board for England, but it is by no means certain they would endeavour to force the same measure on Scotland and Ireland. It is very doubtful, also, considering the Parliamentary interest which the Scottish Universities can now wield, whether a compulsory Act could be passed through both Houses of Parliament. Under these circumstances, for the Profession to make the attempt in England, whilst the other divisions of the United Kingdom persevere in granting separate and comparatively cheap diplomas, would be simply suicidal. It is chimerical to suppose that the House of Commons would consent to exclude the holders of Scottish and Irish diplomas from practice in England. But by no less a restriction could an expensive and difficult conjoint examination maintain its ground. It is no question of free-trade. It is simply one of higher and lower tariffs. Perfect equalisation and reciprocity are the only conditions on which the scheme is in any degree practicable. Without these, its benefits, great as they undoubtedly are, would be purchased too dearly.

The mortality of London last week was 173 below the estimated average, and the deaths from zymotic disease were 357, the average number being 358. The deaths from scarlatina were 114, twenty less than in the preceding week. Six deaths from relapsing fever were registered; four of these took place at the London Fever Hospital, one in Castle-street, Holborn and one in the Mile-end Old Town district. On the whole, the health of the metropolitan population seems to be improving.

A curious case of alleged fraud on a husband has been recently heard at the Wandsworth Police-court. A man and his wife, named Skeplehorn, were charged by a silk buyer, named Ironside, with conspiring to represent a certain female child to be the child of himself and Mrs. Ironside. The evidence proved that Mrs. Ironside having been disappointed in her hope of presenting her husband with a baby left him suddenly when on a pleasure excursion and returned to London. When there she went to a lying-in Hospital, selected a child whom she thought she should like to adopt, and then proceeded to obtain the help of the midwife of the Newington Workhouse. She prevailed on the midwife to accompany her in a cab to her residence. On the way they purchased "a sheep's pluck" at a butcher's. Arrived at home, Mrs. Ironside announced herself ill, and sent her cousin, who was in the house with her servant, to hear Christy's Minstrels. When the coast was thus cleared, the male defendant arrived with the infant from the lying-in Hospital. "Mother and child" were safely put to bed; the cousin returned and offered her congratulations, and a telegram was despatched to the husband. The child was duly registered by the supposed mother. All this took place in August, 1867, and it was only in March, 1868, that the husband became convinced that the child was not his. The prisoners are committed for trial at the Central Criminal Court.

The fire in Aldersgate-street, which caused the death of two persons, is stated to have arisen from the inflammable nature of a varnish called Brunswick black. This substance is said to be composed of asphaltum dissolved in turpentine. There is a doubt whether it emits an inflammable vapour or whether in this case a spark was dropped into it. The inquest has been adjourned that an analysis of Brunswick black may be made by Dr. Letheby. Brunswick black is not supposed to give off an inflammable vapour at a temperature less than 100° Fahr., and therefore does not come under the Acts of Parliament which provide for the safe storage of petroleum.

The interminable Poor-law inquiry at St. Pancras is proceeding. We quote the following as an illustration of the compliments which have been bandied about during these proceedings:—

"Mr. Bere: Over what period do you allege overcrowding?

"Dr. Edmunds: We do not allege overcrowding at all.

"Mr. Bere: You allege that Dr. Ellis improperly kept patients in the wards in order to cause overcrowding.

"Dr. Edmunds: That we allege to have occurred during the months of September and October.

"Mr. Poland: I shall show that Dr. Ellis reported on the overcrowding from time to time to the Board, and they took no notice of it.

"Dr. Edmunds: That was simply because the guardians did not believe a word Dr. Ellis said."

We must await Mr. Bere's report before we express an opinion on the whole evidence. But whatever may be the weight of the proof which the guardians can bring against Dr. Ellis, it will not be made stronger by reckless accusations.

A question has been brought before the sitting magistrate of the Lambeth Police-court for his adjudication, which, in these days of club attendance, is not without Medical interest. It is whether a person seized with lunacy is entitled to the benefits of a sick club. Mr. Elliott will give his decision on Tuesday next.

Wells, the chemist of Poland-street, has been again charged at Marlborough-street with the offence of procuring miscarriage. It will be recollected that he has only very recently been acquitted by a jury of the same crime.

Mr. Lever, the late manager of the Star and Garter Hotel at Richmond, was a son of the late Dr. Lever, of Guy's Hospital, and was formerly an officer in the army. All attempts to recover his remains have failed. Some bones supposed to be his were found in the ruins after the fire, and were examined by Dr. Palfrey, Mr. Walter Rivington, and Messrs. E. Davis and R. Harris. These gentlemen, however, found that the bones did not belong to a human being.

An inquest has been held on a man who died somewhat suddenly in the Counties Asylum, Carmarthen. A post-mortem examination, which was made four days after death, revealed pleurisy and fracture of eight ribs. It appears that the Assistant-Surgeon suspected that the man's ribs were broken before his death, but it does not seem that the condition was diagnosed. The Assistant-Surgeon, in his evidence, said "that a person quietly kneeling on the patient's chest, the patient resisting, would be sufficient to break his ribs." It is a very remarkable fact that lunatics appear to suffer from broken ribs in far greater proportion than any other class of society. It is a question whether the old-fashioned treatment by a strait-waistcoat would not be preferable to that by "quietly kneeling on the patient's chest."

MEDICAL SOCIETY OF LONDON.

The meeting of this Society, on Monday evening, was a full one. The most important subject brought before it was, like a lady's postscript, unfortunately last in the order of proceedings. We refer to the paper read by Dr. C. B. Taylor, of Nottingham, against the extension of the Contagious Diseases Act to the civil population. Those of our readers who have read Dr. Taylor's recently published pamphlet on this subject can readily form an idea as to the nature of the paper. There was a good deal of truth in some of the arguments which Dr. Taylor advanced; but, as is only too common in matters in which sentiment or feeling is involved, there was also a good deal of loose assertion mixed up with prejudged opinions advanced in the guise of actual facts. Dr. Drysdale expressed his concurrence with the general tenor of the paper, but strongly dissented from the author's views as to the really trifling nature of syphilitic ailments. Then followed Dr. Macloughlin, who, from not having been generally recognised, obtained an opportunity of making a long and utterly irrelevant speech, extolling himself, his sayings, and doings, at the expense of all others in the Profession, but especially of Mr. Skey, late President of the Royal College of Surgeons, whom Dr. Macloughlin stated he had proved to be utterly ignorant of his profession. This excited no little surprise and indignation, in the expression of which Dr. Macloughlin was almost coughed down. He, however, continued sufficiently long to make the meeting aware that he did not believe there was any such disease as syphilis, at which the amazement of those not previously aware of Dr. Macloughlin's peculiar views was very considerable. Dr. Richardson especially seemed wonder-stricken, and, in order that there might not be any mistake about it, requested Dr. Macloughlin to repeat his statement, after which Dr. Richardson's manner clearly intimated that he considered comment unnecessary. The debate was then adjourned till an evening to be hereafter announced. The first case brought before the Society was one of intra-thoracic aneurism, the subject of which attended for examination by the members. We were much struck by the manner in which the poor man went round the room to each member and visitor in turn, raising his chest protector before each to permit of examination. Knowing the hopeless nature of the case, and being extremely doubtful of the propriety of having brought a patient with such an ailment out on a damp, raw night in January, the scene assumed an aspect actually pathetic. Indeed, we think the question as to whether it is fair to a patient in such circumstances to bring him to such a meeting might very suitably be discussed at some future meeting of the Medical Society. We should certainly raise our voice on the negative side. Mr. Lowe's case of gastrotomy in consequence of obstruction of the œsophagus by malignant disease was heard with much interest. The conclusion arrived at was that, if such an operation be performed at all, it ought to be in a comparatively early stage of the disease which may render it necessary.

HOSPITALISM AND CHLOROFORM.

Mr. Clough, who occasionally does us the honour of writing to us from Edinburgh, has just discovered, and made known his discovery to the world at large through the medium of the *Edinburgh Courant*, that the fearful results of Surgical operations in Hospital practice are due to the employment of chloroform. Sir James Simpson takes the trouble to reply to this letter in another to the same journal. Surely, were it not that Sir James was anxious not to allow judgment to go by default, reply was as unnecessary as uncalled for. The proposition is too ridiculous to be, we should have thought, for one moment upheld by a member of our Profession. But what are we to think when Mr. Clough gravely asserts that a certain degree of pain acts beneficially in exciting inflammation conducive to healing action? Here we are carried back at once half a century? Does Mr. Clough, if he be ever troubled with the toothache, eat his dinner the more heartily for its twinges, or does he conceive that inflammation is either necessary or conducive to healing action? Gravely, however, members of our Profession ought to abstain from alarming the public mind, especially when such alarms are groundless, and the suggestions, to say the least of them, foolish. To allay such alarm the figures triumphantly adduced by Sir James Simpson may be beneficial; by the Profession they were not needed.

THE VACCINATION ACT.

An important appeal from the decision of the justices at Huntingdon has just been given, on the statement of a case, by the full Court in the Queen's Bench. A person of the name of Allen had been summoned for neglect in having his child vaccinated, and the justices made an order that the child should be vaccinated within seven days. Having neglected to comply, he was summoned, and fined 20s., which he paid. He then received a second notice, and, on being again summoned for neglect to comply, he produced a certificate from a Medical man in the form prescribed by the Act, to the effect that the child was not in a fit state to be successfully vaccinated. On the hearing of the second summons, it appears that the Medical man who had given the certificate was one of those perversely minded gentlemen who oppose vaccination in every case. The justices, however, fined him again. The appellant contended that, having been once fined, he could not be fined again for the same offence, and, moreover, that he was protected by the certificate produced. The Court, however, took the same view of the case as the justices, and supported their decision. It was held that the Legislature intended by the present Act to

give additional powers to the officers appointed to secure the vaccination of children, and, although the Act was not very explicit as to whether the penalties were to be cumulative, they should take into account the fact that the statute was intended to effect a great public benefit. They were also of opinion that the certificate produced did not bar the proceedings or affect the jurisdiction of the justices to inquire into all the facts. We may, then, regard the law on the point to be now settled, and it remains to be seen whether a drain on the breeches pocket of a practically indefinite duration may not have a curative effect on a perverted conscience. It would, indeed, have been a blot upon our Legislature if the enactments of Parliament could be frustrated by any wrong-headed man who might chance to be possessed of a Medical diploma.

THE HEALTH OF ISLINGTON.

Dr. Ballard in his report on the sanitary condition of St. Mary, Islington, for December, 1869, says that the mortality registered in the parish during the month has been 52 below the mean corrected mortality of the previous ten Decembers. Neither is the amount of public sickness, 3425 cases, to be regarded as excessive. Hooping-cough has not been more than half as prevalent as it was in December, 1868. Scarlet fever has continued to decline, only 50 cases having been recorded in the public practice during the five weeks, against 104 cases recorded during the four weeks of November. The mortality from this disease, however, remains stationary, 68 deaths having been registered during 5 weeks, against 56 in the 4 weeks of November (for comparison the former may be reduced by $\frac{1}{5}$, namely, to 55). This discrepancy is due to the fact that the latter part of the autumn and the winter seasons are most unfavourable to recovery from this disease, especially when the weather is damp and cold. "It furnishes a striking illustration," says Dr. Ballard, "of a truth I have on many occasions endeavoured to impress, that our national mortality records furnish no fair index of the prevalence or fluctuations of certain important kinds of disease, but that it is necessary to supplement them with records of sickness." He has registered 16 fresh cases of relapsing fever, making a total of 33 cases in two months. Two of these cases proved fatal. Fifteen people, namely, the family of a tradesman and his workpeople, narrowly escaped fatal poisoning on Christmas-eve, from a mistake of an oilman supplying half a pound of tartar emetic (tartrate of antimony and potash) in place of bicarbonate of soda, for the preparation of cakes and bread.

THE ANALOGY OF COLOUR AND MUSIC.

Ever since the days of Newton an analogy between colour and music has been more than suspected, though the exactness of that analogy still remained to be demonstrated. Mr. W. F. Barrett, in the course of certain experiments as to the analogy of light and sound, the result of which appeared in an excellent article in the last number of the *Quarterly Journal of Science*, was led to investigate this matter somewhat more closely, and in the last number of that valuable periodical, *Nature*, gives his conclusions to the public. He does not, however, seem to be aware that the subject has been worked out more fully, if not quite so exactly, by Dr. John Denis Macdonald—a name familiar to our Profession for researches of a very different character.(a) From the period of the discovery of the rays constituting the solar spectrum, the curious numerical alliance of these rays with the notes of the musical scale could hardly fail to be perceived, there being seven of each, and their analogy would be still further strengthened by the gradual preponderance of the wave or vibration theory of light. The ratio which the lengths of the waves at the two extremes of the solar spectrum have to each other is usually stated to be 1 to ·57, an interval corresponding to a seventh in music. But by using a prism of higher refracting power than those ordinarily employed—one, for instance of quartz—the spectrum is extended, and the extremes are found to have a ratio of 1 to ·50, exactly an octave. On comparing the intermediate colours and notes, a similarly close analogy can be made out, as may be seen in the following table, where the wave lengths of the colour red and the note C are assumed to be 100:—

Colours.	Ratio.	Note.	Ratio.
Red	100	C	100
Orange . . .	89	D	89
Yellow . . .	81	E	80
Green . . .	75	F	75
Blue and Indigo, mean	67	G	67
Violet . . .	60	A	60
Ultra violet . .	53	B	53
Obscure . . .	50	C_2	50

Ultra violet and *obscure* have not been measured; their ratio has been computed. The importance of this discovery to artists especially will be great. Our knowledge of music as a science is nearly perfect, of colouring a matter of tint or experience. Dr. Macdonald, whose book we recommend to the scientific musicians of our Profession—a goodly number—enters fully into the bearings the one has on the other, but thither we can hardly follow him.

FROM ABROAD.—PRIZES AT THE ACADÉMIE DE MÉDECINE—SMALL-POX IN PARIS—DUPUYTREN.

Last week the Académie de Médecine and Société de Chirurgie both held their anniversary meetings, and distributed their prizes. Before the former learned body M. Béclard delivered a most successful *éloge* on Trousseau, while, at the Société de Chirurgie, M. Trélat performed the same office for M. Laborie, who, if less known to the world at large than the celebrated Professor of the Hôtel-Dieu, seems to have been equally endeared to his colleagues. As we have often said, although of course open to some abuse, this practice of celebrating the merits of those who have helped to push on the car of progress, and in the very scenes of their labours, is touching and appropriate, contrasting somewhat painfully with our own seeming indifference.

The prizes for 1869 awarded by the Académie de Médecine are as follows:—1. The Academy Prize: Diseases of the Cerebellum. No work of sufficient importance to obtain the prize was sent in, but 1000 fr. as a "recompense" was awarded to M. Guerder, an Army Surgeon, for a good compilation and criticism of already known cases. 2. The Civrieux Prize of 1000 fr. (The Clinical History of Insanity with predominance of *délire de grandeur*) is awarded to M. Foville, jun. 3. The Lefèvre Prize (On Melancholia) of 2000 fr. is divided, 1200 being assigned to M. Corlieu and 800 to M. Péon. 4. The Amussat Prize of 1000 fr. to the author for the most important progress in Surgical Therapeutics was not awarded as a prize, but as a recompense, to M. Beaudon, an army Surgeon, for a modification which he has contrived in the Cæsarian operation—the modification being regarded more as paving the way than constituting an actual improvement in Surgical therapeutics. 5. The Godard Prize of 1000 francs for the best memoir on External Pathology has been given to M. Chauvel, an army Surgeon, for his memoir on the Pathological Anatomy of Stumps after Amputation; and an "honourable mention" accorded to M. Larcher for his memoir on the Spontaneous Rupture of the Uterus. 6. The Barbier Prize for the discovery of cures for incurable diseases has, of course, not been awarded, but a recompense of 1000 francs is given to M. Pize for a memoir on the Employment of Perchloride of Iron in Purpura, and a similar one to M. Costallat for the second edition of his work "Etiology and Prophylaxis of Pellagra;" 500 francs being also given to M. Girard for his work "On Cauterising the Cervix Uteri in Obstinate Vomiting of Pregnancy." 7. The Sexennial Argenteuil Prize of 8000 francs for improve-

(a) "Sound and Colour; their Relations, Analogies, and Harmonies." By John Denis Macdonald, M.D., F.R.S., Staff Surgeon R.N. London: Longmans.

ments in the treatment of the diseases of the urinary organs called forth nine competitors, but none of these were deemed worthy of it. To M. Conradi, of Florence, however, a recompense of 5000 francs is accorded for his Clinical Studies on Stricture, and another of 2000 francs to MM. Mallez and Tripier for their Cure of Stricture by Galvano-Caustic. To M. Reliquet an encouragement of 1000 francs is awarded for his treatise on Operations on the Urinary Passages. No awards were made for the Portal and Capuron Prizes; and altogether the result of the year's labours can only be regarded as a very sorry affair, no memoir or book of the slightest importance having been called forth.

Let us hope for a better harvest next year. At all events, here are the subjects:—1. The Academy Prize of 1000 francs: "Intracranial Traumatic Effusions." 2. The Portal Prize, 1000 fr.: "The Condition of the Bones, and especially of the Vertebræ, in Cancer of the Viscera." 3. The Civrieux Prize, 1000 fr.: "Are the Neuroses Diathesic? if Diathesic Neuroses exist, indicate the special characters which each Diathesis imparts to each Neurosis." 4. The Barbier Prize, 3000 fr., for the discovery of cures for diseases reputed incurable, as hydrophobia, cancer, epilepsy, scrofula, typhus, cholera, etc. Encouragements to be given to those who approach nearest the end in view even when not attaining it. 5. The Capuron Prize, 1000 fr.: "The Precursory and Concomitant Phenomena of the Lacteal Secretion." 6. Godard Prize, 1000 fr., for the best work on Internal Pathology. 7. Orfila Prize, 6000 fr.: "Digitaline and Digitalis, their Chemical Characters, the Pathological Alterations that result from Poisoning by them, and the Symptoms they give rise to; what indications are to be drawn from the effects produced on animals by the matters vomited, found in the economy or furnished by analysis?" 8. The Itard Triennial Prize, 2700 fr., for the best work on practical Medicine or applied therapeutics, the work having been published at least two years. 9. The Rufz de Lavison Prize, 2000 fr.: "Establish by sufficiently numerous and exact facts observed on man and animals, passing from one climate to another, the Modifications and Alterations of Functions and Organic Lesions which can be attributed to Acclimatation." 10. The d'Ourches Prize, 20,000 fr., for the discovery of a common and simple means for the certain recognition of the signs of real death, such means being available even by poor ignorant villagers; and one of 5000 fr. for such signs as may require for their interpretation the intervention of a Medical man. 11. The St. Lager Prize of 1500 fr., as a recompense to the experimenter who is able to produce a tumour of the thyroid gland in animals by the administration of substances extracted from the waters or soil of districts where goitre is endemic.

Professor Bouchardat, in a note to the *Revue des Cours*, calls attention to the greater prevalence of small-pox in Paris compared with London, the numbers in seven weeks being 133 to 55. Epidemics of this kind have prevailed in Paris for several years past, and he attributes this chiefly, first, to the accumulation of a great number of the working classes, who have come from the departments without having been vaccinated. A certificate of vaccination is demanded before a child can be admitted into a school, and, awaiting the adoption of compulsory primary instruction, he suggests that such certificates should be required of workmen employed in the public works of Paris. Secondly, the poor small-pox patients are distributed throughout the Hospitals, and it is very desirable that Paris, as well as London, should have its small-pox Hospital, and that in a locality in which there is space enough to also attach a convalescent establishment, as these patients cannot be safely sent to the ordinary convalescent establishments. It may be objected that the accumulation of small-pox patients will generate a specific miasm, which will give rise to formidable outbreaks; but this is an example of the danger of generalising in hygiene too hastily, invoking analogy and neglecting observation. The experience of the London Small-pox Hospital shows that the mortality is not greater within its walls than it is in the town itself, while of the danger of disseminating the subjects of variola among crowded localities there can be no doubt.

The memory of the celebrated Surgeon Dupuytren having been rather severely dealt with lately, Professor Bardinet, of Limoges, a former pupil, has addressed to the *Tribune Médicale* a vindicatory letter, from which we may make an extract. He says: "The early manhood of Dupuytren was most honourable to him, and, although he had his times of difficulty, no one ever heard him complain. Saint-Simon, who was very fond of him, knowing him to be embarrassed, deposited a packet of 200 fr. between his books. He found it, and, running after Saint-Simon, exclaimed, with cold dignity, 'You have forgotten this money at my house.'" "That's true," replied Saint-Simon, taking back his money without insisting, understanding well the noble pride in Dupuytren's refusal. If he refused the money of others, he knew, at least at a later period, how to make a generous use of his own fortune. He gave 50,000 fr. to Pierrebuffière, his native town, for the establishment of a fountain; and, by a donation of 200,000 fr., he founded the chair and museum of pathological anatomy. He did not wait for the end of his life to offer to the exiled King Charles X. a million francs; and so little of the ostentation that he was accused of was exhibited in this act that, besides his own daughter and the person employed as an intermedium, no one but the king knew of the offer. For a long time the proposal remained a secret, the king himself, out of gratitude, at last believing it his duty to divulge it. It has been said that Dupuytren knew he was safe in making an offer that never would be accepted; but it was couched in terms so respectful to the aged monarch that it was very near being so. It is an error also to suppose that Dupuytren died worth seven million francs, it being established in the most formal manner that he did not leave quite three million. Dr. Marx has related of him acts of charity that would have rendered him very popular had they been divulged. Those who recollect him at the Hotel-Dieu well know his infinite kindness to little children, and his interest in them did not always cease with their stay in the Hospital. He frequently placed some of these little beings who had been operated on near his country seat at Courbevoie, under the care of his young daughter, in order that fresh air and a good regimen might re-establish their strength. His ordinarily haughty manners became gentle for the poor and the sick at the Hôtel-Dieu, and, as M. Larrey observes, at his public consultations he advanced towards the aged men, made the old women sit down, caressed the children, and, motioning back the pupils, gave private audience to any of the poor bashful persons who asked for it. He was no courtier of the students, always, on the contrary, exhibiting a severe dignity towards them. But they admired his talent, and could not but feel penetrated with respect for the man who for five hours every morning seemed to forget that he had the most splendid practice in Paris, giving himself up to the Hôtel-Dieu, without being influenced by the complaints and entreaties of his richest patients. His death caused them the deepest regret, and their following at his funeral was magnificent.

CERTIFICATES OF DEATH.—An inquest was held by the Deputy Coroner of East London on Friday last, on a child who had died of convulsions from teething. Dr. Kernot, who gave evidence at the inquest, said that he had received the following letter:—"8, Burdett-road, January 7, 1870. Dr. Kernot.—Dear Sir,—The child (Rugg), 3, Sidney-street, has been under my care for more than a month. I have given a certificate. The cause of death was convulsions from dentition.—R. TALBOT." The mother swore positively that no Doctor had seen the child from its birth, and Dr. Kernot said that she had told him the same. Surely some inquiry should be made into the circumstances attending this case.

THE REV. F. D. MAURICE ON THE CONTAGIOUS DISEASES ACT.

The Rev. F. D. Maurice has addressed to the *Daily News* a recantation of his formerly expressed approval of the proposed extension of the Contagious Diseases Act to the civil population. He first pays a tribute to the tremendous self-sacrifice involved by the appearance of ladies as protesters against the measure, which, as he says, must awaken us to deep and earnest reflections. He admits having been one of those who signed a petition for extending the operation of the Act. He did not do so hastily or in forgetfulness of his office as a clergyman, and adds—"I believed, and I still believe, that the argument respecting retribution for sin, which has had weight with most clergymen, is an untenable one. I believe that I should be guilty of a pious fraud if I told any young man that he would inevitably incur the punishment if he yielded to the temptation. I believe that I should be injuring his conscience both by the falsehood and by setting before him a low motive for abstinence." The morality of the above fully accords with what we have ourselves from time to time advanced in these columns. He then gives reasons for adopting means to cure those diseases which are the results of sexual vice, just as we should try to cure any other disease, and adds—"Strike at the causes by all the moral influences you can use; but the effects ought to come under the cognisance of the Physician." Aware of his own ignorance on the subject, and having a reverence for the benevolence and virtue of Medical men, he felt that any suggestion upon a subject which they understood was entitled to confidence, and had a horror of raising a clerical opposition to it. While admitting that the object of the proposers of the extension of the Act was thoroughly benevolent, there are aspects of the subject which he had not sufficiently considered, and for overlooking which he feels that his deference to the judgment of Medical men does not excuse him. He compares prostitution with slavery, legal enactments to soften the horrors of which system only showed it to be essentially abnormal; "every attempt to make it harmonise with domestic order proved it to be incompatible with that order." He adopts the opinion expressed by the lady protesters against the Act—that it inflicts an injury on the whole sex, and involves the innocent with the guilty. The anti-slavery champions were met by the same opposition as the ladies are at present encountering, but nevertheless have been proved to be right, even according to the judgment of those who measure right by success. He now believes that the question must be faced, "How can prostitution be extirpated?" The instance of slavery shows us that this question is not to be silenced, and leads us to hope against hope that an answer to it may be found. "There should be no fierce and angry denunciations of any suggestion, even if it does not commend itself to our judgment—even if we see moral as well as scientific objections to it."

All honour to Mr. Maurice for this frank and high-toned avowal of what he considers to have been an error. His is not one of those weak minds to which Emerson tells us "a foolish consistency is the hobgoblin." We cannot, however, admit that there is the slightest analogy between prostitution and slavery, in the means likely to be successful in the repression of the former. No legislative act will ever make prostitutes chaste, warm-blooded and thoughtless youth continent, or prurient old age cleanly and respectable. On the abolition of slavery by the expenditure of immense sums on the part of this country to buy out the interests of slave-holders, the deck of every British ship, every foot of soil over which the British ensign waved, by their magic contact proclaimed the freedom of the slave. What will do this for our fallen sisters, or for those of our own sex, through whose lustful appetites, as says Mr. Lecky, woman has been since this earth's earliest days "a vicarious sacrifice for the sins of the people?"

The Australian Meat Question.—Her Majesty has caused a letter to be addressed to Mr. Tallerman, the manager of the Australian Meat Agency, Norton Folgate, which says:—"It will be very gratifying to her Majesty if the colonists of Australia are enabled to furnish a supply of animal food at a price within the reach of the poorer classes of this country, and her Majesty will watch with interest the progress of such an undertaking."

ON THE

USE OF PETROLEUM OR EARTH-OIL AS AN ANTISEPTIC IN THE TREATMENT OF SURGICAL DISEASES.

By J. FAYRER, M.D., C.S.I., F.R.S.E.,
Professor of Surgery, and Senior Surgeon Medical College Hospital, Calcutta.

I have recently been using petroleum, as an external application, on the antiseptic principle, in the treatment of certain Surgical cases, and I subjoin a brief abstract of a few of those so treated, which, I think, so far warrant the conclusion that it has been applied with benefit, as it possesses some, if not all, of the advantages assigned to carbolic acid for this purpose. The petroleum in question was kindly supplied to me by Mr. Goodenough, of the firm of Messrs. Mackillop, Stewart, and Co., and is a dark oily-looking fluid, with a peculiar, though not unpleasant, aromatic odour. It struck me that this hydrocarbon might be as efficacious as carbolic acid for Surgical purposes; and as it is produced in this country and in Burmah, it might be obtained in large quantities and at a smaller cost than carbolic acid, and I have no doubt its use might be extended over a wide range of hygienic purposes. The present memorandum has reference merely to its use as a Surgical application on the antiseptic principle of purifying the air that obtains access to the affected surface. This petroleum is produced, I am told, in large quantities in Assam, and from this source, no doubt, an ample supply might be obtained should it prove, after experiment, to be useful for therapeutic and hygienic purposes.

I have used it undiluted, or diluted with equal parts of oil, or glycerine, and whilst it certainly has some deodorising power, it appears also to have that of limiting suppuration, and of restraining the development of septic miasmata in the discharges, whose decomposition it probably retards.

It is also useful as a stimulating and detergent application in sloughing and ulcerating surfaces, and I have remarked, especially in one case of carbuncle, that it proved most efficacious as an external application. It is not irritating, or very slightly so, to raw surfaces, and I have not heard any complaint made beyond that of slight smarting, when it is applied to granulating and ulcerating wounds. The evidence of its virtue is as yet but limited, but it is such as to suggest the advantage of making further trial of what may prove to be a valuable addition to our Surgical resources, and is one that has the advantage of being produced in the country.

Case 1.—Judonath, aged 30, had a large ulcer above the right ankle with a sinus leading to the bone. The ulcer had been treated with carbolic acid dressing. Since April 30 the earth-oil has been applied, and the ulcer is granulating healthily, is much contracted, and is cicatrising rapidly with very little discharge. The dressing causes no pain.

Case 2.—Darai Sirdar had a cystic tumour, size of a walnut, removed from the root of the nose on April 12. The earth-oil dressing was applied immediately after the operation. The wound had nearly closed without any suppuration on April 25. The integument being redundant, however, a portion was removed on May 4, and this wound dressed with earth-oil. It has healed satisfactorily, and he was discharged about the 18th. A small portion of integument sloughed, but there was almost no suppuration.

Case 3.—Degum, aged 35, admitted on May 10, 1869, with a deep cut in the upper and inner side of the right arm. No arteries of importance were divided. The wound was dressed with petroleum, and it healed rapidly with very slight suppuration.

Case 4.—Rajeshwary, a Hindoo woman, aged 65, admitted with an ulcer of considerable size in the right leg. There was a profuse ichorous discharge, with considerable pain. It was dressed on April 30 with the petroleum. The discharge diminished, and the sore assumed a more healthy aspect. To remove thickening round the ulcer, liquor lyttæ was applied, and after this the ulcer rapidly granulated with very slight discharge.

Case 5.—M. M., an East Indian, admitted May 12, 1869, aged 49, with sloughing of cellular tissue of the palm of the

right hand. Petroleum applied, and the sore assumed very rapidly a healthy action. The wound is now (June 8) nearly healed.

Case 6.—Ghurmo, a Hindoo female, admitted March 29, 1869, with a deep excavated ulcer, exposing necrosed bone near the left olecranon. She was evidently syphilitic. The wound was dressed with petroleum, whilst internally potass. iod. and cod-liver oil were administered. The sore healed rapidly; the diseased bone separated, and she is now nearly well.

Case 7.—Hurrish Chunder, aged 50, had a scrotal tumour removed on March 16, 1869. The wound at first was dressed with the carbolic oil dressing, under which it was doing well. On April 30 the petroleum dressing was substituted, and the wound continues to cicatrise most favourably, and without almost any suppuration.

Case 8.—Mosum Ally, aged 35, had a moderate-sized scrotal tumour removed on April 13, 1869. Carbolic oil dressing was at first used. On April 30 the petroleum was applied; the wound is granulating healthily, and with very little discharge. He is still in Hospital.

Case 9.—Soorendro, aged 10, admitted on May 14, 1869, with iliac abscess. This was opened by making incisions through the abdominal parietes on the same date. The earth-oil was applied as a dressing, and the discharge was very slight. It increased on the 17th, but subsequently diminished, and the boy was discharged convalescent a few days later.

Case 10.—Khosal, aged 35, admitted May 10, 1869, eight days after receiving a very severe sword wound on the left hand; the metacarpal bones, except that of the thumb, were all divided. The wound was suppurating when he came in. He has done well since. A collection of matter formed in the fore-arm, which was let out. But the wound in the hand has cicatrised; other slighter wounds in the arms were dressed in a similar manner, and they have done well.

Case 11.—Chummun, admitted May 8, 1869, for having had his left great toe crushed by a carriage-wheel. Earth-oil was used from the very beginning, and the sloughs separated on March 15, 1869, and the wound cleaned by March 17, 1869, and it is now healing up with little discharge.

Case 12.—Babu Sheik had his ring-finger removed on April 26, 1869, with the head of the metacarpal bone, for an injury. The earth-oil was used since the 29th. There was never any great discharge from the wound, which began to suppurate on the 30th. Granulations were so rapidly growing, that by the 6th most of the iron-wire sutures were seen half imbedded within them. Sutures removed on 7th, and cicatrisation began on the 9th, and he was discharged on the 20th cured. He never complained of much pain from the oil.

Case 13.—J., aged 40, admitted on May 10, 1869, transferred from the Medical wards for an ulcer on the left shin. Earth-oil applied. The sore has contracted with hardly any discharge, and completely cicatrised.

Case 14.—A., aged 30, admitted May 2, 1869, for ulcers in his right leg. Earth-oil used from the beginning, and liquor lyttæ applied on May 10, 1869; the sores nearly healed, though on admission they were each about two inches square. They are now cicatrising.

Case 15.—G. H. M., aged 28, admitted May 6, 1869, for a cut in the popliteal space dividing the hamstring tendons. Earth-oil used from the beginning, and the wound has not yet suppurated; the flaps are becoming adherent.

Case 16.—H., aged 25, admitted May 7, 1869, from an incised wound below his right breast, about six inches long. Dressed with earth-oil from the beginning, and it is now very nearly healed. He complained of but slight burning. The wound completely cicatrised.

Case 17.—A European had a lacerated cut about two inches long on his forehead, which healed in about a week and a half without any discharge.

Case 18.—J. R., aged 39, had two contused wounds on the head on May 12, 1869; they were dressed with the earth-oil on the next day. The sloughs separated on the 17th with some bleeding; the wounds have since been healing with slight discharge.

Case 19.—Acham, a Chinese, aged 34, came for a large carbuncle on his back, of a fortnight's duration; it is full of dark sloughs, and there is much pain. It is dressed with the oil, the discharge has diminished, and the sore looks healthy. He ultimately recovered completely.

Case 20.—A native, aged about 45, was admitted in June, with a wound in the left iliac region. A bull had struck him with his horn, and opened the abdominal cavity. The intestines protruded, but were returned. He recovered rapidly with petroleum dressing, without a single bad symptom.

REVIEWS.

Winter and Spring on the Shores of the Mediterranean. By J. Henry Bennet, M.D., M.R.C.P., late Physician-Accoucheur to the Royal Free Hospital. Fourth edition. London: John Churchill and Sons. Pp. 621.

Second Notice.

In our former notice of this pleasant book, we drew attention to the plan adopted by Dr. Bennet for testing the character of the climate peculiar to the various health resorts in the South of Europe, and endeavoured to show how the vegetation might be accepted as a good index of the kind of weather anywhere prevalent. We now desire to point out certain other features of the work equally valuable and instructive. Dr. Bennet was one of the earliest to advocate the adoption of hygienic measures in the health resorts of southern Europe, and he has never ceased to insist on the importance of such measures, especially for invalids.

An Englishman is in some degree an aquatic animal. Wherever he goes his tub goes with him. He rejoices in huge quantities of water wherein to wash, and despises the minute vessels used for such purposes by Continental folks. But he forgets that his is essentially the land of green fields, that at home water is abundant, whilst the temperature is such that it can be used with comfort all the year round. Further south, water is an article of price; further north, the weather is frequently too cold to admit of any, saving the most robust, to enjoy a winter's bath. Associated with the abundance of water is the system of water-closets, for which Englishmen have a predilection strong as for their tubs; but a water-closet implies drainage if it is to be anything beyond a mockery, and the sewage has to be got rid of. Hitherto in this country the nearest running stream has furnished a solution of the problem; but times are changing, and other provisions have to be adopted. The national system has been carried with our countrymen to Cannes, Nice, Hyères, etc., and what is the consquence? Without a due supply of water, without a proper system of drainage, the system has proved a dead failure, and failure in this matter means death. But, even supposing a proper system of drainage could be carried out, the sewage would most likely be poured into the waters of a tideless sea to fester in the warm sun of that southern clime. Where the inhabitants are few and scattered there is no great difficulty; in many parts the household sewage is collected in a barrel and painfully conveyed to the foot of some half-starving tree and there buried, for fruit-trees will not grow without manure, and where else is this to come from where cattle are scarce? It is in large towns, however, where the difficulty culminates, as in Genoa, Rome, Naples, and Malaga; in these hygiene is a myth, altogether non-existent. Such then being the case, why should people, invalids before all, rush to crowded spots whose inhabitants die off at a fearful rate? As Dr. Bennet well remarks, such would do far better to remain at home on some healthy common, where they can breathe fresh and pure air, than to rush south to horribly unhealthy towns merely for a few degrees higher temperature. On this all-important point Physicians would do well to insist. The climate may be perfection; but, if the invalid is to be perpetually surrounded by agencies which induce disease in the healthy, he had far better stop at home.

The remedy is not very difficult. Dr. Bennet thinks a well ventilated cesspool, well walled to prevent soakage, and furnished with a pump by which the sewage may be periodically removed, is its solution. We cannot quite agree with him, as a cesspool, even when ventilated, is a dangerous article. We must never forget that ventilation is by times master as well as servant. Chimneys well sometimes insist upon smoking, do what we will. Fancy the same thing taking place in the ventilator of the cesspool! That means simply that the dwelling-house is to be aired through the cesspool—an idea not at all pleasant to contemplate. Undoubtedly where water is scarce or not to be readily come at, or where sewage cannot be readily and advantageously disposed of, dry earth should be used. The general introduction of such a system as Moule's would go very far to mitigate the evils now complained of, and to render many places naturally salubrious true health resorts. The services of Dr. Bennet in drawing attention to this great and urgent want are inestimable, and he amply deserves what meed of praise we can bestow upon him.

In conclusion, we would strongly recommend the book to our readers and to those of their patients who may be in search of a winter residence.

FOREIGN CORRESPONDENCE.

NAPLES.

Naples, November 30.

The tide of winter visitors to the south has increased rapidly at Naples during the last two seasons, and the fact that there are certain classes travelling for health who do not find any of the more usual stations suitable has induced your correspondent, after several years' study of the principal Mediterranean climates, to resort to Naples with a view to investigate closely its climate as well as that of various places in its vicinity. Perhaps no city in Europe has been more condemned in a sanitary point of view, and truly no city deserved it more justly than did Naples some four or five years ago. The lethargic powers of the municipality have, however, been at length set into a kind of motion, and the insalubrity of the more fashionable portions has been reduced from the superlative at least to the comparative degree. The awful odours that used to assail the olfactory organs at Chiatamone, where are the principal hotels, have been buried underground; the "open drains" between the favourite gardens of the Chiaia and the sea have been placed in similar seclusion by an extension of the grounds on both sides, and it really is possible to reside in the houses that overlook these pleasure-grounds and the Bay, listening to the bands and wondering when the ever-smoking Vesuvius will treat us to another eruption, with as little inconvenience as one would experience in one of the fashionable squares of London. These remarks do not apply to the interior of the city, where the reproach of Naples still exists unmitigated; but the English visitor never thinks of residing there, and while enjoying from his villa the unrivalled beauties of the Bay he may almost ignore the existence of the great city that lies near.

Our weather during the past month has been lovely, with the exception of some rainy days; we sit generally with our windows open and a bright sun streaming in, and the whole month of November has been like a fine English September, the daily average in the shade being about 64°, the average minimum at night 54°, and the difference between the wet and dry bulbs from six to eight degrees.

The Medical session was inaugurated on November 15, and the number of students in attendance at the University School of Medicine, as well as at that of the Incurabili, and at the clinical lectures at the Ospedale Gesu Maria, is very considerable; indeed, Naples is now considered the first Medical school in Italy, and while it possesses such men as Tommasi, Cantani, Tanturri, Palmieri, etc., it will not fail to maintain a brilliant reputation. It is not surprising in a city of over 600,000 inhabitants, and so fearfully deficient in hygiene, that the Incurabili (not by any means an incurable Hospital) with its 1500 beds, the Gesu Maria with five or six hundred, the Pellegrini, and many minor Hospitals, should have at once been filled to overflowing.

Last week the clinical lectures were commenced at the Gesu Maria by Professor Tommasi. The arrangements of this establishment are admirable, and contrast wonderfully with the usual disposition of Italian Hospitals, where want of ventilation and deficiency of cleanliness are distinguishing features. This building is placed on an elevated and healthy site, high over the town, and commanding a magnificent view. Scrupulous attention is paid to cleanliness and hygiene, and a fresh current of air circulates constantly through the wards. Over each bed is suspended a paper describing the symptoms which its occupant complained of when admitted, and the progress of the case, an admirable exercise and help for the students. There are special wards for obstetrical cases and for skin diseases; adjoining the wards is a chemical laboratory, where there is a separate Professor constantly engaged in the analysis of urines, etc. There is also a library and reading-room, well supplied, for the use of the students. The ward for skin diseases is under the direction of Professor Tanturri, who has adopted all the most recent Continental treatment, and at a time when the recovery of the King of Italy from a serious inflammatory attack has been attributed to his having been bled three times in as many days, it is worthy of record that in this Hospital, depletion, blistering, calomel, and all violent antiphlogistic treatment is completely deprecated. Professor Tanturri's cases are mostly syphilitic; in none of them does he resort to corrosive sublimate or mercurial inunction, as he considers the poor of Naples in too cachectic a condition for such measures. Primary cases he treats almost exclusively with the proto-iodide of mercury; two similar cases accompanied with periostitis he is treating, one with the iodide, the other with the bromide of potassium, in order to compare their results, which he has promised to communicate. In three cases of scabies where the patients object to sulphur in any form, he employs frictions with storax, and an obstinate case of prurigo he is treating with ointment of iodoform. This compound, first brought prominently into notice by Bouchardat, is now employed extensively not only for glandular enlargements, but also, owing to its anæsthetic properties, in skin diseases accompanied with intense pruritus; its odour is much more agreeable than that of chloroform, resembling that of saffron. Moretin and Humbert recommend it for internal use as possessing all the advantages of iodine, of which it contains 90 per cent., without any of its inconveniences. It exercises upon the sphincters a local anæsthetic effect so powerful that defecation is sometimes performed unconsciously after its use; it therefore forms an admirable suppository in cases of tenesmus, hæmorrhoids, etc. Moûtre's formula is—iodoform, powdered, gr. xx.; cocoa butter, ʒ j.; melt and mix for six suppositories. For frictions the ointment is used in the strength of ʒ j. to the ounce of simple ointment.

A remarkable case of lethargy occurred in this Hospital some months ago, very similar to that which is recorded in the *Medical Times and Gazette* of November 27, with the exception that it did not end fatally. A student, who had formerly fought under Garibaldi, and was in receipt of a pension for his services, received one day a notice that, in future, his pension would be stopped. This produced so violent an emotion that he tore up all his books and papers, piled them in a heap, and was found shortly afterwards lying senseless on the floor of his room. He was carried to the Hospital, and remained permanently in a torpid unconscious state. Electricity, douches, every known expedient failed to arouse him, and he continued in this condition for more than two months, food being forced down his throat, and the functions of nature being performed mechanically. One day a mesmeriser presented himself and requested to be allowed to try his art. "Let the fool amuse himself if he likes," said Tommasi. He made several passes *secundum artem*, when, lo! the patient's eyes opened, and he came completely to himself. Symptoms of cerebral excitement began to manifest themselves soon after, and he was sent to an asylum a raging lunatic, where he still remains. I give the account without comment; of the facts there can be no doubt, as all who were connected with the Hospital were witnesses of them.

GENERAL CORRESPONDENCE.

STEDMAN'S TEETHING POWDERS.

Letter from Assistant-Surgeon Grose.

[To the Editor of the Medical Times and Gazette.]

Sir,—Stedman's Teething Powders are much used in this neighbourhood for "fractious" children. Last August I was suddenly called from mess to a child, 6 month old, said to be dying. It was comatose, had contracted pupils, pale face, and cold clammy skin. The child had been given half a Stedman's teething powder—nothing else. An emetic was administered, and it recovered. I write this as confirmatory of Dr. Stevenson's letter in your issue of to-day, that these powders contain morphia, and that, too, in sometimes dangerous quantity. At the time, I had no doubt the symptoms were caused by some preparation of opium.

I am, &c.

Samuel Grose, F.R.C.S., Assist.-Surg. R.M.A.

Royal Marine Artillery Barracks,
Eastry, near Portsmouth, January 13.

THE COMPOSITION OF STEDMAN'S POWDERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reference to Dr. Stevenson's alleged detection of morphia in Stedman's powders, I have to make the following statement:—Morphia is a substance which contains nitrogen as one of its constituents. It must, therefore, be obvious that if a given powder contains no nitrogen it cannot contain morphia. I have accordingly made a careful experimental inquiry, and find that Stedman's powders are devoid of nitrogen,

and therefore they must be devoid of morphia. As chemists will admit, there could not be any more absolute proof of the absence of morphia than the above; and if tests such as those mentioned by Dr. Stevenson indicated the presence of morphia, chemists would consider that the fallacy of those tests had been demonstrated. The production of a purple colour with molybdate of ammonia and strong sulphuric acid is, moreover, a rather common occurrence, and takes place on the employment of a multitude of organic substances as well as with morphia. Among these substances cane sugar is included, and it was doubtless to the reducing action of the cane sugar present in Stedman's powders that Dr. Stevenson owes the production of the purple which he mistook for the sign of morphia.

When cases of suspected poisoning by morphia are taken to the chemists of Guy's Hospital, those gentlemen are, we hope, more acutely alive to the verities of analytical chemistry than they are when so comparatively trivial and unimportant a matter as a patent medicine is before them.

I am, &c.

THE AUTHOR OF THE REPORT ON STEDMAN'S POWDERS.

ON THE INCUBATION OF YELLOW FEVER.

LETTER FROM DR. J. L. PATERSON, OF GUERNSEY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Had your correspondent who, in the *Medical Times and Gazette* of the 4th inst., does me the honour of replying to a few observations of mine, in the preceding number, on the subject of the incubation of yellow fever, done me also the honour of reading those observations a little more attentively, he might, I think, have saved himself the trouble of that reply and me of the present, as well as, what is of more importance, yourself and your readers the double trouble of both.

I began those observations by the remark, "If by incubation is meant the period elapsing between the introduction of a poison into the system and the manifestation of the symptoms of the resulting disease," considering such limitation of the term as the only possible scientific interpretation of an expression otherwise hopelessly indefinite, and therefore, for any useful purpose, meaningless. Starting from that point, I went on to say that, could we mark with the same precision the exact moment when the poison of yellow fever enters the system, as distinguished from the time when a patient palpably to our rude senses becomes or remains exposed to the possibility of contagion, the duration of the period elapsing between that moment and the manifestation of the resulting symptoms would, I believed, be found equally definite and certain, or nearly so, as that between the inoculation of the virus and the outbreak of the resulting symptoms of small-pox; and that, in the same manner as small-pox, pus, or, to bring the case still nearer home, vaccine lymph, may be carried about the person in sealed glass tubes, retaining all the time the power of propagating the corresponding disease, for an indefinite period, without any resulting damage to the person so carrying them, so, I believed, might the virus of yellow fever be carried about the person, in the clothes or otherwise of any one previously coming within the range of its diffusibility, to be gradually dissipated, neutralised, or otherwise rendered inefficient, as might equally, in a thousand ways, happen to the vaccine tubes, or, on the other hand, to be absorbed at periods indefinitely varying, and under laws as yet unknown, into the system of the person so carrying it, or even into the system of any one else exposed to this new centre of infection.

In what hidden corner it is, or in what bodily or other form, we may perhaps never know, that the Medical man who has attended a case of puerperal fever carries about with him, even, as we are assured, for many weeks, the germs of that disease with no more detriment to himself than if it were so much hermetically sealed vaccine lymph, and yet in quantity and in manner sufficient to cause the development of that fearful malady again and again in any one labouring under the peculiar predisposition necessary for the virus taking effect. I also hinted that all of us had heard of, some of us perhaps had known, married ladies who conceived for the first time after fifteen or twenty years of continuous cohabitation with their husbands; none of us, I presume, having ever suspected that the incubation of such babies was much prolonged beyond the canonical nine months.

My remarks were made in reference to a case occurring in the practice of my distinguished friend Dr. Silva Lima, and which had appeared to him, well accustomed though I knew him to be to this train of reasoning, for we have often gone over it together, so remarkable and exceptional that he had found himself obliged to look on it as actually a case of prolonged incubation. I, who am, I confess, more accustomed to look for exceptionality—pardon me the word—in our own experience than in the laws of nature, hazarded, even against his opinion, an explanation which I hoped might yet bring the case under the dominion of old law.

Your correspondent, ignoring altogether this line of argument, has brought forward three additional cases, having no bearing on this the only point really at issue, nor in themselves in any way remarkable, but such as Dr. Silva Lima or myself might have quoted him, from either of our experiences, by the hundred. It is not the fact, it is the scientific explanation of the fact, that is in question.

Your correspondent's rejoinder reminds me not a little of the sluggard's refutation of the Copernican theory of the earth's revolution; he, honest man, rose one morning, much as he lamented, against his custom and his inclination, before the dawn, and with patient watching, the weather being fortunately fine, he had actually with his own eyes seen the sun rise, and now hastened to give the world and Copernicus—I am not Copernicus—the benefit of the fruits of his self-devotion. Your correspondent cannot conceive where I learned the theory of the virulent contagiousness of yellow fever. I will tell him. I had been already in practice for a considerable number of years in Bahia, the ancient capital of Brazil, when in the end of 1849, the first time for upwards of a hundred and fifty years, the yellow fever made its appearance in that empire. It was imported in a vessel, believed to be connected with the slave trade, bringing papers only, as was usual in such cases, from New York, but which, as was afterwards ascertained, had on the way touched at the Havana, where she shipped part of her crew, several men dying of yellow fever on the passage from the latter port to Bahia.

These facts unfortunately came to the knowledge of the authorities only when the epidemic had already obtained a firm footing in the place. The first case I ever saw—and it is the first, as far as we could ascertain, seen in the empire—occurred in the person of a Brazilian boy living over the American ship chandler's store, frequented by the captain, himself a citizen of that country, and his crew. This case terminated fatally on November 3. On the same day I was called to my second case, that of an English clerk, living in the house where the captain slept, and passing habitually the evening in his society. This case terminated in recovery. My third case, and the first in which I recognised the disease, occurred during the convalescence of the second, also in an Englishman, his fellow clerk and living in the same house; this house, however, being at least a mile and a half distant from the residence of my first patient; the connecting link between them being the captain of the vessel, himself in perfect health. This third case terminated also fatally. None of my colleagues had as yet seen any case of the disease. Within a few days, however, many new cases occurred alike in my own practice and in that of other Medical men; in a few weeks the epidemic was general, and in less than eight months almost every man, woman, and child, in Bahia, with a population of considerably over a hundred and fifty thousand, had contracted the disease. I say almost very advisedly, for the exceptional immunity was certainly under one per cent. Would your correspondent desire a disease more virulently contagious? for after the exhaustive articles from the pen of the late Dr. Macwilliam, that appeared now a good many years ago in the pages of this journal, even he will hardly feel inclined, against, I may say, the unanimous opinion of every man of any eminence in the Profession who has written on the subject since that date, to deny its contagiousness. Nor, as this is entirely alien to the question at issue, will I now, at all events, trouble either you or your readers with any views or experience of mine on the subject. They say the postscript of a lady's letter is generally the important part of such document—your correspondent is evidently not a lady. Did Dr. Silva Lima or did I assert that the black vomit contains the contagious principle of yellow fever? Or did any sane Medical man ever imagine that, even if it did, it would of necessity develope the disease in any pig, human or other, who should be guilty of the disgusting bravado of drinking it, any more than his swallowing small-pox matter would necessarily give him that disease? Are we sure that even the poison of the rattlesnake itself would produce any deleterious results, if attempted to be so introduced into the system?

So far are these opinions of mine on the subject of incubation, as you are well aware, from being novel, that were I not on ground so traversed and trodden that I have a right to consider

it as the Queen's highway, I might far more justly be accused of plagiarism than of innovation. Fortunately for your readers, I am here at a distance from books, and can quote in support of such opinions only one writer; they themselves will easily supply the deficiency. Dr. S. G. Jones, in the first volume of Reynolds's "System of Medicine," makes the following observations in regard to the incubation period of scarlatina:—"It is easy to fix the least possible duration (within a few hours) of the incubation period, compared with the difficulty or the impossibility of determining, by mere observation, the maximum. That the incubation period may last no more than twenty-four hours is certain (Trousseau); but of a person who should adduce an example of an incubation lasting more than a week, it were only fair to ask if all possibility that the infection was indirect and mediate be excluded. Suppose, for instance, that Hildenbrand, not at the end of eighteen months, as related above, but of one month, had put on his infectious dress, and had been infected, incubation of at least one month, reckoning from the time of visit to the primary source of the contagion, would have been inferred." As to my statement that the period of three days may be taken as the fair average of the incubation period, conformable as it is to the period given it by Sir William Pym and many other observers, I may be allowed also to remark that the calculation on which I based it was formed from the careful comparison not of three nor of thirty, but of many hundreds—nay, were I inclined to boast on such a subject, thousands of cases occurring in my practice, and extending over a period of twelve years.

I am, &c. JOHN L. PATERSON.

Guernsey, December 5.

VACANT PHYSICIANSHIP AT ST. BARTHOLOMEW'S HOSPITAL.

LETTER FROM DR. ROBERT MARTIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Be so good as allow me to say, in your next number, that I am not a candidate for the vacant Physiciancy at St. Bartholomew's Hospital. I am, &c. ROBERT MARTIN.

6, Old Cavendish-street, January 16.

PHTHISIS IN ICELAND.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the discussion which has taken place between Dr. Leared and Dr. MacCormac respecting the existence of phthisis in Iceland, I do not remember to have seen the following quotation from Drs. Carpenter and Power's "Principles of Physiology:"—"The dwellings of the great bulk of the population of Iceland seem as if constructed for the express purpose of prisoning the air which they contain. They are small and low, without any direct provision for ventilation, the door serving alike as window and chimney; the walls and roof let in the rain, which the floor, chiefly composed of hardened sheep dung, sucks up; the same room generally serves for all the uses of the whole family, and not only for the human part of it, but frequently also for the sheep, which are thus housed during the severer part of the winter. The fuel employed in the country districts chiefly consists of cow dung and sheep dung caked and dried, and, near the seacoast, of the bones and refuse of fish and seafowl; producing a stench which, to those unaccustomed to it, is completely insupportable. In addition to this, it may be mentioned that the people are noted for their extreme want of personal cleanliness; the same garments (chiefly of black flannel) being worn for months without even being taken off at night. Such an assemblage of unfavourable conditions, combined with the cold damp nature of the climate, might have been expected to induce tubercular diseases of various kinds; but from these the Icelanders appear to enjoy a special exemption." I am, &c. S. W.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The annual report of this charity shows that the number of in-patients admitted during the year 1869 was 1215; 1074 of these were beneficially treated, 95 received no benefit, 3 died, 12 were discharged at their own request, 3 cases were unfit for the Hospital, 10 were discharged for breach of rule, and 18 remained at the close of the year. The number of out-patients during the year was 246. The average cost of every in-patient was £1 12s. 9¼d. for three weeks.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JANUARY 4, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

ANNUAL MEETING.

DR. MOXON read, on behalf of the Morbid Growth Committee, a report on Dr. Leared's specimen of Diseased Lung. They found the mass to consist of a rapidly growing soft sarcoma, with intense powers of local infection.

Dr. PAYNE brought forward a specimen illustrative of Cerebro-spinal Meningitis, occurring in a man aged 27. He was brought to the Hospital in a dying state. The dura mater was found not much changed. There was no fluid in the arachnoid. The sub-arachnoid spaces contained greenish lymph round the vessels. The pia mater was injected at the top and base of the brain, not much at the sides. The same conditions existed in the cord, but its substance appeared unaltered. The disease had lasted only a short time. The subject had been a hard drinker. Five days before death he had complained of headache, but had got better. Forty-eight hours before death he was picked up in the street vomiting; he became delirious, and, when brought to the Hospital, was quite unconscious. The temperature was high. His kidneys were diseased, many tubes being blocked with epithelium.

Dr. DICKINSON fancied that, if the cord was more frequently examined, marks of meningitis would more often be found. He had seen four cases of cerebro-spinal meningitis at the Children's Hospital; they had no alliance with the epidemic fevers.

Dr. CLAPTON exhibited a specimen of Ruptured Auricle. The case was remarkable clinically. The patient was the wife of a publican, aged 61, and had been healthy. Latterly there had been symptoms of cardiac mischief and some jaundice. When seen she had difficult breathing and palpitation, and a loud harsh murmur was heard. Then followed a flapping and next a rushing sound. Next moment the sounds had gone, and the woman was apoplectic. The lungs were found to be healthy. There was some clear serum in the pericardium. The heart was slightly fatty, and there was a rupture of the left auricle just above the auriculo-ventricular opening. There was no trace of fibrinous deposit on the valves. The clot had been entirely carried away. In 1863 Dr. J. Ogle recorded a similar case.—Specimen referred to Drs. Moxon and Beigel.

Dr. SEMPLE exhibited a specimen of Congenital Malformation of the Heart in a child ten months old. The child was brought as a patient when about three months old, suffering from cyanosis. No treatment was recommended, and no hopes of improvement were entertained, but the child lived till about ten months old, when death occurred without any remarkable symptoms. The body was thin and emaciated, but the only morbid appearance discovered was some red hepatisation of the lower lobe of one of the lungs. The heart presented the following conditions:—The right and left auricles communicated by a patent foramen ovale. The left ventricle was small, and presented two openings—namely, the auriculo-ventricular, and a round opening through the septum ventriculorum. This latter opening was of about the size of a large goosequill, situated at the upper part of the ventricular septum. The right ventricle was larger than the left, and presented three openings—namely, the interventricular opening just described, the auriculo-ventricular opening, and the opening into a large artery, which, from its construction, position, and relations must be regarded as the aorta. The ascending aorta was dilated, and the convexity of the arch of the aorta gave off the innominata and the left carotid and left subclavian in their usual order; but from the concavity of the arch there proceeded downwards the ductus arteriosus, quite patent, and giving off a pulmonary artery on each side. But, instead of communicating with a pulmonary arterial trunk, the ductus arteriosus continued its course obliquely downwards, and terminated in a pointed *cul de sac* at the base of the heart near the origin of the aorta.

Dr. JOHN MURRAY exhibited a specimen of extreme Aortic Valvular Disease from a man, aged 60, who was admitted into the Middlesex Hospital with general bronchitis, pneumonia, and slight dropsy. He died next day. No cardiac murmur was detected, but the heart sounds were extremely weak, and the bronchial râles, heard over the whole chest, masked them

still more. The patient had suffered from rheumatic fever when young, and palpitation of the heart ever since, but from no other inconvenience whatever until two years before death, when frequent attacks of syncope supervened. After death general hypertrophy and dilatation of the heart were found. The aortic valves were rigid, and in them were deposited hard plates of calcareous matter. Their free edges were covered with very firm fibrinous deposit. The aortic opening was reduced to a mere chink, which, in the recent state, was scarcely visible until the valves were stretched. The case was interesting in so far as it illustrated the extent to which aortic narrowing may take place compatible with life.

Mr. Arnott reported on Mr. Maunder's specimen of Ovarian Tumour. The mass varied in colour and consistence, and contained the ordinary colloid matter of the ovary.

Dr. Dickinson exhibited a specimen illustrative of Pyelitis. A man, two years ago, passed thick stuff in his urine; but this ceased, and he got well. Six months ago this recurred; but there was only a little dull pain in the loins. When seen, he was in a hectic condition, and the pus after twenty-four hours' standing formed one-fourth of the urine. The right kidney was healthy; the left dilated, and without any kidney structure—a bladder lined with a vascular membrane pouring out pus. The upper inch and a half of the ureter was dilated; below it was narrowed. There were minute black specks on the wall—oxalate of lime calculi—which had probably led to the suppuration. In tubercular pyelitis the pus seldom disappears.

Dr. Powell had seen a somewhat similar case.

The Council of the Pathological Society reported that they had 462 members; that the Committee appointed to consider Lardaceous Disease would soon report; that the income of the Society for the year had been £464, its expenditure £419; there was thus a balance in hand of £45. The *Transactions* had cost £259.

Mr. Parkinson moved, and Mr. Cooper Forster seconded, the adoption of the report.

The balance-sheet, which had been audited by Dr. Murray and Mr. George Lawson, was then read.

Dr. Hilton Fagge proposed, and Dr. Weber seconded, a vote of thanks to the retiring Vice-Presidents and members of Council.

The President addressed a few apt and congratulatory sentences to the members, and the meeting dispersed.

The following gentlemen were elected as Officers and Council for the present year:—*President:* Richard Quain, M.D. *Vice-Presidents:* John S. Bristowe, M.D.; *Edwards Crisp, M.D.; Thomas Bevill Peacock, M.D.; Samuel Wilks, M.D.; *John Gay, Esq.; Timothy Holmes, Esq.; John Simon, Esq., D.C.L., F.R.S.; Sir Henry Thompson, Knt. *Treasurer:* Charles Murchison, M.D., F.R.S. *Honorary Secretaries:* William Howship Dickinson, M.D.; John Whitaker Hulke, Esq., F.R.S. *Council:* James Andrew, M.D.; Francis E. Anstie, M.D.; H. Charlton Bastian, M.D., F.R.S.; Thomas Buzzard, M.D.; *William Cayley, M.D.; *Charles Hilton Fagge, M.D.; Wilson Fox, M.D.; William Marcet, M.D., F.R.S.; Walter Moxon, M.D.; Hermann Weber, M.D.; J. Lockhart Clarke, Esq., F.R.S.; *John Couper, Esq.; *John Croft, Esq.; Arthur E. Durham, Esq.; James Hinton, Esq.; *George Lawson, Esq.; Charles F. Maunder, Esq.; *Thomas Pickering Pick, Esq.; *William Potts, Esq.; *William Squire, Esq. (The gentlemen whose names are marked with an asterisk (*) were not on the Council or did not hold the same office during the preceding year.)

CLINICAL SOCIETY.

Friday, January 14, 1870.

Mr. Paget, President, in the Chair.

ANNUAL MEETING.

From the report of the Council it appeared that the number of members was 207, showing a considerable increase from the last year, that the meetings were well attended, and that every endeavour was being made to carry out the principles for which the Society was established. The contributions received from members, together with the balance in favour of the Society at the last annual meeting, amounted to £311 8s. 7d. During the past year an expenditure of £153 0s. 5d. had been incurred. Consequently there remains at the present time in favour of the Society a balance of £158 8s. 2d.

Mr. Kesteven moved the adoption of the report; Mr. Langton seconded.

Dr. Greenhow proposed, and Dr. Bristowe seconded, a special vote of thanks to the President.

Mr. Heath proposed, and Mr. T. Smith seconded, a vote of thanks to Dr. Sanderson and the other retiring office-bearers.

Mr. Lanoton then brought under the notice of the Society the case of a male who had a large Tumour removed from the Soft Palate. The patient eventually died from recurrence of the disease. The points of interest in the case lay in the rarity of the disease, in the co-existence of tubercle and cancer, as shown at the post-mortem examination, and in the difficulties which surrounded the operation from the size of the tumour, and from its situation. The case showed also how conveniently chloroform could be given for such operations about the soft palate.

Dr. J. Pollock asked as to the evidence of tubercle.

Mr. Lanoton pointed to the well-marked cavities.

Dr. H. Weber said the two diseases were not frequently seen together; still they did occur so. Dietrich had pointed this out, and had affirmed that tubercle arose from the absorption of diseased matter by the blood. Martzius had done the same. Often caseous masses were found in the lungs along with cancer.

Dr. Pollock said he did not wish to cast doubt on the association of the two; he himself had proved that; he only wanted the evidence of their co-existence.

The President asked what was the evidence that they were both progressing at the same time? That was the point.

Mr. C. Moore thought it would be good if antipathies in disease could be established. He had seen cancer disappear with tubercle. He had sometimes thought that tubercle was really cancer.

The President said there was no doubt that cancer was sometimes superseded by tubercle. A gentleman of 72 was suffering from epithelial cancer, he had an attack of gout, and was suffering from chronic psoriasis; besides this, he had taken a grain of calomel every night for years, so that he was at once under the influence or four morbid agencies.

Mr. Thomas Smith related three fatal cases of Carbuncle, two of which occurred on the face. He remarked that this disease bore much the same relationship to common carbuncle as scarlatina maligna does to scarlatina simplex. He referred to the different names that the disease had received, and noticed Mr. Ludlow's cases, and stated that though he had seen the cases related by Mr. Ludlow and others occurring since, he was unable to state any signs by which the malignant cases might be recognised in an early stage of the disease. The ordinary progress of facial carbuncle was described, and also that of malignant pustule; the characteristic signs of the latter were stated to be its origin from a local virus, the absence of severe pain or increased heat, the dryness of the slough, the absence of pus in all stages of the malady, and the fact that the death of the tissues proceeded from the skin towards the deeper parts. In discussing the cause of the fatality of facial carbuncle, attention was drawn to the susceptibility of this locality to erysipelas and œdema, to the peculiarities of the venous circulation, and to the sudden deaths that had occurred from the injection of nævi on the face with tincture of iron. As regards treatment, the author confessed that we possessed no means of arresting the fatal effects of blood-poisoning when it has once taken place, and that treatment could only be directed to prevent the occurrence of pyæmia, either by the destruction of the disease in its earliest stage by caustics or by the administration of internal medicines. The former plan he rejected as unjustifiable from its severity, in our ignorance of the characteristics of malignant carbuncle in an early stage. He spoke of quinine in large doses as having proved useful in the hands of Mr. Paget in one case, and he suggested that in all cases of facial carbuncles sulphate of magnesia should be given from the very first.

Mr. Gant said these were either very small or suppressed carbuncles. Such cases were referred to by Brodie. Malignant pustule implied inoculation; this did not.

Mr. Heath had seen cases of carbuncle on the lip. One recently under his care he had treated by incision. This had been eschewed in those related. The President had thrown the weight of his great influence against incision; still, he had seen the measure afford great relief. The local abstraction of blood itself did good.

Dr. Greenhow said malignant pustule was quite distinct from the disease in question; the former disease was very fatal.

Mr. Croft had been looking out for a case of facial carbuncle. He had never seen a fatal case. There was no post-mortem in three of Mr. Smith's cases. In three he thought death arose from erysipelas.

Mr. Hulke asked if any one had used carbolic acid in such cases. In his hands its free topical application had done much good.

Mr. Paget was glad attention had been drawn to this curious disease. He had seen the first case brought to St. Bartholomew's twenty years ago. No one could give it a name. It was called impetigo of the lip. Much to the surprise of all, the patient died of pyæmia. Six months after another case came in. This time the disease was recognised, and the parts were incised. This patient also died of pyæmia. He had seen fifteen or sixteen cases; of these only one survived, and that only after a most severe attack of pyæmia. Till the last case he thought the disease was something different from either carbuncle or malignant pustule. He now believed the disease to be malignant carbuncle of the face. He could not say why one case should go on to pyæmia and another do well. The diseases were at first exactly alike. There was always an affection of the lymphatics down the neck. This was followed by pyæmia and rapid death. Death, in fact, was unusually rapid. Incisions did no good—in fact, seemed to have no influence. He wanted to know what gave rise to these peculiar phenomena.

Mr. Nunn thought the key might rest in the nervous supply of the part, and that pyæmia might exist before any of its symptoms.

Dr. Theodore Williams had found sugar in the urine in such cases.

The following gentlemen were elected as Officers and Council for the present year:—*President:* James Paget, Esq., F.R.S. *Vice-Presidents:* Henry Wentworth Acland, M.D., F.R.S.; *Thomas King Chambers, M.D.; William Withey Gull, M.D., F.R.S.; Sir William Jenner, M.D., F.R.S.; Thomas Bevill Peacock, M.D.; C. J. B. Williams, M.D., F.R.S.; Sir William Fergusson, F.R.S.; John E. Erichsen, Esq.; Prescott Gardner Hewett, Esq.; Professor Humphry, M.D., F.R.S.; *Henry Lee, Esq.; John Simon, Esq., F.R.S. *Treasurer:* E. Headlam Greenhow, M.D. *Council:* *Andrew Whyte Barclay, M.D.; J. Syers Bristowe, M.D.; *John Hall Davis, M.D.; *John Langdon H. Down, M.D.; Frederick W. Pavy, M.D., F.R.S.; James D. Rendle, M.D.; John Burdon Sanderson, M.D., F.R.S.; Francis Sibson, M.D., F.R.S.; Reginald Southey, M.D.; Hermann Weber, M.D.; *John Croft, Esq.; J. Cooper Forster, Esq.; George G. Gascoyen, Esq.; Christopher Heath, Esq.; *Berkeley Hill, Esq.; *James Hinton, Esq.; *Carsten Holthouse, Esq.; *William B. Kesteven, Esq.; Charles F. Maunder, Esq.; Thomas Smith, Esq. *Honorary Secretaries:* *Thomas Buzzard, M.D.; George W. Callender, Esq. (Those gentlemen whose names are marked with an asterisk (*) did not hold the same office during the preceding year.)

OBITUARY.

JOHN GEORGE PERRY, F.R.C.S.

Mr. Perry received his education at St. Bartholomew's Hospital, and established himself in practice as a "Surgeon" in Great James-street, Bedford-row, where he resided for several years. He was not, we believe, very successful in practice; but he was Surgeon to the Foundling Hospital and to St. Marylebone Infirmary. During the presidency of Sir Benjamin Brodie of the Royal Medical and Chirurgical Society, Mr. Perry was fortunately one of its honorary secretaries. A vacancy having occurred in the Medical Inspectorship of Prisons, Sir Benjamin being then on very intimate terms with Sir James Graham, the Home Secretary recommended Mr. Perry to fill the vacancy. It is doubtful whether a more judicious choice could have been made. Mr. Perry was not a man of brilliant talents or of remarkable acquirements, but he was a thorough man of business, industrious, and methodical. We have reason to know that he fulfilled his duties in a most exemplary manner. His "reports" were characterised by a clearness and exhaustiveness which gave them an exceptional value. Mr. Perry contributed nothing, we believe, to the literature of his Profession. He was a man "well up" in practice, and of unassuming and urbane manners.

It may not be out of place here to state that his "Abstracts" of the Surgical papers read before the Medico-Chirurgical Society were most able documents, and the writer of this notice is desirous of recording his testimony to the kindness and assistance he received at the hands of Mr. Perry in his very onerous duty of reporter for a Medical journal. At that time he was the only representative of the press attending the Society. Mr. Perry was one of the officials of the Society who broke through the very evil custom of discouraging reporting. In this he was upheld by the eminent person who was then president. Sir B. Brodie was in favour of the greatest freedom of discussion and of the greatest possible facilities being afforded to the representative of the press. On one occasion Sir Benjamin said, "By the service the press has rendered to us and to the Profession in general, a vast mass of information and of the practical experience of the Fellows of this Society has been snatched, as it were, from oblivion. No one values more highly than I do the papers that are presented to us, but I value more highly the discussions which ensue upon their reading." J. F. C.

NEW BOOKS, WITH SHORT CRITIQUES.

The Pathology and Therapeutics of Mental Diseases. By J. L. C. Schroeder van der Kolk, Professor of Physiology in the University of Utrecht, translated from the German by James T. Rudall, F.R.C.S. (Exam.), Surgeon to the Melbourne Hospital. London: John Churchill and Sons. Pp. 158.

*** We congratulate Mr. Rudall, and in him Australian Practitioners; we accept his work as an earnest of what shall come when the interminable quarrels and Medico-ethical problems perpetually discussed by our antipodean brethren shall cease. Mr. Rudall has taught us that in Australia there are men *au fait* in the best and most recent literature of Continental Europe. The work of Schroeder van der Kolk is a valuable one; it is essentially original, and reflects the notions on an obscure subject of no ordinary man. The translation is not directly from the Dutch, but from the German of Theile. Mr. Rudall's manuscript has also been revised by the distinguished Australian naturalist, Dr. F. von Müller. Of course the double translation impairs the freshness of the original, but, on the whole, the work is well done, and is one which will amply repay perusal. By the bye, are our readers aware that the pathological collection of Schroeder van der Kolk, a collection rich in many ways, constitutes the basis of that now at Oxford?

Faraday as a Discoverer. By John Tyndall. New Edition. London: Longmans. Pp. 208.

*** Speedily after Bence Jones's large and interesting "Life of Faraday," recently noticed in these columns, comes a new edition of Tyndall's more modest but equally interesting volume, "Faraday as a Discoverer." Tyndall and Faraday are both representative names, the men themselves were long associated, and it is a pleasure to find the deeds of the one so ably dealt with in the hands of the other. This little work originated in certain lectures in the Royal Institution, and no one who heard these, nor, may we add, any reader of the book, could fail to be struck with the fact that great as were the discoveries of Faraday, as a *conteur* Tyndall takes a correspondingly high place in narrating them.

The Essentials of Bandaging, including the Management of Fractures and Dislocations. By Berkeley Hill, M.B. Lond., F.R.C.S., Instructor in Bandaging at University College, Assistant Surgeon to University College Hospital. Second Edition. London: Walton. Pp. 224.

*** Mr. Hill's is a capital little book, and we are glad to see it in a new edition. This time he gives a list of those things necessary for a great variety of operations. In dealing with dislocations the different steps are very clearly described, but might we suggest to Mr. Hill that in the next edition he should devote a little more space to that masterpiece of Surgical art, the manipulative reduction of the dislocations of the various joints?

Psychologie Naturelle. Par le Dr. Despine.

*** We can do no more at present than announce the receipt of the three goodly volumes of Dr. Despine's Psychology, and give the merest summary of their contents, which shall receive due notice from our reviewer. They deal with the subjects of reason, free-will, and automatic actions, with the psychological characteristics of the sane, the insane, and the criminal, and ought to interest the speculative philosopher, as well as practical men, whether jurists, Physicians, or educators. The author is a Physician of Marseilles, and from a glance at his work may be seen to be a man of learning and research.

Conseils d'Hygiène aux Etrangers à Londres. Par Charles Bernadet, M.D.

*** This *brochure*, from the pen of a Paris Physician established in London, is intended for the use of the author's

countrymen visiting or resident in this country. He is an admirer of the regimen and hygienic procedures of John Bull, and recommends them accordingly. He does not seem to be aware of the existence of the main-drainage system, as he says the sewerage of London still pollutes its noble river. We think his *Conseils* would have been more useful had they been somewhat more precise and detailed.

No Frog, no Foot: Observations on the "Good Enough" System of Shoeing Horses. By Edmund Cottam. London: Stanford. Pamphlet.

*** Horseshoeing is not much in our line, but some of our country readers may be glad to hear of a system which, at all events, promises well. The most important part of it, in our eyes, seems to be the preservation of the frog, which, with proper treatment, becomes soft and elastic as india-rubber, and enables the animal to feel the ground before the shoe with its heavy weight strikes the surface.

The Transactions of the Odontological Society for June, 1869,

*** contain an interesting paper on "Electricity as an Anæsthetic in Dentistry," by Mr. Snape, of Liverpool.

The Royal London Ophthalmic Hospital Reports, vol. vi., Part iv.,

*** contain, besides the usual accurate periscopes, cases by Mr. Cowell, "Herpes Frontalis" by Mr. Hutchinson, cases by Mr. Oglesby of Leeds, cases by Mr. Hutchinson, notes on pathologic specimens by Mr. Brown, a paper by Mr. Hulke on wounds of the eye, and a report on three cases of optic neuritis by the same author.

*** Dr. Cheadle's *Report of the Department for Diseases of the Skin at St. Mary's Hospital for the Year* 1868, reprinted from the *Journal of Cutaneous Medicine*, will prove exceedingly instructive to those interested in this branch of practice. Many curious cases are recorded. Why does Dr. Cheadle spell leichen with *ei*, and eczema with *e*? We take these Greek words as they were used by the Latins, and spell them as Celsus did. If Dr. Cheadle *must* write leichen, he should write ekzema. We write honour, favour, and labour, because these Latin words came to us through the French.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a Meeting of the Court of Examiners on the 18th inst., and, when eligible, will be admitted to the Pass Examination:—

Wilde, F. G. S., student of King's College.
Rae, William, King's College.
Parson, F. J. C., King's College.
Widdifield, J. H., Toronto and St. Thomas's Hospitals.
Buller, Frank, Toronto and St. Thomas's Hospitals.
Whitehead, G. M., St. Thomas's Hospital.
Barrow, A. H., St. Thomas's Hospital.
Hammond, William, University College.
Coupland, Sydney, University College.
Blaker, W. C., Guy's Hospital.
De Lisle, F. J., Guy's Hospital.
Tennant, E. G., St. Mary's Hospital.
Bryan, F. C., St. Mary's Hospital.
Jelly, William, Edinburgh and St. Mary's Hospitals.
Rees, W. C., Melbourne School.
Sarjant, J. J., London Hospital.
Wade, William, Toronto School.
Barlow, Thomas, Manchester School and University College.
Roberts, L. E., Middlesex Hospital.
Hey, E. C., Leeds School.
Muggeridge, E. A., Grosvenor-place School and Charing-cross Hospital.
Elias, T. A., Manchester School.
Barton, J. E., Westminster Hospital.
Chambers, Ebers, St. Bartholomew's Hospital.

The following gentlemen passed on the 19th inst.:—

Borcham, W. T., Charing-cross Hospital.
Atthill, R. C., Charing-cross Hospital.
Greenslade, George, Charing-cross Hospital.
Pinching, C. J. W., Guy's Hospital.
Steele, E. H., Guy's Hospital.
Lithgow, R. A., Guy's Hospital.
Bartlett, William, St. Mary's Hospital.
Harrison, H. B., St. Mary's Hospital.
Madden, E. M., King's College.
Plummer, E. J., King's College.
Bishop, S. O., St. Bartholomew's Hospital.
Randall, Windham, St. Bartholomew's Hospital.
Symes, E. W., University College.
Sparrow, R. H., Dublin School.

The Pass Examination for the diploma of Membership commenced yesterday.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, January 13, 1870:—

Daphtary, Girdharlal Ratanlal, Kensington-gardens-square.
Flowers, William Field, Tealby, Lincolnshire.
Nettle, William, Liskeard, Cornwall.
Rigden, Walter, Canterbury.
Taylor, Frederick, Kennington-park-road.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Amsden, George, M.B., C.M. Edin., L.R.C.P. Lond., M.R.C.S. Eng.—Assistant Medical Officer to the Essex County Lunatic Asylum, Brentwood, *vice* Dr. Gillard, appointed Medical Superintendent of the New Berks County Asylum.

Davies, F. Pritchard, M.B., C.M. Edin., M.R.C.S. Lond.—Resident Medical Officer to the Children's Hospital, Birmingham, *vice* C. H. J. Hogg, M.R.C.S., resigned.

Smith, Dr. Protheroe—Corresponding Fellow of the Edinburgh Obstetrical Society.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty, January 17.—John Stirling, M.D., has this day been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets on the retired list. Christopher K. Ord, Staff Surgeon to the *Pembroke*, for Greenwich Hospital; and Patrick Keelan, Assistant-Surgeon to the *Forte*.

Medical Department.—Assistant-Surgeon Peter Shepherd, M.B., from 99th Foot, to be Staff Assistant-Surgeon, *vice* Thomas Edward Carroll, who exchanges. Assistant-Surgeon Edward Hopkins, from 2nd Foot, to be Staff Assistant-Surgeon, *vice* George John Gibson, M.D., who exchanges.

War Office.—The following appointments have been made:—2nd Foot: Staff Assistant-Surgeon George John Gibson, M.D., to be Assistant-Surgeon, *vice* Edward Hopkins, who exchanges. 99th Foot: Staff Assistant-Surgeon Thomas Edward Carroll, to be Assistant-Surgeon, *vice* Peter Shepherd, M.B., who exchanges.

BIRTHS.

Brushfield.—On January 16, the wife of Dr. Brushfield, Medical Superintendent of the Brookwood Asylum, near Woking, Surrey, of a son.

Debenham.—On January 16, at Heath House, Stepney, the wife of Robert Debenham, M.R.C.S.E., of a son.

Dudgeon.—At Peking, on November 5, 1869, the wife of Dr. J. Dudgeon, of a daughter.

Fennell.—On January 14, at Plymouth, the wife of Charles John Fennell, Assistant-Surgeon R.N., of a daughter.

Harman.—On January 16, at 2, Salisbury-villas, Gresham-road, Brixton, the wife of J. Harman, M.R.C.S.E., of a son.

Jackson.—On September 13, 1869, at Mount Gambier, South Australia, the wife of Dr. James Jackson, of a son.

Marshall.—On January 16, at Holly House, Mortlake, the wife of Dr. William Marshall, of a daughter.

Williams.—On December 13, at Norwich, the wife of Charles Williams, F.R.C.S., of a son.

MARRIAGES.

Armistead—Smith.—On January 12, at the Parish Church, Lancaster, William Armistead, M.B., C.M., of Harpurhey, Manchester, to Emily Agnes, second daughter of Warwick Smith, Esq., of Walnut Bank, Lancaster.

Inglis—Taverner.—On January 13, at Christ Church, Gipsy-hill, Walter William Inglis, Surgeon, of 15, Cockspur-street, only son of Walter Inglis, Esq., of Clifton Lodge, Brixton-hill, to Anne, youngest daughter of the late Thos. Joseph Taverner, Esq.

Lloyd—Johnstone.—On January 11, at the Parish Church, Leamington, James Edward, only son of Thomas Lloyd, Esq., of the Priory, Warwick, to Harriett, daughter of the late James Johnstone, M.D., of Leamington.

Sargent—Cooper.—On December 20, 1869, at Lingasoogoor, Deccan James Forbes Sargent, Assistant-Surgeon, 5th Infantry, Hyderabad Contingent, second son of the Rev. J. P. Sargent, M.A., to Mary Elizabeth, eldest daughter of Colonel A. Cooper, Madras Staff Corps.

DEATHS.

Keys, George Francis, F.R.C.S. Eng., at 20, Warwick-street, Regent-street, on January 19, aged 53.

Middleton, Alfred, Surgeon, at Leyton, Essex, on January 10, aged 63.

Reynolds, Louisa, the long-loved wife of Henry Reynolds, Surgeon, at Lower Denmark-hill, on January 13.

Strover, T. R., Surgeon-Major, F.R.C.S., late Bengal Medical Service, at his residence, 6, Almorah-crescent, St. Helier, Jersey, on January 8.

Tippetts, Richard, F.R.C.S., late of Dartford, Kent, at 9, Edith-grove, Brompton, on January 14, in the 68th year of his age.

Tucker, Andrew, M.D., Edin., M.R.C.S. Eng., brother of Dr. James Tucker, Medical Officer, Sligo District, formerly Medical Officer of the Cartherea Workhouse and Lough Glynn Dispensary, county Roscommon, at Boyle, county Roscommon, on January 13.

Velten, Dr. Herman, resident English Physician, at Aix-la-Chapelle, on December 17, aged 56.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Birmingham General Dispensary.—Resident Surgeon; must possess at least one qualification, and be registered. Applications and testimonials to the Secretary on or before January 24. Election on the 26th.

Bournemouth Dispensary and Cottage Hospital.—Honorary Surgeon, vacant by the resignation of E. Lacy, Esq. Applications to the Secretary, W. W. Humby, Esq.

Chelsea, Brompton, and Belgrave Dispensary, 41, Sloane-square.—Surgeon to the Western District. Candidates must be Members of the Royal College of Surgeons of London, Edinburgh, or Dublin. Applications and testimonials to the Secretary, on or before February 3, on which day candidates will be required to attend at 7 p.m. Election on February 17.

Great Northern Hospital, Caledonian-road, King's-cross, N.—Junior Surgeon. Applications and testimonials to the Secretary, G. Reid, Esq., 46, Great Coram-street, on or before February 9.

Highworth and Swindon Union.—Medical Officer for the Second District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on before February 1, election on the 2nd.

Highworth and Swindon Union.—Medical Officer for the Fourth District and Workhouse. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on or before February 1, election on the 2nd.

Holbeach Union.—Medical Officer for the Sutton-bridge District. Candidates must be legally qualified and registered. Applications and testimonials to Mr. E. G. Ayliff, Clerk, Holbeach, on or before February 5. Election on the 7th.

Leicester Infirmary and Fever House.—House Surgeon and Apothecary; must be a Member of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be L.S.A. Applications and testimonials to the Secretary at the Infirmary on or before February 1. Election on the 12th, at 1 o'clock p.m.

Liverpool Dispensaries.—Assistant Resident House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary on or before February 26.

Liverpool Northern Hospital.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before February 7. Election on Feb. 11.

Midhurst Union.—Medical Officer for the Milland District. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. E. Albery, Clerk, Midhurst, on or before January 24. Election on the 25th.

North Staffordshire Infirmary, Hartshill, Stoke-upon-Trent.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary at the institution on or before January 29. Election on February 3.

Nottingham Dispensary.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

Public Dispensary, 59, Stanhope-street, Clare-market.—Resident Medical Officer; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to J. S. Phillips, Esq., 5, Bishop's-court, Lincoln's-inn, W.C. Personal attendance will be required at 3 o'clock p.m. on the 25th inst.

Ross Union.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

St. Alban's Union.—Medical Officer and Public Vaccinator for the Redbourn, Harpenden, and Wheathamsted District. Applications and testimonials to the Clerk to the Guardians, St. Alban's, on or before January 28. Election the same day.

Sheffield General Infirmary.—House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, or a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and also L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary on or before February 5. Election on the 9th.

South Lambeth, Stockwell, and North Brighton Dispensary.—Visiting Medical Officer; must be duly qualified and registered. Applications and testimonials to E. G. Syms, Esq., 250, South Lambeth, S.W., on or before February 9.

Sunderland Infirmary and Dispensary.—Junior House-Surgeon; must possess both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before January 26, 1870. Election on February 3.

University College.—Professorship of Medical Jurisprudence. Applications will be received till February 5. Further particulars may be obtained from the Secretary, John Robson, Esq.

University of London.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

West Derby Union, Liverpool.—Assistant Medical Officer to the Workhouse. Applications to the Clerk at the Workhouse on or before Jan. 25. Candidates will receive notice if their testimonials and diplomas will be required.

Westminster Hospital.—Resident House-Surgeon; must be registered. Applications and testimonials to the Secretary on or before January 22. Election on February 3.

POOR-LAW MEDICAL SERVICE.

. The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Midhurst Union.—Mr. George Hills has resigned the Milland District; area 8855; population 1449; salary £55 per annum.

West Derby Union.—Mr. McNicholl, Assistant Medical Officer at the Workhouse, has resigned; salary £80 per annum.

Whitehaven Union.—Mr. John Churchill has resigned the Gosforth District; area 18,925; population 2170; salary £20 per annum, no fees.

APPOINTMENTS.

Caistor Union.—Ralph Burnham, M.R.C.S.E., L.S.A., to the Keelby District.

Eastry Union.—Henry J. Shirley, M.R.C.S.E., L.S.A., to the Ash District.

Kingsbridge Union.—George V. Langworthy, M.R.C.S.E., L.S.A., to the Thirteenth District.

Oakham Union.—William Row, M.R.C.S.E., L.S.A., to the Market Overton District.

Oundle Union.—Daniel W. Tomlinson, M.R.C.S.E., L.S.A., to the Oundle District. George W. B. Calcott, M.R.C.S.E., L.S.A., to the Workhouse.

Wigan Union.—Maxwell F. Reilly, M.R.C.S.E., L.R.C.P. Edin., to the Wigan District and the Workhouse.

Collegiate Examinations.—At the last primary or anatomical and physiological examinations for the diploma of Membership of the Royal College of Surgeons, when sixty-one candidates presented themselves, it is stated that as many as twenty-three failed to reach the required standard, and were consequently referred to their studies for three months. The following were the questions submitted at the written examination—viz., 1. Name the bones with which the astragalus is in contact; and mention the shape of its articulating surfaces. Describe the ligaments which connect the astragalus with other bones. 2. Mention the sources from which the vena portæ derives its blood; and explain how this blood is rendered available for the performance of certain functions in the animal economy. 3. Describe the various structures which surround the elbow-joint, and are included in a space extending two inches above and two inches below the condyles. 4. State the functions generally attributed to the spleen. 5. Describe the peculiarities of the first, the seventh, and the twelfth ribs. 6. Describe the functions of the soft palate and uvula.

Mr. John Hollingsworth, M.R.C.S. Eng., late Medical Officer for the Greenwich West District of the Greenwich Union, has obtained a superannuation allowance of £50 per annum.

Dr. Isaac Massey, who has resigned as Senior Surgeon to the Nottingham Dispensary, is proposed to be elected Hon. Consulting Surgeon and Life Governor, "in consideration of his long and eminent services," at the next meeting of the Governors.

Norfolk and Norwich Hospital.—At the quarterly meeting of the Governors it was proposed to increase the Medical staff by the appointment of three Assistant-Surgeons; but after some discussion the question was agreed to be deferred.

The late Dr. Croker.—The funeral of Dr. Croker took place on Tuesday. The attendance was large. While a large number of the Medical Profession in Dublin were present, all other classes and professions were well represented. The various institutions with which he was connected—the College of Physicians, Steevens's Hospital, Swift's Hospital, the Hospital for Incurables, and the Female Orphan House—sent representatives to do honour to his memory by following his remains to the grave. He was buried at Mount Jerome Cemetery.

The Preston and County of Lancaster Royal Infirmary, in its first report, states that at present it is compelled to limit the number of beds to twenty-four until the means available for the maintenance or the in-patients are considerably increased. This must be at the rate of £60 per bed at least to the present income.

Compliment to the Mayor of Belfast.—The Medical students in attendance at the General Hospital assembled in the theatre of that institution on Monday morning, for the purpose of presenting Dr. Samuel Browne, R.N., with an address congratulating him on his accession to the Mayoralty. The address, which was read by Mr. Murphy, referred to Dr. Browne's past services to the town, and described the dignity which had been conferred on him as an honour not only to himself, but also to the Profession of which he is so distinguished a member. Dr. Browne replied, thanking the students for their kindness.

What does this mean?—The *Pall Mall Gazette* remarks:—"The approaching execution in Paris has revived the old question whether death instantaneously follows upon the severance of the head from the body. In a letter to the *Gaulois* Dr. Pinel asserts that decapitation does not immediately affect the brain. The blood which flows after decapitation comes from the large vessels of the neck, and there is hardly any call upon the circulation of the cranium. The brain remains intact, nourishing itself with the blood retained by the pressure of the air. When the blood remaining in the head at the moment of separation is exhausted, there commences a state, not of death, but of inertia, which lasts up to the moment when the organ, no longer fed, ceases to exist. Dr. Pinel estimates that the brain finds nourishment in the residuary blood for about an hour after decapitation. The period of inertia would last for about two hours, and absolute death would not ensue till after the space of three hours altogether. If, he adds, a bodiless head indicates by no movement the horror of its situation, it is because it is physically impossible that it should do so, all the nerves which serve for the transmission of orders from the brain to the trunk being severed. But there remain the nerves of hearing, of smell, and of sight." If Dr. Pinel be correct, the trunkless head might wink, or at all events squint.

THE SUNDERLAND INFIRMARY.—The patients of the Infirmary were entertained on "Twelfth Night" with something new, through the exertions of Dr. Drury, the active House-Surgeon. The entertainments were of the most varied character, and gave immense delight to all engaged. There was a great Christmas-tree, most prolific of ornaments and prizes, and there was an excellent representation of the "Area Belle." A local prestidigitator gave some smart feats in legerdemain, and songs, pianoforte performances, and readings filled up a capital two hours and a half's entertainment. The *Sunderland Times* says, "The effort to lighten and amuse the patients proved as efficacious as it was thoughtfully conceived."

THE DRIFFIELD COTTAGE HOSPITAL. — The third annual report of this institution has just been issued. It is in a very flourishing condition in every respect. During the past year twenty-six in-patients have been admitted, of whom eighteen have been discharged cured, five have improved under treatment, one died, one was not benefited, and one remained in the Hospital. Two serious operations have been performed, one amputation of the thigh, one removal of the breast for cancer; both cases did well. Twenty-six out-patients have been relieved at the Hospital, of whom fourteen have been cured, eleven have improved, and one remained on the books. The total receipts have been £207 17s. 11d.; the expenses have been about £130, leaving a balance of £77 in the hands of the treasurer.

SANITARY CONDITION OF GLASGOW.—The sanitary condition of the city was discussed at great length last week at a special meeting of the Police Board, and strong statements were made as to the present deplorable state of matters. To give a practical shape to the several suggestions made, the Lord Provost proposed that the Sanitary, Cleansing, and Fever Hospital Committees be amalgamated into what he called the Committee on Health; that this committee should meet every alternate Monday, that it should have a separate clerk, and that a general Inspector of Nuisances should be appointed. He suggested that the number of sub-inspectors should be increased; that they should have special districts allotted to them, and, further, that the cleansing of the city should be done in special beats or districts.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At the annual general meeting of the Society, held on Monday, the 10th instant, the discussion on Mr. Mummery's paper on "The Relations which Dental Caries, as discovered amongst the ancient Inhabitants of Britain and amongst existing Aboriginal Races, may be supposed to hold to their Food and Social Condition." After which the following gentlemen were elected as the officers for the current year:—*President:* R. Hepburn, Esq. *Vice-Presidents:* Resident—Arnold Rogers, Esq.; John B. Fletcher, Esq.; J. R. Mummery, Esq. Non-Resident—P. Orphoot, Esq. (Edinburgh); George T. Parkinson, Esq. (Bath); Joseph Snape, Esq. (Liverpool). *Treasurer:* W. A. Harrison, Esq. *Librarian:* Alfred Coleman, Esq. *Honorary Secretaries:* Ordinary—Edwin Sercombe, Esq.; G. Gregson, Esq. For Foreign Correspondence—Charles James Fox, Esq. *Councillors:* Resident—J. Walker, Esq.; Isaac Sheffield, Esq.; J. W. Elliott, Esq.; Thomas A. Rogers, Esq.; W. G. Bennett, Esq.; John Tomes, Esq.; Samuel Cartwright, Esq.; G. A. Ibbetson, Esq.; T. C. Vidler, Esq. Non-Resident—H. Morley, Esq. (Derby); J. Steele, Esq. (Croydon); J. S. Coles, Esq. (Plymouth); F. H. Thomson, Esq. (Glasgow); H. Barron Rodway, Esq. (Torquay).

AT the last meeting of the Board of the Western General Dispensary, a proposition was considered for establishing a provident branch in connexion with the charity as already worked. The almost unanimous opposition of the Physicians will probably prevent the scheme from being carried into effect, but after an animated discussion the meeting was adjourned until Monday, January 23, that the subject may be more fully considered. The main arguments of the governors in favour of the plan are that it will tend to promote habits of careful independence amongst the poor, and at the same time provide for the payment to some extent of the Medical staff. The Physicians, on the other hand, argue that any such arrangement would affect their Professional status, and that payment by the patients, however small, would entail more work than they are willing to undertake, as they would be subject to constant and unseasonable demands upon their time by the sick poor, who would consider that they were entitled to any amount of service paid for. As the proposed scheme of connecting a provident branch to a charitable dispensary is a novel one, we shall be curious to see the result, if the plan be really organised.

SCARLET FEVER IN MARYLEBONE.—Dr. Whitmore in his last report says:—"On referring to the mortality table we find no less than 46 deaths ascribed to scarlet fever, a number almost unprecedentedly large for so short a period of time, and showing not only the great fatality of this disease, but its highly contagious nature also. In the past month it destroyed, with the exception of phthisis and bronchitis, more lives than any other disease. Every day's experience shows more and more clearly that scarlet fever spreads by contagion and contagion only; we may make every house in the parish perfect as to its sanitary condition, we may carry out amongst our poor and destitute population the best possible measures of hygiene, such as providing them with good and sufficient food, warm clothing, etc., etc., but nothing short of the most effectual checks to the spread of the infection will, in times of epidemic like the present, lessen its prevalence and fatality; these checks it is by no means difficult to interpose. There is no reason why one particle of the poison of scarlet fever should pass beyond the sick chamber; means are available, both cheap and abundant, for destroying it, but such is the neglect and apathy of the poorer classes generally that they never think of employing them. The handbills which I drew up some two months since, giving directions as to the mode of arresting the contagion of scarlet fever, and preventing it spreading amongst other inmates of the house in which a case might unfortunately occur, were distributed from house to house in all the poorer districts of the parish, as well as in many of the more respectable localities, and I do not hesitate to say that had those very plain and simple directions, which entailed the least possible trouble and expense, been generally carried out, the mortality which has resulted from this fearful epidemic would have been materially less. Within the last week or ten days I find indications of its decline. It would seem that its contagion, which for many weeks past has been most intense, is gradually becoming weakened, and the probability is that the disease will now slowly subside, although with its subsidence we are likely to have a simultaneous increase of some other zymotic disease, but which we may hope will be less protracted and fatal."

AVERAGE COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN THE YEAR 1869.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	19·78	0·089	0·112	0·002	14·3	3·7
West Middlesex	18·83	0·079	0·116	0·001	13·9	3·6
Southwark & Vauxhall	19·52	0·097	0·113	0·002	14·3	3·7
Chelsea	19·23	0·091	0·139	0·003	14·2	3·8
Lambeth	18·84	0·085	0·169	0·002	13·9	3·6
Other Companies.						
Kent	27·85	0·031	0·200	0·001	20·2	5·9
New River	18·80	0·042	0·113	0·001	14·1	3·5
East London	19·93	0·066	0·139	0·001	14·5	3·8

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water supplied by the following companies—namely, the New River, the East London, and the West Middlesex—has always been bright and colourless, but that of the Grand Junction was turbid on one occasion, the Southwark and Vauxhall on two occasions, the Lambeth on four occasions, and the Chelsea on six.

The chemical composition of the water has not fluctuated to any considerable extent from the average, the water derived from the Thames and the Lea having had the maximum amounts (from 21 to 23 grains per gallon) in the winter months, and the minimum amounts (from 17 to 17·5 grains per gallon) in the summer months.

The quantity of water supplied daily to the metropolis during the year has ranged from 91,578,341 gallons in the month of January to 110,094,058 gallons in the month of July, the average for the whole year being, as nearly as possible, 92,000,000 gallons daily, and the average number of houses supplied has been 466,100. This is at the average rate of 29 gallons per head of the population daily. About half of the supply is from the Thames, and the rest is from the River Lea and from springs and wells in the chalk.

According to the official returns from the Prefect of the Seine, the average daily supply of water to Paris during the year has been 46,858,900 gallons, which is at the rate of 24·8 gallons per head of the population; but this includes the supply to the public fountains and the ornamental waters in the Bois de Vincennes, Bois de Boulogne, and elsewhere.

The water is derived from the Seine, the Marne, the Canal d'Ourcy, and from artesian wells and springs in the chalk. None of the river water is filtered, and it is always turbid.

H. LETHEBY, M.B.

THE quarterly meeting of the Poor-law Medical Officers' Association will be held at the Freemasons' Tavern, Great Queen-street, on Wednesday, the 26th inst., at 7:30 p.m., when further facts will be adduced, showing the injurious consequences that have resulted to the interests of the community from the present imperfect system of Poor-law Medical relief. As it is desirable that the statements which will be made should be fully ventilated, we trust there will be a full attendance. The subject is one which interests not only the Poor-law Medical Service, but the Profession and public. The meeting will be an open one; it is therefore to be hoped that Poor-law guardians will avail themselves of the opportunity of being present at what is likely to be an interesting gathering.

CORONERS IN JAMAICA.—The office of coroner has been virtually abolished in Jamaica. The Governor has assigned the coroner's duties to the District Court Judge, and he, on occasions, can appoint a deputy to hold any particular inquest. It was soon found that this plan would not work well in such a climate as Jamaica, inasmuch as the District Judge might reside so far from the place of inquest that the body might be decomposed before any Medical examination of it could be made. So the Governor hit upon the notable expedient of empowering any justice of the peace or officer of constabulary, not under the rank of sergeant, to direct a neighbouring Medical Practitioner forthwith to make a post-mortem examination of the body in any case which, in his (the justice of the peace's or officer of constabulary's) opinion, renders an inquest necessary; and, in like manner, the District Court Judge, as coroner, may direct a similar examination to be made, if, from his distance from the place or any other cause, he is unable immediately to summon a jury to view the body. Now, in addition to this, the report of the Medical Practitioner may be received in evidence, although the jury may not have seen the body, which may or may not, at the discretion of the judge, be buried or kept above ground until after the inquest. This is really doing away with the main object of an inquest. By the British law it is incumbent on a jury to view the body into the cause of whose death they are empanelled to inquire. This system cannot, we think, work in any way satisfactorily, and it might be as well to abolish all inquiries into causes of death if persevered in. The remedy is simple; coroners should be appointed in each district to officiate properly, they should be paid adequately, and moreover should be Medical Practitioners.

AN amusing blunder occurred at an inquest held on the 16th ult. at the Melbourne Hospital, before Dr. Youl. It appears that an inquest was being held on the body of a child which had been accidentally poisoned; but through some bungling, the body of a child which had been scalded to death was viewed by the coroner and jury, when a verdict was duly recorded, that the child, whose death had been occasioned by a severe scald, had been poisoned. In the interests of public justice, we sincerely hope that blunders like this, calculated to bring coroners' inquests into contempt, are rare.—*Australian Medical Gazette.*

INHALATION OF ETHERIAL TINCTURE OF VALERIAN IN HYSTERIA.—M. Guillemin brought under the notice of the Paris Therapeutical Society the great advantages he has derived from this practice. Inhalation for the production of anæsthesia, he observes, has occupied so much attention of late, that the employment of this means for other purposes has been neglected. Repeated experience has convinced him that, employed in the hysteric convulsive paroxysms, it is a most valuable agent. He drops twenty drops of the officinal tincture of the French Codex on a compress, or holds the mouth of the bottle containing it to the patient's nostrils, the inhalation being continued for about a minute. Repeated again, the paroxysm is usually at once relieved, the patients passing abundance of urine and complaining of great debility The specific effects of ether have never been observed from the inhalation.—*Gazette Méd.*, December 25.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A blank cover, contents missing, with post mark "Dublin, Jan. 15, '70," was received at our office on the 18th.

We shall notice the discussion as to the construction of the new Infirmary at Edinburgh in connexion with Captain Galton's work on Hospital constructions next week.

There have been warm debates at the Association of Medical Officers of Health and at the Medical Society of London on the Extension of the Contagious Diseases Act to the Civil Population. We are obliged to defer our reports till next week.

Atropa.—The paper is in type.

W. C., Edinburgh.—We advise you to try the experiment yourself. Take the credit if it succeeds, and hold your tongue if it fails.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.

On Thursday, January 13, the adults and children who are, or have been lately, under treatment in this Hospital, were gratified by one of the "Christmas tree" entertainments now happily becoming usual in our Hospitals at this season. The tree, which had been tastefully "dressed" by the nursing sisters of the Hospital, and was loaded with presents useful and ornamental provided by the liberality of various friends of the charity, and by the Ladies' Association, was exhibited in an empty ward which had been decorated for the purpose, and after the distribution of its acceptable fruits, the Rev. T. P. Dale, one of the House Visitors, amused the patients by a magic lantern exhibition. The Honorary Secretary, many of the Medical Staff, and several members of the Ladies' Association were present, and helped the Sisters and House-Surgeon in giving the patients a most pleasant two hours' entertainment.

The Milk Question.—The *Commercial World*, in reproducing our article on this subject in its pages, makes some valuable remarks on the importance of the question.

Hanwell.—It is a question to be decided by experience. In kind and conscientious hands, non-restraint is undeniably the better. In bad and violent hands patients are not safe anyhow.

M.D., L.F.P. and S., L.M., etc.—You cannot *claim* the office. When the present limited appointment ends, the guardians must proceed to a new election, and no doubt the Poor-law Board, if made aware of the facts, would require them to elect, if possible, a fully qualified and resident man. But bear in mind that both the Medical and Surgical qualifications must be granted by "competent legal authority in Great Britain or Ireland."

DONATIONS TO THE BRITISH MEDICAL BENEVOLENT FUND.

The Treasurer and Honorary Secretaries of the British Medical Benevolent Fund beg to acknowledge, with thanks, the following additional sums, which have been forwarded to them as the result of the appeal published in the Medical journals:—

Donations.

Bell, Dr. James V., Rochester	£1	1	0
Coutts, Miss Josephine E., 21, Golden-square, Aberdeen	1	1	0
Frank, Dr. Philip, Cannes, France	20	0	0
Gill, Dr. John B., Dover	1	1	0
Mason, Richard D., Esq., Haslar	3	0	0
Miller, A. G., Esq., F.R.C.S.E., Charlotte-sq., Edinburgh	1	1	0
Miller, Mrs., per A. G. Miller, Esq., do. do.	1	1	0
Page, Dr. A. H., Lower Darwen, Lancashire	1	0	0
Pooley, Charles, Esq., Weston-super-Mare...	1	0	0
R. S. P.	2	2	0
Royds, Wm. A. S., Esq., Royal Berks Hospital, Reading	3	3	0
Thankoffering, A, per Dr. James V. Bell, Rochester ...	5	0	0

Annual Subscriptions.

Hewitson, Charles C., Esq., St. John's Chapel, Darlington	3	3	0
Keele, George Thos., Esq., St. Paul's-road, Highbury, N.	1	1	0

Further donations or subscriptions will be thankfully received and duly acknowledged by Dr. Thorne Thorne, Honorary Financial Secretary, 42, Seymour-street, Portman-square, W.

Intemperance.—Mr. W. Tallack, in the *Christian Times*, has a good practical letter on the subject of intemperance, and offers several suggestions for its prevention, amongst the chief of which are the abolition of excise licensing, to close public-houses mostly, if not altogether, on Sundays, to make retail drink bills irrecoverable, to weed out the more disreputable public-houses by generally increasing the rental qualifications for licences.

H. R.—"The Surgical Aid Society," we think, supplies a want which often presses heavily on the poor and afflicted. Most of the charitable institutions in London do not supply Surgical appliances and instruments. This the "Surgical Aid Society" does, and since its existence, now seven years, has furnished 3211 appliances to persons requiring them.

A Country Member.—There is a vacancy occasioned by the resignation of Mr. Joseph Swan. Mr. Thomas Paget, of Leicester; Mr. Turner, of Manchester.

PROFESSOR HUXLEY AND PROTOPLASM.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Much is said nowadays about "protoplasm" as the result of a close observation of the phenomena of living matter. I am not aware whether Mr. Huxley claims originality for the induction, but the following conclusions of Gottfried Reinhold Treviranus sound singularly like the protoplasm of that gentleman. They are taken from my translation of the first volume of Tiedemann's "Physiologie des Menschen," published by Churchill in 1834. In giving them, Tiedemann refers to the "Biologie" of Treviranus, vol. ii. pp. 267 and 403, in these words:—

"He concludes from his researches on life—

"1. That there is in Nature a matter which is ever moving, by which all living beings, from the byssus to the palm, and from the infusoria to the sea monster, possess life, and which, though immutable in its essence, is notwithstanding variable in its form, and is incessantly changing it.

"2. That this matter is deprived of form in itself, but nevertheless ready to take that of life; that it maintains a determinate form under the influence of external causes; that it only continues in that form so long as these causes are active; and that it takes another so soon as new causes influence it.

"3. That the matter capable of life and the living principle exist recipro-

cally, and that death is only a passage of certain forms of this matter to certain others."

Such are the conclusions of Treviranus announced in his "Biologie," which was published in 1802, quoted by Friedrich Tiedemann in his "Physiologie des Menschen" in 1830, and presented by myself in English in 1834. It is possible that I do not rightly apprehend Mr. Huxley's "protoplasm;" but if I do, the above conclusions seem to me to anticipate his own by sixty years and more, though they do not bear a Greek derivative name. I am, &c. J. M. Gully, M.D.

Malvern, January 15.

A Scientific Doctor, etc.—The term "quack" is not applicable to any man who acts in good faith, believe what he may. Any man, however orthodox his faith may be, may misconduct himself so as to deserve the appellation. Science itself, from the very nature of things, must vary at times, as knowledge increases. We confess that we are feeling our way; collecting facts by degrees, and drawing inferences from them. The greatest foe to advance of knowledge is the belief in certain dogmata which preclude research. It may, or may not, be the case that for every disease some poison is an antidote, and that for every poison there is some disease which it can cure; but all this has to be made out by experiment, and till this is done the dogma is *in nubibus*.

A Student in Physick and Astrology.—We are convinced our correspondent is under a mistake. We have examined a number of packages of medicine prescribed by Medical men and dispensed by the firm he mentions. In none of them did we find any advertisement of any medicinal preparation. We are, moreover, assured by the firm that no advertisements of preparations have ever been enclosed by them in packages of medicines prescribed by Medical men. Of course a chemist has a right to wrap up such wares as Seidlitz-powders, tincture of myrrh for the gums, tooth powders, "effervescing" magnesia, etc., in any papers he likes, and no reasonable person would find fault with him for so doing.

"Haggis" or "Hades"?

The other evening a group of workmen were overheard discussing the probable result of the motion of the Rev. Dr. Johnston in the Edinburgh U.P. Presbytery regarding certain well-known statements of the Rev. George Gilfillan. "What d'ye think they'll mak o' 'im, Jamie?" said one. "I dinna ken, I'm sure," was the reply; "he's a tough customer—Geordie, an' I fear they'll land the same way as when they tried him aboot Haggis." Of course this allusion to *Hades* caused a general titter, which "Jamie" did not seem to understand, and certainly did not diminish by exclaiming, "'Od! it was something like haggis, at any rate; but ye a' ken what it means."

The New York *Nation*, in some remarks on the Œcumenical Council, says: "It is very certain, as it seems to us, therefore, that 'the army of progress' may learn a good deal from that venerable and, as many think, effete organisation, the church. Human character has, within historic times, undergone considerable modification; but the constitution of the human mind remains and will remain the same as long as the race lasts. Knowledge will always be power; reason will always, in the long run, govern the affairs of men. Its doing so is one of the lines by which Providence has separated man from the brute. Human society is the most delicate of all pieces of God's handiwork—more delicate by far, even, to him who considers it aright, than the human body—and the power, the longevity, the influence for good, the share in carrying the world on to that golden age for which, whether as the kingdom of God or the good estate, so many generations have sighed and have yet to sigh, which may be attributed to any one community, will always depend on the *amount of cultivated reason* it contains, which it brings to the conduct of its business. For communities which deliver themselves over to vain babblers, and potterers, and ignoramuses, and believe that the heights of heaven can be scaled by much speaking, there is clearly no lasting place, no great or illustrious destiny, reserved in this world of ours as at present ordered."

Parochial Medical Officers.

To the Editor of the Medical Times and Gazette.

Sir,—As our daily newspapers abound with continual outcry against the parochial Surgeons of our different parishes, might I suggest a very convenient way for the guardians to get out of their difficulty in electing their district Medical officers, and the Medical men the unthankful office of performing their duties to an ungrateful people, who are too often unnecessarily finding fault with the non-attendance of the Medical men or their own dislike to that particular parish officer? What I would suggest, Sir, is this—The amount allowed for each district should be reckoned according to the number of registered Medical men who reside and pay rates and taxes in the district who are willing to take their mites as to the number of patients they may have attended. The means of knowing how many cases each Medical man has attended who has agreed to accept the amount offered would be that each of these gentlemen should be furnished, on accepting office, with a cheque-book similar to a bank cheque-book; and that every three months or so the counterpart should be checked against those halves given out to each poor person who might wish to have a certain Medical man, and that that half-cheque should be given to the dispenser, who would produce it as often as the guardians thought fit to settle with the Medical men. This would allow every poor person to have the Medical man to their fancy, and would relieve the existing Medical officers from much toil and low remuneration now allowed. If you think the above worthy a space in your journal, or even the pith of the same, I shall be obliged by your inserting it in your earliest number, as daily we see the necessity of some change. I have spoken to two or three guardians of this parish, and they seem to approve of the plan if it could be carried out properly. I am, &c. J. Whitehead, M.D., L.S.A.

18, Upper Tollington-road, Holloway, N., January 14.

Arts Examination.—The result of the preliminary examination in December last at the Royal College of Surgeons was communicated by circular to the numerous candidates on Tuesday last, whether successful or unsuccessful; amongst the latter, we are sorry to say, there are an unusually large number. The list will occupy too much of our space to publish.

L.S.A.—A daughter of Mr. Putnam, the well-known publisher in New York, has lately graduated in Medicine at Paris.

Cui Bono.—There is a bust of Mr. J. M. Arnott in the hall of the College of Surgeons.

Archæologist.—Mr. South, a late President of the Royal College of Surgeons, is engaged writing a history of that institution, which will, no doubt, be very interesting. Macaulay states that during the last illness of Charles II. all the Medical men of note were summoned, and one of the prescriptions was signed by *fourteen Doctors*. "He was bled largely, a hot iron was applied to the head, and a volatile salt, extracted from human skulls, was forced into his mouth." His Majesty survived this treatment four days.

Erratum.—In the first line of the concluding paragraph of Dr. Osborn's letter (page 55 of our number for January 8), the word "how" is a misprint for "now."

Does Collis Browne's Chlorodyne contain Morphia?—Caution to Practitioners.

To the Editor of the Medical Times and Gazette.

Sir,—Every formula which I have seen published for preparing chlorodyne contains morphia, but it is remarkable that those who have taken Collis Browne's preparation in full doses have informed me that it is not bitter to the taste. I believe it would be impossible to take morphia in the smallest medicinal dose, however much it might be sweetened with treacle, etc., without detecting the bitter. Moreover, I have often applied a little of it to my own tongue, in an undiluted state, without perceiving an appreciable bitter taste, and, if morphia is present, the quantity must be exceedingly small. Objecting, as I do, to prescribing a remedy without knowing its composition, I have, nevertheless, given the original preparation in two or three cases without meeting with the result I should expect from the presence of morphia. It does not, for instance, produce sleep, though it, in some cases, allays pain and produces a sedative effect—strictly so termed.

As I have not taken the trouble to analyse Collis Browne's chlorodyne, I cannot speak positively as to its actual composition, but I am of opinion that the various formulæ given for the preparation differ materially from the original preparation.

The more I study therapeutics the more I am convinced of our responsibility in the treatment of disease. The administration of the most simple remedies requires the greatest caution and the greatest judgment in adjusting the required dose. How very important is it, then, that we should not only know the exact composition of our remedies, but that we should be most cautious, if we do prescribe chlorodyne, not to confound two preparations bearing the same name, and differing as they do in their physical and physiological properties. On referring to some of the published formulæ for chlorodyne, I find the proportion of morphia and other constituents differ so widely that the greatest risk would be incurred by ordering chlorodyne in a prescription. I therefore would suggest that we should adhere, as much as possible, to the Pharmacopœia, and compile what we wish to prescribe in the usual way, instead of ordering an uncertain compound.

As it is a great convenience to ourselves, as well as to the chemists, to order drugs in a compound form, and as there are so many new preparations being introduced, it becomes a question whether it would not be advisable to publish an appendix to the British Pharmacopœia every three or four years: the cost, I think, would be met by the convenience afforded. In writing a prescription we should then have to signify (B. P. Ap.) if the preparation be contained in the appendix.

Southampton, January 12. I am, &c. Henry Osborn, M.R.C.P.

P.S.—Since writing the above I have had an opportunity of tasting some chlorodyne containing one-fifth part of laudanum, and found, on placing two or three drops on the tongue, no bitter was perceptible to the taste, but, after the volatile constituents had passed off, the bitter of opium was impressed on the tongue.

Fasting Girls.—We are refraining from any extended analysis of the case of the Welsh fasting girl until the trial of the father for manslaughter has come off. In the mean time, however, it is to be observed that abstinence from food is no very uncommon phenomenon in young girls at a period when the first great revolution in their system is taking place. It is one of a number of abnormal symptoms with which Medical men are familar under such circumstances. Instances of it are being published in the papers, and from among these we select the following because it illustrates the sort of management which girls of the kind require. The main thing is to make the girl understand that there is a stronger will than her own, and by no means to let her get into her head the notion that she is at all a marvel or prodigy. We copy the following from the *Standard*:—

"I have a daughter who had a very similar illness, beginning in the same way, and continuing for three years; it was called an 'obscure case' by the Doctor who constantly attended her with the most indefatigable care and interest. The last year of her illness she lost flesh rapidly and became quite a skeleton. Her power of sitting up or walking was quite gone; a teaspoonful of fluid, tea or broth, a few times a day, or a tiny biscuit, was about all she could be prevailed on to take; and her repugnance to this was so great that she would resist even to weeping before she would submit to swallow it.

"She appeared to be rapidly sinking, and was given over by her Doctor. A Consulting-Physician, of great eminence, called in for the second time at this juncture, repeated his belief that the case was one of those obscure affections of the nervous system which baffle all Medical skill and treatment. He said she might die or might recover. He could find out no reason why she should not recover. It might be weeks, months, or even years first; and she might one day turn the corner almost suddenly, and recover as by a miracle. All he prescribed was, that food should be given peremptorily. She was to take it as medicine ordered by the Doctor. She was to be roused, and obliged to make efforts; to be taken out in the air, and be required to drink a tumbler of milk between morning and evening, sipping it at intervals, and another between evening and morning; and

after a few days meat was to be given and forced on her as physic. This was done determinedly, and a strong will exercised over her accomplished it. She had at this time no wish to recover—quite the contrary—and considered the efforts to restore her cruel. As soon as ever she could be moved she was taken away from the scene of her illness, and for nine months was subjected to continual change from place to place. None of her family going with her, she became obliged to exert herself, the friends to whom she was sent being made aware that they must ignore her illness and expect her to throw it off as much as possible. After six weeks she began to walk with crutches a little; by degrees her appetite returned; she took an interest in life, gained strength, occupied herself, and mixed with people. She returned home before the end of the fourth year last October, completely cured—rosy, fat, active, lively, useful, and thankful; and is now her mother's right hand, the most energetic of all her daughters. Allow me to sign myself "MATER."

A FASTING MAN AND GOOD CONJUROR.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your journal of the 1st inst. I find that Deputy Inspector-General Gordon mentions the case of a faqueer in the Punjaub living for a considerable time without food, etc., as related by Dr. Honigberger in his work entitled "Thirty-five Years in the East." As the book is in my possession, and as it might interest your readers, I have extracted from it the full particulars of the case, and will feel obliged if you can find space for them in your next impression. It runs thus:—

"It was in the year 1839 that I had returned to Lahore, after having visited the European Continent and my native country. I enjoyed the pleasure, on my return, of being the companion of General Ventura, who was also hastening to India to resume his duties. On our voyage we had many conversations, among which the events which had happened during my absence from Lahore underwent discussion. On that occasion the General related to me an occurrence which at first I could scarcely believe, thinking it a pure invention or a mere joke; but I soon became persuaded that he was in earnest. I give it here with the remark only that, after having arrived at Lahore, I heard it confirmed by other persons, in whose statements I could also place confidence.

"Runjeet Sing—thus runs the narrative—was told that a saat or faqueer, living in the mountains, was able to keep himself in a state resembling death, and would allow himself to be even buried, without injuring or endangering his life, provided they would remove or release him from the grave after the expiration of a fixed time, he being in the possession of the means of resuscitating himself again. The Maharajah thought it impossible. To convince himself of the truth of the assertion, he ordered the faqueer to be brought to court, and caused him to undergo the experiment, assuring him that no precaution should be omitted to discover whether it was a deception.

"In consequence, the faqueer, in the presence of the court, placed himself in a complete state of *asphyxia*, having all the appearance of death. In that state he was wrapped in the linen on which he was sitting; the seal of Runjeet Sing was stamped thereon, and it was placed in a chest, on which the Maharajah put a strong lock.

"The chest was buried in a garden, outside of the city, belonging to the minister; barley was sown on the ground, and the space enclosed with a wall and surrounded by sentinels.

"On the fortieth day, which was the time fixed for his exhumation, a great number of the authorities of the durbar, with General Ventura and several Englishmen from the vicinity—one of them a Medical man—went to the enclosure. The chest was brought up and opened, and the faqueer was found in the same position as they had left him—cold and stiff. A friend of mine told me that, had I been present when they endeavoured to bring him to life, by applying warmth to the head, injecting air into his ears and mouth, and rubbing the whole of his body to promote circulation, etc., I should certainly not have had the slightest doubt of the reality of the performance.

"The minister (Rajah Dhyan Sing) assured me that he himself kept this faqueer (whose name was Haridas) *four months* under the ground when he was at Jummas in the mountains. On the day of his burial he ordered his beard to be shaved, and at his exhumation his chin was as smooth as on the day of his interment, thus furnishing a complete proof of the powers of vitality having been suspended during that period. He likewise caused himself to be interred at Jesrota, in the mountains, and at Umritsir, and also by the English in Hindostan. In the *Calcutta Medical Journal* about 1835, there is a full description of the faqueer, and we are there informed that he preferred having the chest in which he was enclosed suspended in the air, instead of its being buried beneath the earth, as he feared the possibility of his body being attacked by ants whilst in that middle state between life and death. Having, however, refused to undergo another trial, several of the English people there doubted the truth of the story, and refused credence in so astonishing a power. But it is quite certain that, had there been any deception as regards the interment of the faqueer, rendering his experiment easy of accomplishment, those engaged or associated with him, and to whom the task of restoring the vital energies was necessarily entrusted, would of necessity be acquainted with the mystery, and able, since his real decease, to emulate his example; that, however, is not the case.

"It appears, consequently, that the faqueer was the only one then in possession of that ability; and, as a further corroboration of this view of the case, I may mention that I myself inquired in the Punjaub, in the mountains and valleys of Cashmere, and in other parts of India, and used every exertion to find a person possessed of this power, in order to bring him to Europe, or at least to Calcutta, but without success. Several Hindoos told me that such faqueers set no value upon money. I replied to them, however, that at all events they fully appreciated other worldly pleasures. They did not like to hear this statement, implying that the faqueer was a debauchee. Several complaints, however, had been made of him, on which account Runjeet Sing intended to banish him from Lahore. He anticipated the intention by eloping with a katrany (woman of a Hindoo caste) to the mountains, where he died, and was buried according to the custom of the country. His elopement with this woman may serve as a proof (in contradiction to other statements) that he was neither a eunuch nor an hermaphrodite."

I send you the copy of the portrait of Haridas.

Dr. Honigberger gives accounts of the manner in which the faqueers bring about this extraordinary state of things, but which, I fear, would take up too much space in your columns. I am, &c.

Litcham, Norfolk, January 8. JOSEPH HAZARD.

CLEVER CONJURATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reply to your letter of yesterday respecting further particulars as to the mode in which the faqueers bring about their fasting, I send you the following:—They have their frænum linguæ cut and entirely loosened, and get their tongue prominent, drawing and lengthening it by means of rubbing it with butter mixed with some pellitory of Spain, in order that they may be able to lay back the tongue at the time they are about to stop the respiration, so as to stop or cover the orifice of the hinder part of the fossæ nasales, and thus keep the air shut up in the body and head, shut their eyes and press them with their fingers, as also the cavities of the ears and nostrils, because the natural warmth of the body might cause such an expansion of the enclosed gas as otherwise to produce, by the violence of its pressure, a rupture of some of those delicate organs not yet accustomed by practice to endure it. For the better acquisition of this power, they are accustomed to practise the holding of the breath for a long period. Then they swallow a small strip of linen, in order to cleanse the stomach, and by a tube draw a quantity of water through the anus into the intestines to rinse them. This is performed while sitting in a vessel filled with water to the height of the armpits. The faqueer in question, a few days previous to his experiments, took a purgative, and subsisted for several days on a coarse milk regimen. On the day of his burial, instead of food, he slowly swallowed, in the presence of the assembly, a rag of three fingers in breadth and thirty yards in length, and afterwards extracted it, for the purpose of removing all foreign matters from the stomach, having previously rinsed the bowels in the manner I have before mentioned. He then stopped all the natural openings in the body with plugs of aromatic wax, placed back his tongue in the manner I have before indicated, crossed his arms over his breast, and thus suffocated himself, in the presence of a multitude of spectators. On his exhumation, one of the first operations is to draw his tongue into its natural position; after this a warm aromatic paste, made of pulse meal, is placed on his head, and air is injected into his lungs, and also through the ears, from which the plugs are withdrawn. By this operation the pellets in the nostrils are driven out with considerable force and noise, and this is considered the first symptom of his resuscitation. Friction is then strenuously applied all over the body, and at length he begins to breathe naturally, opens his eyes, and is gradually restored to consciousness. I am, &c.

Litcham, Norfolk, January 11. JOSEPH HAZARD.

JOHN HUNTER, F.R.S.

In continuation of the interesting letters of our great physiologist, published for the first time in the *Medical Times and Gazette*, we have great pleasure in adding another from the large collection of Hunterian manuscripts in the possession of Charles Hawkins, Esq., F.R.C.S., a member of the Council of that College where the Hunterian Museum is so well preserved. It is addressed to Lord Auckland, who took much interest in the purchase of the Hunterian Museum for the country. It is the opinion of Mr. Hawkins that John Hunter, in the letter, had some thought of perhaps giving the Museum to the College of Surgeons or to the Government. The orthography and punctuation are strictly preserved:—

"My Lord

"altho you desired me not to answer your Lordship's Letter, yet I cannot obey your orders. our conversation the other day was what naturaly arises when there is a perfect confidence in the friendships of the person we are conversing with. I then give your Lordship a short sketch of my intentions and you have been so kind as to think of them, and has offerd your assistance. Be assured my Lord, that I then did not throw these thought out as a hint which I do not believe you did originally it appeared *deid*] only was ready to show me, how ready you was to serve me, which I have expereinced upon every occasion. and be also assured my Lord (that altho I was thus not trying your friendship, yet) you was one set down in my mind; and that whenever my intentions were fully digested, that I should at once lay open my proposals and ask your assistance because I have not another idea but the good of mankind

"I am with great respect
"My Lord your most
"obedient and most
"Humble Servant
"JOHN HUNTER

"Leicester Sq:
"Feby 14. 1790."

The following letter will also be read with great interest, and perhaps some advantage to the Library of the Royal College of Surgeons. It is from the large and interesting collection formed by Mr. T. M. Stone (so long connected with this institution) to illustrate Mr. Drewry Ottley's life of Hunter. The letter was addressed to the Corporation of Surgeons by John Hunter when presenting his Observations on Anatomy and Surgery:—

"Gentlemen,

"At this period, in which the Surgeons of Great Britain have deservedly acquired the highest reputation in Europe, both by their practice and publications, it appears to be a reflection upon them that the Corporation of Surgeons of London should not be possessed of a public Surgical Library, a circumstance so extraordinary that Foreigners can hardly believe it.

"If a custom had been established at the time the Surgeons were incorporated, that every member should send a copy of his publications to the Companys library, it would have at present containd the works of many of the best writers in Surgery, which might have proved a valuable collection of instructions for the improvement of the profession.

"As the smallest beginnings may in the end lead to the greatest acquesitions, I have done myself the honour of presenting to the Company through your hands the few observations on Anatomy and Surgery which I have published; and should the other members of that body be induced to follow my example, and by presenting their works establish a Library which shall hereafter become both a public benefit and an Honor to the Corporation of Surgeons, I shall consider it as one of the happiest events of my life to have been at all instrumental in such an establishment.

"I have the Honor to be,
"Gentlemen,
"Your most obedient Humble Servant,
"Leicester Square, August 14, 1786." "JOHN HUNTER.

With respect to the curious orthography, punctuation, etc., of Hunter's letters, there is an interesting and very characteristic note by the amiable

Mr. Clift, the first Conservator of the Hunterian Museum, who was so devotedly attached to his illustrious master, in which he observes:—

"This manuscript account of the various operations for the relief of Hydrocele(a) is undoubtedly in the genuine handwriting of John Hunter, having seen him write hundreds of times, and having also transcribed more of his handwriting during his life and since his death than perhaps any other individual living or dead. The caligraphy, orthography, and punctuation afford but a lame excuse to Sir Everard Home for destroying all Mr. Hunter's manuscripts, "*because they were unfit to meet the public eye.*" The sense is strong enough and clear enough for those who are not wilfully blind. 'There are none so blind as those who won't see.'—*Old Proverb.*

"WILLIAM CLIFT.

"Royal College of Surgeons, Lincoln's Inn Fields, May 6, 1841.

"For Tom Stone."

COMMUNICATIONS have been received from—

Dr. BRITTON; Dr. ARMISTEAD; Dr. FOTHERBY; Mr. JOSEPH HAZARD; Mr. F. PRITCHARD DAVIES; H. R.; Dr. J. WHITEHEAD; Madame BAENNER; Dr. HERMANN REIMER; Dr. WILKS; Dr. J. M. GULLY; Dr. ROBERT MARTIN; Dr. PROTHEROE SMITH; Mr. S. GROSE; Dr. T. A. BUCK; Dr. PHILIPSON; Mr. G. A. HUTTON; Mr. C. J. FOX; Dr. DUDGEON; Mr. NATHANIEL ALCOCK; Mr. T. CHARTERS WHITE; ATROPA; Messrs. T. KING and Co.; Dr. BAEUMLER; Dr. A. E. SANSOM; Dr. W. CLOUGH; Da. ALEXANDER YULE; Mr. F. S. GARLICK; Dr. TUCKER; Dr. G. T. MOCKETT; Dr. F. R. FAIRBANK; Dr. LETHEBY; Dr. CORBOLD; Mr. G. AMSDEN; Dr. GEORGE CRAWFORD; Dr. W. S. PLAYFAIR; Mr. SPENCER WELLS; Mr. HAYNES WALTON; Mr. ARNOTT; Mr. LAWSON TAIT; Sir J. Y. SIMPSON, Bart.; Mr. J. HUTCHINSON; Dr. LAWSON; Mr. J. CHATTO; Mr. T. M. STONE.

BOOKS RECEIVED—

Elam's Medicine, Disease, and Death—New York Medical Journal, No. 58—Dr. Philipson's Report of the Health and Meteorology of Newcastle and Gateshead—Voluntary Patients in Asylums—Galton on the Construction of Hospitals—The American Journal of Psychological Medicine, January—The Journal of the Gynecological Society of Boston—Croll on Prison Discipline, with some Suggestions for its Improvement—The Physical Theory of Animal Life, by Julian—Owen's Shilling Manual of Pharmacy—Journal of Cutaneous Medicine, No. 12—Guy's Hospital Reports, vol. 15—Letheby's Lectures on Food.

NEWSPAPERS RECEIVED -

North British Daily Mail—The Sunderland Times—Medical Press and Circular.

(a) We purpose publishing this interesting communication in a future number.

APPOINTMENTS FOR THE WEEK.

January 22. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

ROYAL INSTITUTION, 3 p.m. Mr. Scott, "Meteorology."

24. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures—The Pathology and Treatment of Eczema, and, incidentally, the Influence of Constitutional Conditions in Skin Diseases, by Dr. Tilbury Fox. Lecture 2: The Pathology and Etiology of Eczema."

25. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Mr. J. Bonwick, F.R.G.S., "On the Origin of the Tasmanians geologically considered." Mr. H. H. Howorth, "On a Frontier-line of Ethnology and Geology." Mr. G. M. Atkinson, "On the Nicobar Islanders."

ROYAL INSTITUTION, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. William Ogle, "Anosmia: Cases illustrating the Physiology and Pathology of the Sense of Smell," etc.

26. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

SOCIETY OF ARTS, 8 p.m. Meeting.

27. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Odling, "Chemistry."

28. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

QUEKETT MICROSCOPICAL CLUB, 8 p.m. Dr. R. Braithwaite, Vice-President, "On the Geographical Distribution of Mosses."

ROYAL INSTITUTION, 8 p.m. Prof. Odling, "Prof. Graham's Scientific Work."

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 15, 1870.

BIRTHS.

Births of Boys, 1173; Girls, 1178; Total, 2351.
Average of 10 corresponding weeks, 1860-69, 2037·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	815	849	1664
Average of the ten years 1860-69	828·7	841·7	1670·4
Average corrected to increased population	...	...	1837
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	8	...	14	1	3	2	6
North ...	618210	5	7	31	2	11	7	2	8	2
Central ...	383321	...	1	5	1	3	...	3	2	1
East	571158	4	15	25	4	11	2	2	4	2
South	773175	3	15	45	1	19	3	4	7	2
Total	2803989	12	40	114	8	58	13	14	23	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·574 in.
Mean temperature	39·3
Highest point of thermometer	50·9
Lowest point of thermometer	28·2
Mean dew-point temperature	35·6
General direction of wind	W.S.W. & S.W.
Whole amount of rain in the week	0·48

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 15, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending Jan. 15.	Deaths Registered during the week ending Jan. 15.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2351	1664	50·9	28·2	39·3	4·06	0·48	1·22
Portsmouth ...	122084	12·8	83	56	51·2	27·2	40·3	4·61	0·39	0·99
Norwich	81087	10·9	54	49	49·5	27·0	37·0	2·78	0·62	1·57
Bristol	171382	36·6	145	102	49·2	31·0	39·7	4·28	1·41	3·59
Wolverhampton ...	72990	21·5	57	33	47·6	29·8	38·1	3·39	0·60	1·52
Birmingham ...	360604	47·2	237	202	48·4	31·2	39·2	4·00	1·14	2·89
Leicester	97427	30·4	79	50	47·7	26·7	36·5	2·50	0·86	2·18
Nottingham ...	88888	44·5	51	50	47·2	23·4	36·1	2·28	0·71	1·81
Liverpool	517567	101·3	403	279	46·5	32·2	39·6	4·23	0·77	1·96
Manchester ...	374993	83·6	243	203	47·5	26·0	37·0	2·78	1·26	3·20
Salford	124580	23·5	105	67	48·1	23·8	36·2	2·33	1·37	3·48
Bradford	143197	21·7	105	43	46·1	29·8	37·7	3·55	0·96	2·82
Leeds	259527	12·0	119	129	47·0	30·0	38·6	3·17	1·10	2·44
Sheffield	247378	10·8	168	137	47·0	31·0	38·4	3·67	1·11	2·79
Hull	130869	36·7	101	58	46·0	23·0	35·2	1·78	0·55	1·40
Sunderland ...	94257	19·6	48	50	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	73	72	44·0	29·0	35·2	1·78	0·20	0·51
Edinburgh	178970	40·4	105	109	43·7	27·0	35·6	2·01	0·60	1·52
Glasgow	468189	92·5	334	316	43·0	26·4	35·4	1·89	1·91	4·86
Dublin (City, etc.*)	321540	33·0	148	152	53·0	28·0	39·3	4·06	0·30	0·76
Total of 20 Towns in United Kingd'm	7209603	33·6	5009	3821	53·0	23·0	37·6	3·12	0·86	2·18
Week ending Jan. 15 Paris	1889842	...	...	998	...	...	...	...	...	...
Week ending Jan. 8 Vienna	605200	...	...	313	...	...	33·6	0·88	...	...
Week ending Jan. 13 Berlin	702437	...	656	606	...	...	30·0	3·88	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·574 in. The barometrical reading increased from 29·18 in. at the beginning of the week to 29·89 in. on Tuesday, Jan. 11.

The general direction of the wind was W.S.W. and S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON METEOROLOGICAL READINGS IN RELATION TO SURGICAL PRACTICE.

Gentlemen,—In the month of October of the year 1868 I wrote a note to Mr. Spencer Wells conveying to him an opinion that the time was unfavourable for the performance of the formidable operation with which his name is so familiarly connected, ovariotomy—that the external atmospherical conditions were not only opposed to recovery from operation, but were even conducive to death.

The prediction thus ventured upon—and, indeed, the venture was not very great in presence of the evidence in hand—was verified by the results of practice, and, Mr. Wells having, with a candour which is rarely met, publicly affirmed the fact, it has happened that since the time named I have been repeatedly addressed by various members of the Profession in respect to two questions. Several times it has been asked whether, at a given period then present, there was any serious objection against operation; more frequently a plan of observation or series of rules has been applied for, by which the Surgeon may know for himself what are and what are not favourable seasons for operative proceedings.

It is my intention in the present lecture to try, as far as is possible, to meet the last of these requests, and as it would be hard to approach a subject of greater importance, so it is necessary to approach it with equal caution, modesty, and decision; for if the views to be advanced are in the main correct, they will not only give the Surgeon, in very simple rules, an account of the best seasons for operating, but will offer the means of largely reducing the fatality of some operations, the means themselves being simple, inexpensive, natural, true. If I have appeared to have been reticent on this subject too long, the reticence has been due to sense of responsibility in putting forward the details of a reform so large as that which is now in my mind. I have feared lest the charges of enthusiasm and innovation might be levelled with success even against a correct demonstration, (since these charges cost their authors no labour, but form rather an idle pastime), and I have waited therefore to relearn and to feel reassured. I wait now no longer, but proceed, sustained by no feeling so powerfully as that those to whom this lecture is addressed are sure to appreciate justly what is to be adduced, and to accept favourably even an approximation to the truth, on a subject so vast as that before us at this moment.

And, in the first place, let me say that the study we are entering upon has a general bearing on disease and its prevalence. The simplest, the most natural of all subjects for study, it has been ignored for the most abstruse and unnatural studies. We observe great outbreaks of disease, and we look for their primary cause: says one, it is "epidemic influence;" says another, it is "germs, organic germs;" says a third, it is "malarious air," and so on, each having a theory and adding to it some learned reason, or so-called practical inference or moral, and all omitting to inquire what may be the action, in regard to causation, of common changes of atmosphere combined or uncombined with natural physiological changes in the living organism. The study we are now upon touches on the omission I have thus noticed. It brings us face to face with simple natural agencies in relation to their effects on our animal motion, and thus it really brings us face to face with the first causes of disease, all of which are simple natural agencies.

My present thesis is to this effect, that there are certain particular conditions, simple atmospheric conditions, which are favourable to the success of Surgical operation; others which are unfavourable; and that these conditions, favourable and unfavourable, admit of being recognised by the means we have now at command in science.

Certain classes of Surgical operation come definitely, I think, under this rule; others are excluded from it. We may exclude minor operations, such as extraction of teeth, all subcutaneous operations, and, in fine, every operation which in an overwhelming majority of cases is unattended with risk to life. Again, we may exclude those larger and dangerous operations which are demanded by accident, and which, at all risks, must be performed in the attempt to ward off threatening death. We may include, on the other hand, all Surgical operations in which the resistance, excited by the operation, to the continuance of animal motion is hazardous, and in which, at the same time, there is no such immediate demand for the performance of the operation as shall force the Surgeon to proceed when the conditions surrounding the patient are opposed to success. These operations constitute the larger part of capital Surgical practice, and the reduction of fatality from them would effect virtually the whole success of Surgery in a nation where every Surgeon practised with a determination to act only under conditions favourable to success, except in emergency.

In seeking out the conditions favourable and unfavourable to Surgical practice, we are bound first to look upon the nature of death after operation. As a rule, an operation may be considered successful, in so far as it is itself concerned, if the patient recover from the direct effects of it within ten days after the operation. Indeed, with respect to some of the most extreme operations, such as ovariotomy, the absolute danger of death from the operation may be considered practically as over at the end of one hundred and forty hours. There may be exceptions to this rule, but they need not disturb us. Neither need we be disturbed by the secondary results of operation, such as recurrence of cancer or other growth. We need only consider what it is which kills as the direct result of Surgical interference.

When, then, we narrow our practice to this limit, we find after operation a few prominent and immediate causes of death. They are (*a*) immediate shock, (*b*) syncope from hæmorrhage, (*c*) tetanus, (*d*) gangrene, (*e*) exhaustion from discharge, (*f*) increment of animal heat from resistance, giving rise to one or other of the types, apparently different, but really the same in essence, of Surgical fever. The last of these causes of death is that which fills up the balance-sheet against Surgery; it is that, also, with which we have now to deal.

In a previous lecture I have dwelt with care and clearness on the effects of increment of animal heat. I have shown what is a fatal increment; I have shown that the direct effect of increment is to cause contraction of vessel, suppression of watery secretion, and separation of fibrine from accumulation of water in the blood.

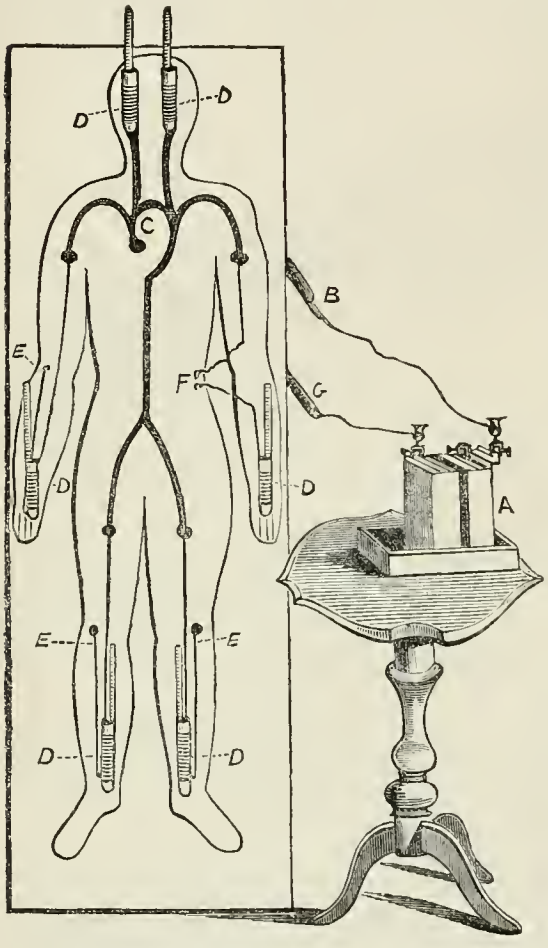
The induction of these changes within the body by increment of heat is, moreover, a simple act. An animal which cannot cool down rapidly enough to meet even a moderate increase of external temperature will show increment of heat that shall be fatal in an air in which another animal may live unaffected. An animal subjected to active oxidation while the conditions for equalisation of heat are imperfect will suffer from increment of heat, and may die. In Surgical procedures, in Surgical operations, the production of increment of heat is equally simple. There existed in the animal before operation a given structure, through which, while that structure was in connexion with all the body, there was distributed from the combustion of so much blood a certain amount or degree of force. The Surgeon severs this structure from the rest of the body, and thereby limits, in proportion as he removes in some cases, the distribution of force derived from the main source. But observe, he but temporarily interferes with the development of force in the body as a whole, and so when the immediate depressing effect of the operation is over, when the organic mechanism swings round, to speak in common language, and rights itself, then, the active combustion restored, there will be resistance in the organism, because so much living structure has been severed, and if there be not equalisation from evaporation of water, or increased secretion or radiation, there will be increment of heat and Surgical fever.

Let me illustrate this explanation by a simple piece of mechanism which is here constructed. There are mapped out on a board the arterial and venous systems of a man. The arteries are represented by insulated copper wires, and the veins are represented in a similar way. All the arteries have a common origin from a bundle or rope of wire which enters at what may be called the point of origin of the great aorta, c; then they divide as the great arterial trunks divide—some to the brain, some to the extremities. At the termination of each arterial course, the arterial wire is made into a fine coil representing

(a) Delivered on Tuesday, January 4, 1870.

the capillary surface, DD, DD, DD, and within each of these coils is placed a small glass tube containing a little mercury, and holding a small thermometer. The extended arterial or capillary coil terminates in a return wire, B, which we may call the venous wires, E, EE, and ultimately all the venous wires are made to coalesce into one cord or bundle, G, which

FIG. 1.



emerges from the system at the point where the arterial cord enters. The two terminal bundles or cords are finally connected with a small Grove's battery, A; they are so connected that the voltaic current passes from the battery through the wires which represent the arterial system, through the coils which represent the peripheral system, and through the wires which represent the venous system back to the battery.

And now, when the battery is put into action, we notice this phenomenon, that the mercury in the little cups, which are surrounded by the coils, gains, as you will expect, in temperature, and, other things being equal, the rise of temperature in each cup is equal, so that the thermometer in all stands at the same level—in brief, there is equilibrium; the force derived from the battery is equally distributed to every part, and so long as the battery power remains the same, and the surrounding air the same, there is the same manifestation of heat. If the battery begins to fail, there is a general reduction of temperature; if another cell be added, there is a general gain of temperature. The changes of decrease and increase are dependent on the battery. When, then, I do not interfere with the battery, but keep it in steady action, all the thermometers in the cups show the same degree of heat in all parts of the periphery; but if I cut off one of the limbs—say a hand from the artificial system—by dividing the connecting wire, as at F in the diagram, the temperature of the mercury in all the other cups rises, and the thermometers register the fact. The battery power is the same before as after the division, but there is so much resistance from the operation which has been performed, that there is elevation of temperature in the remaining part of the system.

If, instead of using a battery and wires, I could use tubes, like arteries capillaries and veins, could charge them with a current of heated fluid, and could keep that fluid up to a given temperature as it circulated, I should more faithfully represent the animal mechanism, mechanically, than I have represented it here. But the facts elicited would be the same—that is to say, on cutting off a given portion of the circulating force there would be resistance in the remaining parts and increment of heat.

The inflammatory fever of John Hunter—or sympathetic fever, as he sometimes called it—is, when simply understood, in the same manner an increment of heat from resistance, and the increase of water in the blood, the apparent increase of fibrine and the adhesive infiltrations that may follow are but the sequelæ of the first divergence from that natural process of animal motion in which there is perfected equalisation of the force produced within the organism.

You will remember an experiment performed in my lecture last year on decrement of animal heat, and I refer to it now because it illustrates well the point before us. A pigeon was put instantaneously to sleep in vapour of bichloride of methylene, and was let to die instantly. The natural temperature of the bird was 107° Fahr. before death; but so soon as the death took place, so soon as the muscular motion—motion of respiration, circulation, and digestion—ceased in the animal, the temperature rose three degrees. Why? Because in the animal after death there was still chemical action progressing for a short time, and, as that was not disposed of as motion—that is to say, as the normal process of equalisation was interfered with—the result of the chemical changes was illustrated in elevation of temperature; the temperature of the dead animal rose until, by loss from radiation and conduction, the further rise was checked. Afterwards, as the chemical changes were not renewed, there was decline of temperature to that of the surrounding air.

There is a method by which you can make a similar observation in the simplest manner, and without devising any special or elaborate experiment. Rabbits when killed for food are usually slain by a blow on the back of the head—a very painless and humane mode of killing. When, then, this process is carried out in a warm air, the temperature of the air being from 85° to 90° Fahr., the temperature of the body will be found to rise, immediately after the fatal blow, two and a half and even three degrees, and will be sustained until there is equalisation by radiation or conduction of heat from the body. The suddenness of the arrest of respiratory, cardiac, and intestinal motion is again the cause of increase of temperature.

If, in a living animal, I could remove as much active substance as would represent the active matter of the heart, respiratory organs, and digestive organs, without touching those parts, I should have the same rise of temperature as if the motions of those organs were suddenly suspended, with this difference—that, if force should continue to be fully evolved in the living animal, the increment of heat would continue, and, with increase of resistance, would persist to increase unless it were equalised.

But let me put still a better case forward in illustration. A few weeks since Mr. Wells performed ovariotomy in a woman whose temperature before the operation was 98° Fahr. After the return to full power from the operation the temperature began to run up rapidly till it reached, such was the resistance, 104° Fahr. Suddenly there was death—death so rapid that the process for the production of heat continued, even after the respiration had ceased, and the result was that a few minutes after death the temperature of the body rose to 109° Fahr.

What instruction a case such as this affords!—what insight! The rise of animal temperature after the operation, the rise after death, both from one and the same physical cause.

The nature of the operation in respect to the part operated upon is of moment in relation to increment of heat. Some structures are interfered with with much more danger than other parts, and three structures I notice specially in this regard—the brain, the peritoneum, and, in the male, the testes.

Let us, then, keep this point fairly before us—that there will be increment of heat from resistance, Surgical fever, whenever an operation performed on the living body shall cause sufficient destruction of part to interfere with the distribution of heat, provided always that there be no compensating process set on foot to meet the difficulty.

Happily there are certain modes of compensation which, in the majority of operations, do meet the difficulty and the inevitable danger of death. In the first place, there is direct radiation of heat from the body; then there is evaporation of water as vapour; next there is the quickened movement of pulse and of respiratory muscle, which we call a symptom of

fever, but which, in truth, *is in the end a process of cooling*; and, lastly, there is arrest of appetite for food, and the almost complete voluntary abstinence from food. These are the equalising processes. Carried to their ultimate perfection, they restore equilibrium, and there is recovery.

Unhappily there is one process of cooling down from fever heat, in acute inflammation, which is in itself fatal—that is, a process of cooling from arrest of the current of the blood on the right side of the heart. I have described this sudden decline of temperature many times, but I cannot notice it too often; I have diagnosed from it many times with a certainty that has seemed singular, but it is a so certain and simple a diagnosis, that, when it is known, he who runs may read it.

The safe processes by which the increment of animal heat is lowered, prevail, fortunately, in the majority of cases. In this country I should judge that, in from eighty-five to ninety per cent. of Surgical operations, there is reduction of fever from compensation, with recovery, and, as there is no country where Surgical art is so bold and so skilled as it is in this, it will be quite fair to consider that our results are a just average, at least, of the results of the world altogether. There remain, consequently, from ten to fifteen per cent. of cases in which death follows operation, and, although this is a very small number compared with the whole number operated upon, it is a huge totality per year.—The cause of this mortality is a question we have to ask.—We may throw overboard at once any fault in Surgical art, for, although Surgeons are mortal, it is one of the wonders of the age how rarely they have an accident that is fatal in the course of an operation.

And so there remain behind those causes which were enumerated at the beginning of this lecture, chief of all Surgical fever. And now I come to this consideration:—Is the increment of animal heat influenced by external conditions, and if so, what are they? If it be so and we can read those conditions, we can reduce mortality. We appeal first for knowledge respecting external influences. They are season, temperature, barometrical pressure, moisture of air, electrical condition of air, direction and force of wind. We will consider these briefly in detail.

Season.

When we study the influence of season in relation to changes in the body, we include in one view not only the combined influence of atmospherical changes, but certain great and singular changes which are progressing within the body itself. The general influence of season on the results of Surgical practice is of the most significant import, for Surgical fever, in relation to frequency, comports itself with all that class of general disease which is attended with increment of heat—scarlet fever, acute rheumatism, erysipelas, puerperal fever, carbuncle; and the facts relating to the mortality of all of these are in such accord they admit of no doubt. These diseases, when considered on an efficient scale, all have seasons when their mortality prevails; for example, from an analysis of 139,318 deaths, from all diseases, during the year 1838 to 1853, I found by the Registrar-General's tables that the mortality from three of the diseases of the class named held the following proportion, in regard to mortality:—

	First Quarter. Jan., Feb., March.	Second Quarter. April, May, June.	Third Quarter. July, Aug., Sept.	Fourth Quarter. Oct., Nov., Dec.
Scarlet fever	20·809	18·978	26·234	33·976
Erysipelas .	25·144	23·444	22·337	29·174
Carbuncle .	29·771	19·685	24·409	29·133

Thus we see that in respect to these diseases, the congeners with Surgical fever, the mortality reached its highest in the years named at the period of the fourth quarter.

In further illustration of the same truth, let us turn to the Registrar-General's summary for the year 1868, and from this we glean the following table:—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Erysipelas . .	81	69	102	175
Puerperal fever .	54	45	42	78
Carbuncle . .	12	8	15	16
Rheumatism .	79	93	118	184
Scarlet fever .	368	352	738	1463

It is unfortunate for us that we cannot produce elaborate tables of facts relative to Surgical operations and their results at different seasons. But I have one series of facts which is entirely to the point, and which is peculiarly valuable because it admits of comparison with the general death-rate from diseases allied to Surgical fever which has been recorded above, and because one great operation is concerned and one operator. In the year 1868 Mr. Spencer Wells performed the operation of ovariotomy fifty-four times. In January, February, and March, he performed the operation sixteen times, with a result of three deaths within the fifth day after the operation. In the months of April, May, and June, he performed the operation thirteen times, with a result of two deaths, one of which was within two hours, and therefore would not reckon in our research, and one death in eighty hours. In July and August he performed the operation five times, with one death on the third day. In October, November, and December, he performed the operation twenty times, with a result of *eleven* deaths all within the sixth day after the operation. Now, add these facts to the table for 1868 which I have quoted, and see how interesting is the lesson; how the results of the special operation tally in the main with those of the table. In the first quarter the deaths, in Mr. Wells's cases, are 1 in 5·3; in the second, excluding the death two hours after operation, 1 in 13; in the third, 1 in 5; in the fourth, 1 in 1·8.

These observations are precise, but I have observed year after year practically the same relationships. I have extended the observation to deaths in which the fatal result has been recognised as due to fibrinous deposition in the heart, of which I see so many cases; and the estimate I have been able to form from the whole series of observations has rendered me the approximate truth which is now attempted to be explained.

From the facts, then, we gather that the last quarter of the year is the period most favourable to the class of cases in which increment of animal heat is the first and distinguishing symptom. The last quarter is clearly the central quarter of the season in which these diseases are most fatal. There are fluctuations sometimes on the side of the quarter which precedes it, and sometimes on the side of the quarter which follows it, but it retains its place.

Singularly, too, the December of this quarter is the centre of a period of seven months—September, October, November, December, January, February, and March—during which there is occurring in the animal organism a marked modification in the nutrition as compared with the five remaining months—April, May, June, July, and August. In the period in which December is the centre, there is, as the admirable researches of the late Mr. Milner, of Wakefield, have shown, a determinate loss of animal weight in persons living under the same precise circumstances in respect to food, clothing, and exercise; while in the five other months there is an increase of weight. The maximum of decrease is in March, of increase in August.(b)

(To be continued.)

(b) Mr. Milner's observations on this subject are in their way the most laborious and valuable on record. From his position as Surgeon to the convict establishment at Wakefield, Mr. Milner was enabled to weigh every prisoner at given periods, to compare the gain and loss throughout the year, and to estimate such gain and such loss, by individual against individual, and by diet against weight. The prisoners upon whom the observations were made had been sent to Wakefield to undergo the first portion of their punishment. They were kept in separate cells for a period of nine months, they were all males between the ages of 15 and 60, and they were all in good health when they arrived. Their cells having an equal capacity and the same means of ventilation, they were served with the same quantity and character of air, and the mean temperature of the cells was in every case 61°. The men were all fed on the same kinds of food, they were all dressed in the same attire, and they were made to take the same amount of exercise. They were weighed on admission, and again at the latter end of every calendar month during their stay. The number of men weighed by Mr. Milner exceeded 4000; the period of time occupied in his observations was ten years; the average number of prisoners weighed monthly was 372; and the total number of individual weighings was 44,004. To begin with the first months of the year, he found that the body undergoes an average loss of weight in January, February, and March, the proportion of loss being 1·14 in January, 0·24 in February, and 0·95 in March. During the months of April, May, June, July, and August, there is gain in the following proportions:—For April, 0·03; for May, 0·01; for June, 0·52; for July, 0·08; for August, 0·70. In September, October, and December, there is loss in proportion of 0·21 for September, 0·10 for October, and 0·03 for December. November presents an exception to the months that precede and follow it, there being an average gain of 0·004; so that, at first sight, November would seem to be an exception in the losing series of months that precede and follow it, in a very, very slight degree. But Mr. Milner points out that this apparent exception was caused in the prisoners by the arrival of large numbers of new men in each year, and from the fact that the men usually gain weight for a short time after they are received; so that this break in the series results from the influence of the stage of imprisonment. On the whole, there is an average loss beginning in December, and increasing rapidly up to March. In April there is an abrupt gain, which extends irregularly until August. In September there is a rapid loss, which continues, but not to the same extent, through October. From these facts Mr. Milner draws the following inferences:—1. The body becomes heavier during the summer months, and the gain varies in an increasing ratio; 2. The body becomes lighter during the winter months, and the loss varies in an increasing ratio; 3. The changes from gain to loss, and the reverse, are abrupt, and take place about the end of March and the beginning of September.

ORIGINAL COMMUNICATIONS.

ON DERMATITIS EXFOLIATIVA.

By ERASMUS WILSON, F.R.S.

General dermatitis is sufficiently rare to excite some attention and interest whenever a case of the kind comes under notice. I have already published in my work "On Diseases of the Skin" two instances of this disease and one of a local form, and I now present to the Profession the details of another example of the same affection. Heretofore I have followed the nomenclature of Devergie and Hebra, and have called it "pityriasis rubra;" but, on the present occasion, I have ventured to employ a term which, I believe, will convey to the mind a better idea of the nature of the complaint than the name given to it by my colleagues, and which, at the same time, is calculated to escape controversy. There may be some doubt as to the true meaning of pityriasis and as to the appropriateness of the application of the name to the disease in question, but there can be none as to the term "dermatitis exfoliativa"—that is to say, inflammation of the skin accompanied with exfoliation of the epidermis, the inflammation being of an unusually intense kind, and the exfoliation of cuticle profuse, amounting, in fact, to a state of positive flux.

The case which I am about to describe, may be briefly stated as follows:—A punctated exanthema, following a shock to the nervous system occasioned by chill, nausea, perspiration and checked perspiration; the exanthema developed in a few hours, and rapidly diffused, until the whole body presents a bright red colour; excessive heat with soreness and stiffness of surface; well-marked infiltration and condensation of the skin; tendency to crack into fissures on motion; in six or seven days incipient exfoliation of the epidermis in thin laminæ with elongated base; the line of fracture of the cuticle corresponding with the grooves of motion of the skin, and, when the laminæ are only partially separated, projecting from the skin in narrow frills sometimes several inches in length. Incessant exfoliation of cuticle so as to fill the patient's bed with thin laminæ; no pruritus; no exudation; no general perspiration, and but slight partial perspiration from the forehead and back of the hands; tendency to œdema about the ankles; scanty urine loaded with urates; no albumen; pulse quick and excitable; tongue clean; appetite and digestive organs undisturbed, and strength but little affected.

The patient, a young man, aged 28, enjoying average health, and engaged in a brewery, was attacked with eczema erythematosum, which was developed in small circumscribed patches on his limbs, chiefly those of the lower extremity. This occurred in the month of May, 1869, the eruption desquamating and continuing without other change until October. At the latter date he left home with his wife for an afternoon's holiday. The day proved to be wet, and his clothes were saturated with moisture. He stood under an archway waiting for a cab for nearly an hour, and on reaching his house was seized with nausea. He then went into his garden to relieve himself by vomiting, but was unable to do so, and became suffused with perspiration. While in the garden he experienced a chill, which he was unable to shake off the whole evening, and he has remained abnormally sensitive to cold ever since. On the following morning it was perceived that his skin was covered with a bright red and punctated exanthema, which in the course of the two following days spread over the whole surface of his body. Nevertheless, the rash was unattended with fever, and did not therefore confine him to the house. The inflammation of the skin, with great redness and excessive heat, lasted without breach of surface for about a week, but after this time the epidermis began to crack and exfoliate, and has continued to do so up to the present time—namely, about six weeks from the beginning of the attack.

On November 20 I saw the patient with Dr. Locke. His face presented the usual remarkable character of this foliaceous form of dermatitis—a deep red hue, with tightening and contraction of the skin, and an unusual expansion of the eyelids, which gave to the countenance a staring expression, and, added to this, the white edges of numerous partially separated stripes of epidermis, which marked the forehead and face all over as if it had been tatooed. The ears also were deeply red, and looked parched, and there were dark scabs at the root of the pinna and at several points on the helix, produced by the oozing of blood occasioned by his habit of picking at the scales.

From the head down to the feet the same characters prevailed, although in a heightened degree. The skin everywhere exhibited the appearance of tightening and contraction; it was vividly red, covered with loose frills and shreds of epidermis, was hot and parched, and exhaled an unpleasant valerianic smell, while the lower sheet was covered with similar shreds and flakes. The exfoliation of the epidermis was, however, most remarkable on the back, which was covered with small gauze-like shreds ranged for the most part transversely, the rows being situated at short distances apart. The derma had the appearance of being thinner than ordinary, and the grooves of flexion were strongly marked. The only parts of the skin which had escaped the general dermatitis, but those only partially, were the soles of the feet and palms of the hands, the latter being moistened with perspiration. But, at a later period, the cuticle of the palm was raised by numerous pimples, was hard and stiff, and subsequently exfoliated, as did that of the soles of the feet.

The symptoms accompanying this state were a feeling of burning heat with occasional transient chills, of soreness and stiffness; he had difficulty in opening his mouth when told to put out his tongue, and he dreaded movement from the fear of cracking his skin. There was no itching, and he had had none from the first.

Constitutionally, his appetite was good, and digestive functions moderately healthfully performed. His tongue was clean, bowels a little confined, and urine normal in appearance and somewhat scanty. He remarked that he was thirsty, and drank a good deal of water, but he was at a loss to understand what became of the fluid. This difficulty is easily explained when the burning heat of the surface of the skin is considered, and the necessarily rapid evaporation of moisture. He slept well, and the only important symptom of disorder of health that could be discovered was a nervous pulse, ranging in frequency between 105 and 110.

To summarise the chief features concerned in the origin of the disease, we may note the predisposition to eczema, the wetting through, the shock to the nervous system evinced by nausea; the outburst of perspiration; the succeeding chill, and finally the reaction declared by the exanthema and subsequent dermatitis. That the eruption is allied with eczema seems proved by the presence of an existing eczema; but it differed from ordinary eczema in the total absence of ichorous exudation, although the skin was obviously condensed by infiltration, and especially in the absence of itching. Neither in eczema do we ever find the rapid growth and exfoliation of epidermis which is so strikingly characteristic of this form of disease.

At a subsequent visit to our patient nine weeks from the commencement of the attack, I was informed that he had remained at his work for five weeks previously to taking to bed, and that this latter event was brought about by a painful boil situated near the anus. With the pain and irksomeness of the boil, the dermatitis had increased in uneasiness, and he has now kept his bed for a month, although the boil healed in a week. He had been subject to boils as a boy of fifteen, and had outgrown the tendency, but at the present time he has several small boils on the occiput, induced probably by the heat of the pillow. Since my last visit his state had improved very materially; a few days before he had attempted to get up, but he found his skin still stiff and sore, with a tendency to crack, especially in the joints, and the sense of chill previously spoken of was very disagreeable. His pulse is now 80; his tongue clean, but soft and over moist; the appetite good; bowels regular with the aid of a Seidlitz draught; and urine natural. The scales have disappeared from his scalp, they have lost their linear arrangement on the face, and they are thinner and less abundant on the rest of the body. The armour-plate distribution of the stripe-like laminæ is, however, more striking; the patient speaks of his skin as being "ribbed" by the white streaks of exfoliating epidermis, and these laminæ are transverse upon the arms, and longitudinal on the outer side of the thighs. In the latter situation, the scales, or rather frills, are many inches in length, about half an inch in breadth, and situated pretty evenly at about an inch apart, whilst on the palms and soles the epidermis is desquamating in broad laminæ. The derma is paler, and thrown into small wrinkles, and is evidently less infiltrated, indurated, and hot; still there is no exudation of moisture on any part of the body, and no perspiration.

With these characters of this very singular and interesting disease before us, we are in a position to inquire, what name would be most suitable to convey the idea of its nature? That it is a dermatitis is self-evident, but so also is eczema. Dr. Wilks, in describing a similar case, calls it a "general inflammation of the skin or dermatitis." I myself called it, in the first instance that came under my notice, dermatitis squamosa

rubra, but the word dermatitis itself expresses redness, and "squamosa" hardly suffices to give an idea of the foliaceous and frilled character of the desquamation—in fact, of a fragmentary exfoliation rather than of a desquamation. Hence my selection, as the heading of the present case, of the term dermatitis exfoliativa. Its decided alliance with eczema, if not its positive identity with eczema, suggested another name which once occurred to me as being particularly appropriate—namely, eczema foliaceum, and the further designation of psoriasis squamosa rubra; while it would seem to be this malady which has received from Devergie and Hebra the name of pityriasis rubra. An objection to the term pityriasis is palpable—namely, the large size of the laminæ of epidermis, which bear no proportion whatsoever to the small bran-like scales of psoriasis and pityriasis. Indeed, in the presence of the patient the latter term is wholly inapplicable, and, if it were recognised, pityriasis foliacea or pityriasis foliacea rubra would be much more suggestive than pityriasis rubra simply. The exfoliating laminæ have generally an elongated figure corresponding with the grooves of motion of the skin, and they are free only by the border, which, in accordance with the motions of the part, is one while directed upwards and another while downwards; and these elongated laminæ, sometimes many inches in length, are apt to be broken into smaller fragments, which, when collected, have the appearance of the bracts of the hop rather than the smaller scales of bran.(a)

By actual measurement many of the exfoliated laminæ extended to two inches in length by half an inch and three-quarters of an inch in breadth, while, in quantity, the scales amounted in weight to somewhat more than two ounces, and in bulk to upwards of a pint in the day.

In the case reported by Dr. Wilks in the *Guy's Hospital Reports* for 1861 the patient was a coal-porter, aged 34, under the care of Dr. Rees. On his admission into the Hospital he was exceedingly ill, with febrile symptoms, pulse full, tongue thickly furred, and skin covered with a punctated rash which was thought to be incipient small-pox. In a few days the whole skin manifested a general and intense inflammation; it was vividly red, and "slightly swollen." On the sixth day the skin was beginning to roughen with desquamation, and on the tenth day large flakes of epidermis were peeling off. On the palms and soles there was no redness at first, but in the desquamating stage the ends of the fingers were raised in bladders, from which the fluid became absorbed, and the cuticle subsided and shrunk, while at a later period he lost the nails of his fingers and toes. As the desquamation proceeded, the tongue was less coated, but became superficially ulcerated, and it was ascertained that he had had a suppurating bubo ten years before. The patient was convalescent at the end of a month; but, although convalescent, he was still an out-patient at the end of the ninth week, and at that time he was losing the nails of his fingers and toes.

According to Devergie, *pityriasis rubra* is the only affection, with one exception—namely, acute lepra—that is capable of invading at once the whole surface of the body. It has been met with more frequently in females than in males, and chiefly between the age of 40 and 45. It makes its appearance on any part of the body, most commonly the front of the trunk or the inner side of the limbs. It presents itself as an erythema, vividly red, deep and uniform in tint, and terminating by an abrupt boundary. It increases rapidly in extent and depth of colour, the skin becomes thickened and moist, and throws off thin epidermic scales that are easily detached. The redness and moisture are augmented with the progress of the disease, and the epidermic lamellæ become larger and more abundant, the symptoms which accompany the disease being heat, tingling, and some degree of itching.

If the eruption be severe, a surface of skin of considerable extent may be invaded in the course of a few days, and not uncommonly the whole body may become affected in from two to four weeks. When this is the case, the subcutaneous tissue as well as the skin is slightly swollen, and the sweat-like exudation is so excessive that the patient may require a change of linen twice or three times in the night. As the cutaneous transpiration subsides the amount of epidermic exfoliation increases to such an extent that in the morning there may be collected from the bed a quantity of scales sufficient to fill a measure of from two to three quarts (*deux et même trois litres*).

Contrasting pityriasis rubra with eczema, Devergie remarks that although, from the presence of inflammation of the skin accompanied with exudation, heat, and itching, eczema might be suspected, yet that there really exist strongly marked differences between the two—for example, in eczema the redness is less vivid, and blends with the surrounding skin; the pruritus is severe, the eruption never occupies the totality of the skin; there is no thickening of the skin, and the scales only make their appearance at the chronic period of the disease; they adhere very firmly, and can only be removed with pain. Whereas, in pityriasis rubra the redness is intense and abruptly circumscribed; the skin is thickened, the subcutaneous cellular tissue somewhat swollen. There is very little itching, but a severe burning sensation; the exudation has the character of sweat, scales appear from the first, are abundant and easily detached, and there are no red secreting puncta, the redness being perfectly uniform.

Pityriasis rubra resembles eczema in the firmness of hold which it takes upon the system, and is often more difficult to cure. When it has invaded the whole of the skin, it is perpetuated for several months, and continues during the entire period to produce epidermic lamellæ. This wasteful operation results in debility; the patient becomes emaciated, his mental and digestive powers both suffer, and not unfrequently diarrhœa is developed. Even when the inflammation has the appearance of subsiding it is liable to relapse, and the disease rarely runs its course without evincing a relapse.

Devergie indicates two periods of the eruption—acute and subsiding. During the former the skin is burning hot, so that the patient can scarcely bear any covering, even in winter; while in the subsiding period the heat and exudation are diminished, but the lamellated exfoliation continues. The prognosis of the disease, he tells us, is not grave, unless it occur in the debilitated or the aged; but it is always serious on account of its persistent character and the tendency which it occasionally exhibits to merge into pemphigus. Moreover, when neglected, it is apt to become chronic, and to last for several years.

The treatment most suitable to the acute period of the disease consists of daily baths, inunction with lard several times a day, starch powder, cooling drinks, sometimes the vapour bath, and, where the condition of the patient is favourable, arsenic; while in the subsiding stage the best remedies are—applications of tar, baths of alum or perchloride of mercury, and gentle frictions with juniper tar every three or four days.

The pityriasis rubra of Hebra corresponds sufficiently closely with that of Devergie to make the identity of the disease evident; but he states that the affection is extremely rare, that he had seen but three cases, and that these three cases all terminated fatally after a duration of a certain number of years. Indeed, the fatal issue of the complaint, and its resistance of remedies found useful in eczema, he regards as the main causes for a distinction between pityriasis rubra universalis and eczema squamosum. The stage of eczema squamosum, which corresponds with pityriasis, is the stage of decline of the disease, and is that consequently which the most readily yields to treatment. "I give the name of pityriasis rubra," he observes, "to an affection in which, throughout its whole course, the only symptom is the persistent deep-red coloration of the skin. In this disease there is no considerable infiltration of the cutis; no papules or vesicles are formed; no secretion is poured from the surface; the itching is slight, and does not lead to the formation of excoriations; no fissures make their appearance; and, lastly, particular regions of the body are rarely affected, the whole surface of the skin being generally attacked."

The patients seen by Hebra represented to him that the eruption had made its appearance on the whole body at once; at first the redness was slight, but it increased quickly in depth of colour. Their health was undisturbed, they could pursue their daily avocations, and they were reminded of the disease, not by any unpleasant sensation, but simply by the redness of the skin; little by little they lost appetite, then their strength gave way; they became emaciated, and finally succumbed to exhaustion. Hebra pays no especial attention to that remarkable feature of the disease, the thin exfoliating lamellæ, which are real lamellæ and not scales, but concludes by recommending, with a view to therapeutic treatment, prolonged tepid bathing and inunction with oils and emollient ointments. This, he says, tends to render the skin more supple, but "neither arsenic, tincture of cantharides, sulphur, antimony, decoctum lignorum, sarsaparilla, iodine, nor mercury, has succeeded in putting a stop to the disease."

Comparing the descriptions of the disease given by Devergie and by Hebra, the chief point of difference between them relates to the prognosis of the affection. The former states that it is not grave; while the latter, certainly with the limited experience afforded by three patients only, found it always

(a) Specimens of these hop-like laminæ may be seen in the "dermatological collection" of the College of Surgeons, and also those obtained in the present case.

fatal. Devergie speaks of its commencement on a limited portion of the skin, and spreading thence, in the course of a few days, to the whole body; while the patients examined by Hebra declare that it appeared on the whole body at once, and such was the case in the example recorded by Dr. Wilks and that by myself. Another discrepancy is more apparent than real. Devergie remarks upon the infiltration of the derma, and its exudation of a sweat-like secretion; and he also finds some degree of swelling resulting from subcutaneous infiltration. In my own experience the infiltration of the derma is well defined, but there was no visible transudation from the surface, and to the hand the skin gave the sensation of dryness. And Hebra, in his definition of the disease, while stating that there is "no considerable infiltration," in other parts of his description observes:—"There is no infiltration of the cutis;" and again, "no swelling or serous infiltration exists." I think, therefore, that we shall only be doing justice to Hebra to regard these latter expressions as relative, and not positive. For most certainly there does exist a decided infiltration and condensation of the derma.

In reference to the treatment adopted in the present case, it consisted in the administration internally of sulphate of magnesia and quinine, one drachm and one grain, in infusion of roses, with a few minims of dilute sulphuric acid, twice in the day; and in inunction into the skin of the benzoated oxide of zinc ointment in combination with carbolic acid, ten minims to the ounce; and the carron oil also, with the addition of carbolic acid. As I have stated above, it was found necessary to give the patient a Seidlitz draught occasionally to secure a free action of the bowels; and at the end of a fortnight the medicine was changed to the citrate of iron and quinine. At the present time there is every reason for expecting that the case will end favourably without further treatment; but should the dermatitis assume a chronic form, it may be necessary to have recourse to arsenic.

NOTES FROM MY CASE-BOOK.

By W. H. T. POWER, B.A.,
Assistant-Surgeon 2nd Battalion 13th Light Infantry.

I.—ON ENTERIC FEVER IN MAURITIUS.

In the following paper I propose to give an account of all the cases of this disease which I treated during two hot seasons in Port Louis, the capital of Mauritius—viz., those of 1864-65 and 1866-67—occurring in two regiments—viz., the 2nd Battalion 24th, and 2nd Battalion 13th. That this, the disease *par excellence* of bad drainage of sewage, should extensively prevail, is not in the least surprising to any one acquainted with the dirty habits and utter want of all proper methods of disposing of fæcal matter which prevail in Port Louis itself and the various villages occupied by the natives. The soldiers of the line regiment stationed in Port Louis were far better off than most of the civil population, in having a large open piece of ground to live on, and a good supply of clean drinking water, and yet even amongst them a considerable number of cases of enteric fever occur, especially during the hot season. I may premise also that this fever has not, as a rule, been recognised and individualised, having been confounded with other diseases. I only treat of cases which I attended myself; they are fifteen in all, of which I exclude four as doubtful (these will be specially noticed at the end of the paper); the remaining eleven consist of one woman, two officers, and eight privates. With a view of taking up as little space as possible, I have given only those points which I believe to be of value, and have not given each case separately.

Symptoms: The main symptoms were such as are usually described. State of bowels: They were bound in only two out of the eleven cases; in the others diarrhœa prevailed. Sweating: In one of the cases marked sweats occurred at intervals throughout the disease. The eruption was seen in only one case; in fact, from the various eruptions common in hot climates, I believe the spots can seldom be made out satisfactorily. Vomiting was seen in one case only, and that after severe hæmorrhage from the bowels. Meteorism was most marked in the severe forms, and in one, where the bowel disease was very severe, there was a large distinct elastic tumour over the ileo-cæcal valve. Relapses occurred in three of the cases—viz., 1st case, normal temperature on the 9th day of disease, with a relapse on the 14th day, and a very tedious convalescence; 2nd case, normal temperature on 14th day, and a relapse on 24th day, followed by a tedious convalescence; 3rd case, normal temperature on 18th, but a relapse on 24th day, death following on the 29th day. Temperature: The range in ten cases was tolerably normal, but it was the peculiar great vacillations between the morning and evening temperature of the third week which formed the most marked characteristic feature in these cases. The highest temperature reached in the fatal cases was 105°, and the lowest high temperature 102·6°; in the recoveries the highest temperature reached was 106°, and the lowest high temperature 102·8°. Morbid Anatomy: Of the four fatal cases, in three ulcerations occurred only in the small intestine, and most near the ileo-cæcal valves (in one the valve was quite destroyed); in the fourth case there were a few ulcers near the valve in the ileum, but the whole of cæcum to about halfway along the "transverse colon" was one mass of sloughing, with a few detached ulcers towards the sigmoid flexure. Mesenteric glands found enlarged in all the fatal cases, and in one case one of the glands contained a good deal of thick creamy matter; and in this same case two of the bronchial glands were also enlarged. Death-rate was high—viz., 36·36 per cent. Modes of death: (*a*) In one case from profuse hæmorrhage from the bowels; (*b*) in two cases from the fever itself; (*c*) and in the fourth case from very violent disease of the gut. Average length of time in Hospital was 29 days, the longest 43, and the shortest 30 days. Associated Pathology: Out of the eleven cases, in only one was there any complication—viz., in one fatal case the right lung was universally adherent, and in the second stage of pneumonia. Causation: Season—Enteric fever is especially prevalent during the hot season, and still more so if unusually dry. Previous Diseases—All these patients were young and healthy. Contagion—Though treated in the same wards as the rest of the sick, no case occurred in the Hospital. Treatment: Wine was given in all the cases except one, about 6 oz. daily (except in the severe cases, when more was given); chlorate of potash with nitric acid was the only medicine given.

The doubtful cases are:—1. A man who was brought to the Hospital with cephalalgia, shivering, and vomiting, and in three hours became comatose, and continued so till his death, two days after; only speaking once, when he said "Oh, my head!" On the evening of the sixth day the temperature was 105° about two hours before death, and the pupils widely dilated. Three days before coming to Hospital, the schoolmaster and himself were seized with nausea and vomiting, caused by a dreadful smell from a neighbouring drain. He died just at the end of the sixth day of illness. Post-mortem: No lesion was found in any organ, but the small intestine was full of a yellow thin fluid, with shreds like bran in it; and a good number of Peyer's patches were slightly prominent, and dotted with congestion. Remarks: This case, I think, must be put down as one of rapidly fatal enteric fever, the history of its origin confirming the slight post-mortem signs.

2. A man who was only in Hospital for twelve days, with the usual signs of enteric fever, and a marked prominent tumour in the right iliac region. This seems to be a case of very mild fever ending about the fourteenth day. The same swelling in the right iliac region occurred in several other cases treated about the same time.

3. A case taken for enteric fever at the time; he died on the sixty-sixth day, when a huge psoas abscess of the right side was found, which had perforated the diaphragm and entered into the right pleura, but without piercing the lung. The man's symptoms were those of enteric fever, with a large prominent elastic tumour over the ileo-cæcal valve. The temperature was not taken till the end of the third week, and was then above normal, and thence on to the thirty-eighth day the range was irregular, sometimes high and sometimes normal, the highest temperature being 101·8°; it was quite normal from the thirty-seventh to the fortieth day. The suspicious point in his case was his not picking up when the fever left him, but, on the contrary, he very gradually sank. There was no naked-eye lesion of the small intestine, so I suppose it was simply a case of psoas abscess, and not enteric fever ending in psoas abscess.

4. This case occurred during the epidemic of malarial fever. After seven days of fever temperature, there was a regular fall of temperature for three days, when it became normal, and he was discharged on the thirteenth day, but was readmitted six days after with feverish symptoms. At the end of the second week the great vacillations of temperature of enteric fever took place, but on the fifteenth day of this relapse the temperature fell, from the highest point reached during the whole attack, to normal temperature, and remained so. Whether this was a case of enteric fever (there was diarrhœa with abdominal tenderness) or of remittent fever, I cannot say.

These cases show how difficult, even when using the thermometer, it is to decide on the diagnosis of this fever in hot climates. I can fully confirm Dr. Murchison's assertion that "enteric fever" is often diagnosed as "remittent fever;" and I know well that during the great outbreak of malarial fever in Mauritius, in 1867, a very large number of deaths were due to unrecognised "enteric fever," and not to "malarial fever," as they were returned; though in many cases the latter coexisted with the former, as occurred in two of my own cases.

NOTES OF A CASE OF

INTESTINAL OBSTRUCTION—SUCCESSFUL TREATMENT BY ATROPIA.(a)

By G. H. PHILIPSON, M.A., M.D. Cantab., M.R.C.P.Lond.,
Physician to the Newcastle-upon-Tyne Infirmary, etc.

Intestinal obstruction, especially when suddenly established, is a condition fraught with the utmost difficulty and solicitude. Difficulty, in that the causes capable of its production are various and widely different, requiring careful discrimination for their elucidation. Solicitude, from the hazard, the urgency of the symptoms, and the necessity for the institution of prompt and decided measures for the relief of the patient.

The following are the particulars of a case of intestinal obstruction which was under my care in the Newcastle Infirmary, and for the notes of which I am indebted to my clinical clerk (Mr. W. L. Emmerson):—

Andreas A., aged 41, a Danish sea captain, was admitted as an in-patient into the Newcastle Infirmary at 4 p.m. on October 25, 1869. Five days before admission he was attacked with pain in the left side of the abdomen, accompanied with a sudden feeling of fulness. Has twice suffered in a similar manner, the last time about two years ago, when the attack passed away in two hours. Bowels have not been moved for nine days, and for a week before that time very scantily. Took an emetic, under Medical advice, two days before admission, and vomited freely four times. During the week previous to admission took various purgatives and had seventeen injections administered, but without any result.

The symptoms being urgent, in the evening I was summoned, and visited him at 8 p.m. He was then very restless, and apprehensive as to his state. He complained of a sharp pain in the left hypochondrium, and a feeling of general fulness of the abdomen. The pulse was 75, soft and regular; the skin was cool and perspiring; the tongue was moist and slightly furred; the breath was very offensive; the abdomen was uniformly distended, tympanitic upon percussion. Firm pressure with the hand over the abdomen appeared to relieve rather than to increase the pain. No tumour was discovered; no hernia; the rectum was free from stricture, tumour, or bloody mucus; had voided urine shortly after admission. During the voyage he had suffered great privation, having been delayed, from the severity of the weather, for more than two weeks, during which time the crew had subsisted upon flour mixed with water.

Taking into consideration the absence of tumour, of hernia, of stricture of the rectum, of bloody mucus from the rectum, the ease with which pressure upon and manipulation of the abdomen was borne, the absence of symptoms or signs of inflammation, or vital depression, and, above all, the character of his aliment, the case was regarded as one of intestinal obstruction due to hardened and impacted fæcal accumulation, accompanied by muscular spasm, and not one of permanent mechanical obstruction. He was ordered to take at once ʒ ss. of castor oil, and an hour afterwards to be placed in a warm bath, and while there for the water of the bath to be injected through the long rectum tube. The castor oil was vomited shortly after its administration. The water of the bath was freely injected, but was productive of no result.

October 26.—No action from the bowels; has passed a very restless night, tossing about in the bed, and at times shouting out from the severity of the abdominal pain; pulse 75, regular, easily compressed; bears firm pressure over the bowels. Other symptoms unchanged.

Continuing to take the same view of the case, the following draught was ordered to be given every three hours:—℞ Magnes. sulphat. gr. lx., acid. sulphurici dil. ♏x., liq. atropiæ sulph. ♏v. (Ph. B.), tinct. aurant. ʒj., aquæ ad ʒj. Ft. haustus. After the first dose, became easier; after the second, passed flatus per rectum. At this time the pupils had become dilated. At 9 p.m., having taken the third dose of the atropia draught, was placed in the warm bath, the water being afterwards injected through the long tube. While in the bath, passed a small lump of hard dark fæces.

27th.—At 1 a.m. passed a liquid motion. At the visit complained greatly of dryness of the throat, difficulty in swallowing, dimness of vision, and frequent desire to micturate. The tongue was dry at the tip and edges, the pupils were widely dilated, and the conjunctivæ slightly injected. The pulse was 72 and regular. The pain in the left side was much diminished, and the feeling of abdominal fulness had passed away. The atropia was ordered to be continued every six hours.

Towards evening he became slightly delirious, muttering and throwing his arms and legs violently about. Later he fell into a calm and quiet sleep.

28th.—Quite conscious and coherent. During the night passed flatus twice, but no motion. The liquor atropiæ was diminished to ♏ iij.

29th.—During the night passed a copious motion, lumpy, dark-coloured, almost black, and very offensive.

30th.—Bowels freely moved during the night, and again at noon.

November 1.—Bowels again moved. Evacuation pultaceous and bilious. The atropia was discontinued, and a tonic draught was substituted.

6th.—Bowels have acted once or twice each day. Was permitted to leave the Hospital, intending to proceed to Hamburg by steamboat on the 7th.

This case has been recounted with the object of directing attention to the treatment employed—viz., the administration of atropia in the manner advocated by Dr. Alexander Fleming, of Birmingham. Dr. Fleming has expressed his belief that the effect of atropia in promoting the action of the bowels is brought about by the increased peristaltic action, this increased action being the result either of direct stimulation of the muscular coat; or, in consequence of the checking of the mucous secretion, more prompt and vigorous contractile action is provoked by the contents of the intestinal canal, causing increased irritation of the mucous surface; or, from constriction of the smaller arteries, the supply of blood to the bowel is lessened, whereby the passive congestion is relieved and healthy action promoted. Of these three modes of explanation, the third—that of constriction of the smaller arteries—is that which appears the most probable.

Accepting this view of the mode of action of atropia on the intestinal canal, its advantage over the ordinary irritant purgatives in the treatment of intestinal obstruction from hardened and impacted fæcal accumulation will be readily recognised. The ordinary irritant purgatives provoke increased secretion and peristaltic action of the canal above the obstruction, which may succeed in propelling the accumulation forward, but should this not be accomplished, inverted action and vomiting occur, which may excite inflammation or sudden and fatal exhaustion.

Atropia, in its operation, is also distinguished from ordinary purgatives by another circumstance. Its action is not followed by reaction, its relaxing power is not succeeded by a disposition to constipate; on the contrary, the improved action of the bowels, comparatively speaking, is sustained.

(a) Read at a meeting of the Northumberland and Durham Medical Society, January 13, 1870.

Wakefulness treated by Chloral.—Dr. Lincoln relates the case of a lady, 40 years of age, suffering from nervous prostration, the result of over-fatigue and anxiety. She passed a whole week without sleep, except an hour one night. Opium only increased wakefulness. Valerian, hop, Indian hemp, and hyoscyamin had been tried without any benefit, when a scruple of hydrate of chloral was administered with the effect of producing seven hours' sleep, a tolerable amount also being obtained next night without any medicine. Uneasy feelings of the head being complained of, the dose was diminished to 15 grains, which has been repeated for eight evenings, with the effect of giving a night's rest of seven or eight hours, without any unpleasant results whatever.—*Boston Med. and Surg. Journ.*, Dec. 16.

Chégoin's Resolvent Ointment.—Iodide of potassium, two parts; extract of belladonna, half a part; lard, thirty parts. In painful glandular swellings.—*Union Méd.*, Jan. 20.

Kluge's Mixture in Mercurial Salivation.—Iodine, half a part; alcohol, eight parts. Dissolve, and add distilled cinnamon water eighty and simple syrup sixteen parts. A teaspoonful at first, and later a tablespoonful, four times a day.—*Union Méd.*, Jan. 22.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. THOMAS'S HOSPITAL.

STATISTICS OF LIMB AMPUTATIONS 1861-69; WITH AN ACCOUNT OF SOME INTERESTING CASES FOR 1869.

(Communicated by Mr. F. CHURCHILL.)

I HAVE completed two years' work as Registrar to St. Thomas's Hospital, first as Medical and now as Surgical Registrar; during this time there have been nineteen cases of limb amputations, some of them double amputations, but recorded as single cases, one of which only was fatal—*i.e.*, a mortality of 5·2 per cent. A more detailed account of these cases is necessary in order that such a favourable result may be fairly accounted for.

In the year 1868 Mr. Wagstaffe recorded eight cases of limb amputations, all of which were successful. During 1869 eleven cases of limb amputations were recorded, of which only one was fatal, and that a secondary amputation in a confirmed drunkard after severe comminuted fracture of tibia and fibula, with mortification of foot and leg, delirium tremens, and meningitis, for which, as a *dernier ressort*, the limb was amputated below the knee.

St. Thomas's Hospital, as it at present exists in its temporary quarters at the Surrey-gardens, contains but three separate wards—viz., on the ground floor, an accident ward for males; on the first floor, which corresponds to the first gallery of the old music-hall, are the Surgical and Medical male wards, separated in part only by a six-foot partition; and on the second floor, corresponding to the top gallery, are the Medical and Surgical female wards, separated in part only as on the first floor. In each case the entire superficial area of the building is boarded across, level with each gallery, so as to make spacious, light, and comfortable Hospital wards. There are windows all round the building, so that the ventilation is very complete, although not on the most approved plan.

The Hospital, as thus arranged, will accommodate 210 patients, and the space allotted to each bed is about 1800 cubic feet. The females have the advantage of a lofty arched roof, which gives them about 2300 cubic feet. There were 18 cases of erysipelas recorded during the year 1868, and we have had at least four epidemics of erysipelas during the past year—first in January and February, when ten patients were attacked; the second in May, when one patient had a slight attack, showing itself in the legs; the third epidemic was in August, when two females were attacked; and the fourth in November and early part of December, when six patients were put in quarantine. The wards are thoroughly cleared out, cleansed, and whitewashed every summer, and every precaution taken to prevent the undue accumulation of suppurating wounds, such cases being distributed as much as possible over the ward. The mortality for 1869 has not been unusually great—about 8 per cent. on the Surgical side—and we have had a very large number of extensive suppurating wounds, which, with few exceptions, progressed very favourably. There was only one fatal case of erysipelas, and that where the breast was amputated, and enlarged axillary glands dissected out.

There was one *amputation of the arm*, for recurrent fibroid tumour, on December 22, but as this patient is not yet convalescent, although making very favourable progress, I have not reckoned it among the successful cases.

Of *amputations of the forearm* in 1869, two were primary in consequence of compound comminuted fracture of radius and ulna; one was secondary in consequence of mortification of hand after severe injury by a printing machine; and a fourth was for strumous disease of wrist and dorsum of hand. All of these did well.

There was one *amputation of the thigh*, the particulars of which were as follows:—

Case 1.—*Compound Fracture of Left Femur, of Left Tibia and Fibula, and Compound Comminuted Fracture of Left Humerus—Amputation of Thigh—Recovery.*

(Under the care of Mr. LE GROS CLARK.)

C. S., a lad aged 9, was knocked down and run over. He was admitted much collapsed from shock and loss of blood, having sustained compound comminuted fractures of the left thigh, leg, and upper arm. Chloroform being administered, Mr. Croft, who was acting for Mr. Clark during his temporary absence in the autumn recess, proceeded at once to amputate the left thigh at the upper third, selecting the principal flap from the buttock and back parts of the thigh. He had also sustained a severe compound comminuted fracture of left humerus, which, under ordinary circumstances, would probably have been amputated; but, finding the patient very weak and scarcely breathing at the conclusion of the amputation of the thigh, Mr. Croft decided to give him a chance of retaining this shattered limb. The wound of integument, which was about six inches long, was carefully stitched, and the arm laid upon a gutta-percha splint and carefully padded. Both limbs progressed very favourably, with very little constitutional disturbance, and the wounds healed very kindly, almost by first intention. He is at present in Hospital; the arm and stump are becoming firmly consolidated, and the wounds have been quite closed for some weeks.

Of *amputations of the leg* in 1869, three were secondary and two for disease. Of the secondary amputations, one was for mortification of limb below a compound comminuted fracture of tibia and fibula; another in consequence of hæmorrhage in a case of compound comminuted fracture of tibia and fibula, where the bleeding was from more than one source. In both cases the limb was amputated within three days after receipt of injury.

The third case was that of a solicitor's clerk, and, as it was the only fatal limb-amputation during the past two years, the leading particulars of the case are here subjoined:—

Case 2.—*Comminuted Fracture of Tibia and Fibula—Delirium Tremens—Mortification of Foot and Leg—Secondary Amputation—Meningitis—Died.*

(Under the care of Mr. SIMON.)

C. S., aged 50, had sustained a comminuted fracture of tibia and fibula, which was put up on a Liston's splint, but after delaying for a month—the patient at last consenting to the operation—it was decided to amputate the limb, in consequence of diffuse suppuration extending up the leg with sloughing of portions of the integument, and necrosis of the isolated portions of broken tibia, with protracted and very offensive discharge of sanious pus from sinuses now freely communicating with the fracture, sleep being also disturbed by delirium both day and night. The delirium, however, continued as before, and he only dozed for a short time for days before and after the amputation without any quiet sleep. There was no attempt at union of stump; the sawn extremities of tibia and fibula were completely exposed, and he had hæmorrhage from the posterior tibial in consequence of the sloughing ulceration extending through the coats of the vessel. The delirium throughout was of a noisy violent character; he never kept his limb still, and required to be held in bed. At the post-mortem examination a fibrous tumour was found attached to the dura mater, covering the petrous portion of the right temporal bone, and there was a distinct hollow in the pons Varolii, corresponding to the tumour over which it was situated. There was recent lymph on the surface of the convolutions. The liver and kidneys were both very fatty.

There was one *double amputation* of leg and arm.

Case 3.—*Compound Comminuted Fracture of Left Leg and Arm—Amputation of both Limbs—Secondary Hæmorrhage from Posterior Tibial, Popliteal, and Femoral Arteries—Popliteal, Femoral, and External Iliac Arteries successively Ligatured to arrest the thrice recurring Hæmorrhage—Recovery.*

(Under the care of Mr. SIMON.)

R. L., a young man aged 28, when intoxicated, was walking on the line, and the train ran over him. On admission (August 5), the left arm was found to be completely torn away from the shoulder, with the exception of the head and neck of humerus, which remained *in situ*, and the left leg was also much smashed, hanging quite loose by its tendons and a small portion of integument. Chloroform being administered, Mr. Sydney Jones, who was acting for Mr. Simon during the autumn recess, proceeded to amputate the leg just below the knee, and the anterior and posterior tibial arteries were secured by ligature. The lacerated integument about shoulder was rounded off, and the broken end of humerus sawn through, and the edges of flap carefully approximated with wire sutures after the bleeding vessels had been secured by ligature. He had considerable spasmodic jerking of both stumps, and twelve days after the double amputation the anterior leg flap, which was united throughout the greater part of its extent, became retracted over the sawn end of tibia, exposing the

bone to the extent of about half an inch. The following day free hæmorrhage took place from the stump, temporarily arrested by lint steeped in the perchloride of iron. Two days after (on August 20), bleeding having recurred, Mr. Jones opened up the stump, and found that there was hæmorrhage from the posterior tibial close to the bifurcation. The popliteal artery was then carefully exposed, and a ligature applied to the trunk. The bifurcating portion below ligature being cut away, the anterior tibial was found to be obliterated by firm adherent clot, but the posterior tibial was flaccid and patent. Fifteen days after hæmorrhage took place from the popliteal above the ligatured point. Mr. Jones then exposed the femoral artery in Scarpa's space, and ligatured it close to Poupart's ligament, above the origin of profunda artery. Pressure applied below the origin of profunda did not stop the pulsation, but when applied above that point pulsation immediately ceased. A month afterwards, the ligature on femoral artery having been removed some days, there was free oozing from ligature-sinus below groin. A tourniquet was applied over the femoral in the groin, but this did not arrest the hæmorrhage. Mr. Jones therefore proceeded to ligature the external iliac artery, and exposed it in the usual way. The ligature came away twenty-four days after, on October 26, and he has had no hæmorrhage since. The ligature-sinuses above and below the groin were some time healing, were button-like, and yielded a sanious discharge, and the stumps healed up rapidly after the ligature of the popliteal artery.

Remarks.—It should be noted that, irrespective of the hæmorrhage, this patient, although otherwise in good health, was anæmic-looking throughout. Up to the present time his lips, tongue, and conjunctivæ have continued pale and bloodless-looking, and his face sallow. His appetite for months past has been excellent, and he has had a full allowance of good nourishing food, wine, and stimulants. As one evidence of the fallacy of statistics, it was mentioned that the death-rate in the Surgical wards at St. Thomas's Hospital had been for the past year about 8 per cent.; but this does not fairly represent the mortality, because, leaving out the cases brought in dead and those dying within the first twenty-four hours, the mortality would be reduced to about 5 per cent.

The following table of the mortality in limb amputations has been compiled from the reports furnished by the Registrars since the Hospital has been in its temporary quarters at the Surrey-gardens. It will be seen at a glance that the aggregate mortality corresponds very nearly to that of the other metropolitan Hospitals, but, contrary to what would have been expected, there have been fewer fatal cases in recent years than when the Hospital was first transferred to the Surrey-gardens.

I think it right to mention that the advantages which are said to arise from the use of a new building are probably counterbalanced at St. Thomas's by the necessarily defective arrangements of a temporary Hospital in a building never intended for such a purpose.

Limb amputations.	1862.		1863.		1864.		1865.		1866.		1867.		1868.		1869.	
	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.	Cases.	Died.
Thigh	10	5	7	3	7	4	6	2	7	1	6	3	3	...	1	...
Leg	1	...	4	...	5	4	4	3	4	2	5	2	3	...	6	1
Arm	2	...	...	...	...	...	3	2	2	...	5	2	2	...	...	...
Forearm ...	5	...	3	1	...	...	...	...	4	1	2	...	...	...	1	...

The Hospital was transferred in 1862, so that some of the cases for that year were operated upon at the old Hospital. During the eight years that the Hospital has been at the Surrey Gardens, there have been 111 amputations, with a mortality of 36—*i.e.*, for the first four years, 57 cases and 24 deaths; for the last four years, 54 cases and 12 deaths, or about half the mortality of the preceding period. The mortality varies considerably, whether the amputations were primary, secondary, or for disease. For 1861-63 and 1866-69 the amputations were tabulated under these three headings, and I find that during these seven years there were 41 primary amputations with 10 deaths, 16 secondary amputations and 8 deaths, and 39 amputations for disease with 7 deaths—*i.e.*,

Primary amputations .	.	1 death in	4·1
Secondary „	.	1 „	2
For disease „	.	1 „	5·5

Carbolic acid has been used to a limited extent, and it may be that the steady improvement during the past four years is in part due to this cause. Our Surgeons, however, have not been so fortunate as Professor Lister in exterminating erysipelas and pyæmia from the wards of the Hospital, or of diminishing the proportionate number of cases attacked.

It appears to me that, as the major amputations constitute such a very small proportion of all the cases admitted for treatment into our large metropolitan Hospitals, an estimate of the relative salubrity of these institutions cannot fairly be derived from this source. I should prefer to take the severer forms of compound fracture occurring in Hospital and private practice, and compare the statistics in each case; and to analyse all cases of fracture in which union was prevented or delayed in consequence of suppuration taking place in the neighbourhood of the fracture, and which ultimately is discharged by some external opening. By this to include all cases of fracture at first simple, but becoming compound from suppuration in or about the broken bones. During the past twelve months several cases of this sort were under treatment, and the amount of contusion and laceration of soft parts, being in some cases very extensive, rendered it necessary to consider the propriety of resorting to amputation of the limb. From experience gained in the successful treatment of similar injuries without operative interference, it was decided in all but four cases to attempt to save the limb. In three out of the four the soft parts were so much bruised and lacerated, and the bones protruding and much comminuted (two of them requiring double amputations), that there could be no question as to the inexpediency of attempting to save the limbs. In the fourth, that of a burly brewer's drayman, who was admitted, under the care of Mr. Le Gros Clark, much collapsed from shock and loss of blood, having sustained a compound comminuted fracture of right forearm, but without much injury to the soft parts, it was decided to amputate the limb, in consequence of the radial and interosseous arteries being torn across, and the amount of blood which he had previously lost rendering it necessary to insure him against any further loss of systemic blood by securing the main arterial trunks. Secondary amputations are, in the experience of Hospital Surgeons, frequently fatal, being performed in many cases as a *dernier ressort;* and these probably, in private practice, would not be so summarily dealt with. We had three such cases at St. Thomas's in 1869, one of them being fatal.

Several very interesting cases of compound fracture were admitted during the past year, in which the propriety of amputation required to be again and again considered and deferred in consequence of the balance of probabilities being in favour of preserving the limb. Many of these cases remained in Hospital for months under treatment, the causes of delay being the formation of secondary abscesses in different parts of the limb from the burrowing of pus among the deeper textures and between the muscular septa, also from the gradual separation of portions of dead and dying bone. A very common cause of delay in these cases is the accumulation of pus between the broken ends of the long bones, which, being pent up in the hollow shaft both above and below the fracture, must necessarily give rise to a considerable amount of local and constitutional disturbance.

My reasons for thinking that statistics taken from this source would be more to the point are the comparative frequency of such both in private and Hospital practice, and the fact that mortality after limb amputations may be fairly attributed to so many other causes besides so-called hospitalism—for instance, shock, hæmorrhage, previous visceral disease, etc., etc. Besides, if we take the germ theory as the basis upon which we are to found our inferences as to the comparative salubrity of large Hospitals, we see at once that, compound fractures terminating in extensive suppuration into all the tissues in and around the fracture in consequence of there being no dependent opening for the escape of the same, a very convenient nidus is thereby obtained for the deposit, development, and rapid increase of mephitic germs the product of specific contagion.

The following is a typical case of this form of injury.

Case 4.—Compound Comminuted Fracture of Tibia and Fibula—Secondary Abscesses in Thigh and Leg—Erysipelas—Acute Capillary Bronchitis—Necrosis—Recovery.

(Under the care of Mr. SOLLY.)

G. G., aged 37, a porter, residing at Lambeth, sustained a compound comminuted fracture of tibia and fibula of right leg from the kick of a horse on December 24, 1868. When admitted, half an hour after, the broken edges of tibia protruded through the wound, and a fragment was felt lying loose behind. The wound was extensive, involving the lower half of the limb as far as the inner ankle. The limb was laid upon a straight Liston's splint, and the wound dressed

with carbolised oil. The temperature on admission was 98°, and it steadily increased up to 102·6° on the evening of the third day, when he was flushed and feverish, complaining of severe pain and throbbing of the limb. During the remainder of the first week the temperatnre was from 100°-101°, when Mr. Croft removed the carbolic acid dressing, and a quantity of pus escaped from the wound. (All the subsequent temperatures were taken in the morning between 9 a.m. and 12 noon.)

January 1, 1869.—He was delirious, rambling, and noisy last night, muttering incoherently.

2nd.—There is evidence of bagging of pus in dependent parts, with tenderness, swelling, and redness along inner side of thigh, where there is some obscure sense of fluctuation. Counter-openings were made, and pus evacuated from the leg. Position of limb good. No pressure by bandages. To continue linseed-meal poultices, which were commenced on the removal of the carbolised oil.

4th.—Additional counter-openings made in leg. Expresses himself as feeling more comfortable. No return of delirium. The pulse has kept steady at about 116 during the past week. Temperature has fallen to 98·8°.

5th.—Fresh incisions made this morning above knee, and pus evacuated. All wounds discharging pus freely. Has very profuse perspirations; breathing short and laboured; tongue clean; pulse 120, feeble; temperature 100°. Sleeps fairly at night.

19th.—Has had some rigors of late. Discharge from leg continues very profuse. Says his leg feels as cold as ice, has occasional throbbings and jerkings of limb. Pulse 132, weak; temperature 102·6°.

26th.—Mr. Solly informed him that he must prepare himself for amputation of the leg should the profuse discharge continue to weaken him as it has done of late. Pulse 136, feeble; respiration 34; temperature 99·7° Pus evacuated from centre of thigh.

27th.—Slept badly last night in consequence of troublesome cough and expectoration of tenacious mucus. On auscultation of the chest, a short blowing inspiratory murmur is audible over the front part, followed by prolonged wheezing expiration, with sibilant rhonchus and small crepitation on both sides of the chest.

February 1.—Cough continues very troublesome; breathing short and hurried: considerable wheezing in chest; expectoration tenacious, tinged with blood; is delirious at night; free discharge from all the wounds. No attempt at union of fracture up to the present time. Pulse 140, weak; respiration 30; temperature 99·6°. Tongue moist, pale, and bloodless-looking; profuse perspirations at intervals.

18th.—Has had some rigors, with frontal headache, sickness, and slight delirium. Erysipelas is spreading up the right leg.

March 5.—Erysipelas disappeared four days ago. General health is now somewhat improved. Less drowsy; cough and breathing better; skin cool; pus evacuated by incision from below great trochanter; wounds in leg closing; discharge continues very profuse.

April 20.—Limb is now in a quiescent state. Sinuses rapidly closing, there being very little discharge of pus. His general health has much improved. Tongue moist; appetite good; pulse quiet, of fair strength.

June 30.—General health continues to improve. Abscesses have appeared in both groins, and a large quantity of pus evacuated by incision.

September 24.—Small portions of necrosis occasionally come away from sinuses on anterior surface of tibia. General health much improved. Has quite lost the sallow hue of face. Takes daily exercise in the garden.

October 26.—Dismissed cured.

Remarks.—This case is interesting, not only as an example of what judicious conservative Surgery may accomplish, but as a type of many similar cases met with in all our Hospitals and in private practice. For at least six months this man had constant profuse discharge of pus from leg, and the formation of abscesses in different parts of the limb. He passed safely through two or three epidemics of erysipelas in the Hospital, and was attacked once himself. Many of the conditions of an amputated limb were present to an exaggerated extent. There was a large skin wound, which, instead of being incised, was lacerated; the muscles were bruised and torn instead of being cut clean through with the knife. The medullary canal of tibia throughout its entire extent, above and below the fracture, was opened up, and the whole shaft bathed in foul accumulation of fœtid pus, there being no dependent opening, as is generally provided for in amputations.

The general outline of treatment was as follows:—For the first three months sleep was only procured by the frequent use of morphia draughts at night. The broncho-pneumonia was treated with stimulating expectorants—chloric ether, sesquicarbonate of ammonia, and nitric ether. The severity of the delirium was allayed by five-grain doses of bromide of ammonium every six hours. During the period of the profuse suppuration he took one drop of carbolic acid with ten of glycerine three times a day. The erysipelas was treated with five-grain doses of the effervescing citrate of iron and quinine twice a day. After the fever had subsided he had two drachms of the syrup of the phosphate of iron and manganese three times a day, continued up to the time of his discharge.

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Medical Times and Gazette.

SATURDAY, JANUARY 29, 1870.

THE CONTAGIOUS DISEASES ACT.

It is fortunate that this Act is now subjected to the ordeal of debate. Our present number contains the conclusion of the debate at the Association of Medical Officers of Health, and that at the Medical Society of London is to be resumed next Monday. It will be a good result if untenable arguments on either side be put out of court, and the questions at issue be well defined, for at present neither the advocates nor the opponents of the Bill seem agreed as to their own principles. It may be convenient, therefore, for us to state a few questions categorically, which ought to be well argued out.

Question the first may relate to the bearings of the Act on general morality. We hold, until better taught, that intercourse between the sexes unsanctioned by marriage, violates the laws of Nature, the public welfare, and the teachings of morality and religion. We need not say that the procreation of children without provision for their maintenance is an offence against Nature and the public welfare. Unfortunately, passion is too strong for continence to be general, and unchastity must be faced as an existing fact, although one against which every reasonable precaution should be taken. Now experience shows that in those countries where prostitution is regulated by law, and where public provision is made against its diseases, the state of public morals is worse than with us. Irregular *liaisons* are looked on as no sin, and the whole relations of the sexes are regarded from a low animal point of view. The question then arises, will the proposed Act be likely to increase immoral practices amongst young men? We may take our answer from the fair and candid book of Mr. Acton. "I was informed," he says, "that on the day after these inspections the houses are specially frequented by the public, in the belief that there is then less chance of contracting disease. It is therefore reasonable to suppose that, under the French system, many yield to indulgence

whom the fear of the natural penalty would otherwise deter. In considering the advisability of introducing health inspectors among the civil population in England, this should not be lost sight of."(a) Young officers from English garrison towns tell the same tale.

As a second question, we may ask whether the Act is to be regarded as a penalty on unfortunate women, and an instrument of tyranny hanging over the heads of all women whatever, whose honour and good name hereafter will be at the mercy of every police spy. This is the ground taken in the eloquent and impassioned appeal of Dr. Charles Bell Taylor, whose exertions in opposing the Act are too well known to need comment. On the other hand, we are forced to ask—Is the Act a boon to a profligate and unprincipled set of women? Is the heavily burdened ratepayer to be forced to support a new set of Hospitals for the special benefit of women and the protection of men who incur illness through their own debauchery, whilst the industrious artisan out of work and the starving widow are left to the pittance of the Poor-law Board? Is the public to pay £50,000 a year for the disinfection of prostitutes, and nothing for the relief of the phthisical or scrofulous?

Either of these two questions seems to supply the answer to the other, and so they may be deemed unworthy of further discussion. But this is not the case. It is quite possible that a Contagious Diseases Act may be a tyranny to some women, and an undeserved boon to others. With regard to the first, we have been astonished at the warmth displayed by intelligent young women employed in houses of business and unable to take exercise in the day time, at the idea that if they were to walk up and down a street or round a square after dark they might be informed against by the police. We do not, for our own part, put this danger very high; yet, considering the known corruptibility of the police, and the variety of circumstances under which young unprotected women may be forced to go out alone, and the fact that if dirt be thrown, however undeservedly, some of it may stick, we cannot but say that, without the greatest care to define the word "prostitute," and the conditions under which a prostitute would be amenable to this law, and to select the police, and, above all, to refer every case privately to a justice of the peace or to the examining Surgeon, some instances of cruel injustice may occur. Very likely some of the cases cited are exaggerated or untrue; but their very possibility should make us cautious.

On the alternative question whether free Hospital accommodation be an undeserved boon, considerations of mercy and expediency should prevail. It is worse than useless to treat diseased women as out-patients, and we think they should have every opportunity of coming into Hospital to be cured of their illness and put into the road for reformation. If they come voluntarily, by all means let them be welcomed. Not the ratepayers, but the Consolidated Fund, should bear the expense. Spirits and tobacco ought to be taxed for the expense of the evils they contribute to cause.

Now let us take a third question. What are the grounds upon which women ought to be subjected to the provisions of such an Act? Who are the persons to be proceeded against? We may illustrate this by a story which we have received as well authenticated. Two young naval officers at Plymouth had formed an alliance with two girls acting as assistants in a first-class linendraper's in that town, and both became affected with gonorrhœa. In consequence, these fellows informed against the girls, who were summoned for examination and lost their situations and characters. Now, whether this story be true or not, we cannot personally vouch, but the bare possibility of such an atrocity makes one's blood boil. As for the male scoundrels, their character and prospects were not hurt by the act of immorality and the disease which followed. Society is lenient enough to them; but why should the women be the special victims? See the inequality of the punishment! We hold that this case (if true) is one in which interference was utterly unjustifiable, unless an equal power were given to women to inform against the men by whom they might imagine themselves to have been infected. Let us have shopgirls informing against Lieutenant A., or, perhaps, Lawyer B.—yea, even against Parson C.! Of course, this will not be allowed.

The true principle would be, that with private immorality the State cannot meddle. If men choose to dabble in dirty water, they must take the consequences. But, if women are public, open, notorious offenders, found in the streets or haunts of obscenity at hours when honest people should be abed—well known to the police—in fact, avowing themselves prostitutes—all law, religion, mercy, and policy require that such women be taken in hand. What the public has a right to exact is public decency. We take care of abandoned women because they are criminal, and because they are sure to become a charge upon public funds, and we have a right to deal with them for the good of their body and soul. If diseased, we subject them to treatment. But we have no right—and Heaven forbid that the English Medical Profession should ever come down to such a pitch of degradation!—merely to relieve their disease—nay, more, teach them the art of washing, injecting, and disinfecting—so as to carry on their trade without injury—in fact, to do what every judge on the Bench would pronounce an illegal act—provide them the means of carrying on the business of common prostitutes.

There are more questions *pro* and *con* which require to be well sifted; but enough for the present.

(a) Acton on Prostitution. Second edition, p. 119.

THE DUST IN THE SUNBEAM.

Professor Tyndall's lecture at the Royal Institution last Friday will no doubt attract a large share of popular attention. Scientific men may labour to investigate the facts of nature; they may apply with accuracy the processes of inductive reasoning, and establish by generalisation the laws whose operation results in the phenomena of life and disease—laws the knowledge of which should be fruitful; yet these laws may remain, for all practical use, as if they never had been educed, until they are brought prominently into popular view, and until the minds of the masses are made to recognise their truth and their applicability to the purposes of daily life. It is with science as with ethics. Mr. Lecky has dwelt on the remarkable fact that the grossest popular immorality and cruelty has prevailed at times when the most noble minds of antiquity were blazing forth on those immediately about them the light of a pure morality. And so it is with science, the teachings of such philosophers as Pasteur, or Hallier, or Beale, will and can have no general influence upon popular practices and habits until the demonstration of their truth is brought within the comprehension of the people, and until it is linked on in some way to other common popular knowledge and popular ideas. When Professor Tyndall, then, begins to talk about dust and dirt, it is more natural that he should be listened to than when Physicians talk about morbid germs, and botanists about fungous spores—when he talks about the dancing motes in the sunbeam, which every child has speculated about, than when learned men discourse on the origin of putrefaction and the spontaneous generation of minute animals which none but microscopists have ever seen. There are few living philosophers with the genius and acquirements of the Professor at the Royal Institution who possess so strikingly the talent of stooping to the level of the ignorant and raising them with themselves to the point at which they may intelligently look upon the marvels of the natural world. It is not to be supposed that everything demonstrated by the lecturer on Friday was new in the sense of its being a scientific discovery. There are things which men, pursuing the ordinary avocations of life, know by daily experience, but which they have never mentally isolated or thought about, which they have seen, but never

observed—just such a thing is the sunbeam as it flows into a room, showing its line of passage when viewed in one direction, but not showing it when viewed in another. The Report of the Cattle Plague Commission proved the existence of organic germs in the air to the satisfaction of scientific men. It is nothing new to us that the seeing its passage at all is due to the reflection of the light from the floating particles of dust in the air, but probably it was new to some of his hearers. What this dust consists of, and how the knowledge of its nature is applicable to daily life, were the special subjects of demonstration, using only the beam of electric light in place of the beam of sunlight.

Experimenting on this dust, he told his auditory the difficulties he had experienced in removing from a tube of air this impurity. Passing the air over sulphuric acid while drying it, and over caustic potash while removing its carbonic acid, still left the reflecting particles of dust. The tube was not optically empty, but it was made so when the air was passed slowly into the tube over the tip of the flame of a spirit lamp. The floating matter was no longer apparent, having been burnt up by the flame. "*It was therefore organic matter.*" This seemed an important discovery, for he says—"I had thought with the rest of the world that the dust of our air was in great part inorganic and non-combustible." The same disappearance of the particles followed the slow passage of air through a red-hot platinum tube. The soda which floats in the air, and is such an annoyance to the student in spectrum observations, vanishes at the same time. "These organic dust particles are, I believe," he says, "the rafts which support it, and when they are removed it sinks and vanishes." Now, amidst all the curious demonstrations given in the lecture, none was probably so useful as that which set visibly before the audience the modern doctrine of the morbid materies of communicable diseases, and the practical means which we adopt now, or may adopt in future, for destroying or intercepting contagia.

"The air of our London rooms," says Dr. Tyndall, "is loaded with this organic dust; nor is the country air free from its pollution. However ordinary daylight may permit it to disguise itself, a sufficiently powerful beam causes the air in which the dust is suspended to appear as a semisolid rather than as a gas. Nobody could, in the first instance, without repugnance place the mouth at the illuminated focus of the electric beam, and inhale the gas revealed there. Nor is the disgust abolished by the reflection that, although we do not see the nastiness, we are churning it in our lungs every hour and every minute of our lives. There is no respite to the contact with dirt; and the wonder is, not that we should from time to time suffer from its presence, but that so small a portion of it would appear to be deadly to man."

That organic matter capable of inducing putrefaction, that living germs of animal or vegetable origin are contained in the atmosphere, and that air thus contaminated, although the contamination is invisible and indistinguishable, can bring about morbid states, is a fact equally known to the Surgeon and to the Physician; and it is a kind of knowledge which both classes of Practitioners put to a useful purpose in the management of the cases committed to their care, and for the prevention of the most destructive forms of disease.

That filtration through cotton wool will deprive air of the organic particles which bring about the process of putrefaction is asserted by Pasteur. Professor Tyndall tells us that a like filtration is so effective in clearing air of its organic dust that "if the nozzle of a good bellows be filled with cotton wool, not too tightly packed, the air urged through the wool is filtered of its floating matter, and it then forms a clear band of darkness (from absence of reflecting particles) in the illuminated dust."

Dr. Tyndall bases upon this quality of cotton wool a suggestion that the use of a respirator charged with this material might be useful for persons exposed to inhale the germs of contagious maladies floating in the air of a sick chamber. Dr. Bree, of Colchester, writing in the *Pall-mall Gazette*, has objected to this, that none of the particles visible in the sunbeam can be germs of disease, inasmuch as these are invisible to the naked eye, and it is doubtful if ever they have been seen by the most powerful microscope. He argues that, although the coarse visible particles might be arrested by cotton wool, it is clear that the germs of disease would pass through it into the lungs as freely as if the wool were absent. We confess that, to our minds, this is by no means so clear; for we cannot overlook the tendency which there always is for smaller masses of matter to be attracted to the larger, and to attach themselves to them. Probably, therefore, by arresting the visible matters, we should arrest with them the invisible infinity of minute germs within the sphere of their attraction, as all float together in the atmosphere. We may say that, as sanitarians, we have been in the habit of looking upon this tendency of such minute particles as morbid germs are believed to be to attach themselves to other larger particles of matter as the great source of danger in accumulations of dust in dwelling houses once infected by the presence of contagious disease, and as explaining the fact referred to by Dr. Bree—namely, the readiness with which infectious principles are gathered up from the atmosphere and retained by the surface of articles of clothing, the more readily when the latter are rough or hairy than when they are smooth and glazed.

The Professor sanctions the time-honoured instinctive practice of putting a handkerchief before the mouth when we breathe air infected with organic impurity. He might have quoted the analogous practices of hawking and spitting, so as to clear the air-passages, when we leave the spot, and the old method of mixing the air with aromatic fumes, or holding aromatic substances in the mouth. He might also have spoken of the use of the spray charged with Condy's fluid or carbolic acid; but the commendation of cotton wool as a filter is a sound one, though it must not be trusted too implicitly in practice.

PROPOSED ASSOCIATION OF GENERAL PRACTITIONERS.

In our number for January 8 we published some suggestions respecting the formation of a "British Association for the Protection and for the better Defining of the Rights and Privileges of General Practitioners." It is undeniable that at the present moment the Surgeons in general practice in this kingdom are in a most anomalous position. They are infinitely better educated than their predecessors, and more capable in every way of acting as "Physician-Surgeons" to the community. But it is doubtful whether their social position has improved, and, in reference to the difficulties they have to encounter in making or keeping together a practice, they are decidedly worse off than their brethren of a quarter of a century ago. Within that period quackery of all kinds, legitimate and illegitimate, has become rampant; specialism has assumed gigantic proportions, and the system of "gratuitous" and "indiscriminate" advice all but intolerable. The result has been that the public "faith" in honest straightforward practice has been grievously shaken, and the "family Doctor" has to that extent "gone to the wall."

Again, the Surgeon in general practice has no status in his own corporate institutions. The College of Physicians have, for selfish purposes, instituted an "inferior" grade of "Physicians," and the College of Surgeons have established a kind of representative body, but the "Fellows" do not constitute a twentieth part of the Members of the College. The Society of Apothecaries, with good intentions, are powerless. Take the societies. They have done much in the main to improve the knowledge of their members, but as a means of elevating the social position of Surgeons in general practice they are useless. Even the British Medical Association wastes its large resources and its undoubted influence in the publication of a journal which is not free from the suspicion

of "cliquism." It does nothing, or next to nothing, beyond the circulation of its weekly print for the great body of its members. Under these circumstances it is natural that the general Practitioners of this kingdom should desire to found an association whose objects will be exclusively for their benefit and that of the public. There never was a time when it was more necessary for these gentlemen to "close their ranks" than the present. We approve in the main of the plan of the proposed association, though some of its details may admit of modification. But we must warn those who join the association to trust to themselves alone: united they will be powerful, and any extraneous aid might do them injury. A league for defence and assistance to each other is the thing wanted. It remains for those favourable to the scheme to make their intentions known to the hon. secretary, Dr. Treutler, at the Linnæan Society.

THE WEEK.

TOPICS OF THE DAY.

PARLIAMENT is summoned to meet on February 8, and Mr. Gladstone has announced that the Government is prepared to submit matters of great public moment to the House of Commons on a very early day. The session cannot fail to be an eventful one. An Irish Land Bill and a broad scheme of national education are *pièces de résistance* which will leave little relish for such unappetising *morceaux* as a Medical Acts Amendment Bill. And yet, although the maintenance of a high standard of knowledge and efficiency in the Medical Profession be not a subject which has special attractions for the ordinary Member of Parliament, it requires no argument to prove that it has enormous influence upon the well-being of the public at large. There can be no doubt that the schemes of united action on the part of the examining bodies which have met of late with so much favour from the Medical Profession are not to be brought into action without an Act of Parliament. The Government, it is understood, are not anxious to move in the matter this session, and it is not probable that they will take the responsibility of introducing a Bill unless it be pretty certain that it would be unopposed by Scottish and Irish members as well as by English. The difficulties in the way of forming a Government Board under the Privy Council—an alternative scheme which has found favour with some *doctrinaires*—are simply enormous. In the first place, it would be distasteful to the whole Profession, inasmuch as it would take from the Profession of Medicine the privilege and right of instituting its own examinations. Secondly, it would be opposed by all the corporations, as well as by most, if not all, of the British Universities; and thirdly, it would involve an outlay for compensation to which, it is pretty certain, Mr. Lowe would never accede. If the College of Surgeons, for instance, is deprived of its revenues by a Government Board, the College museum must be purchased and maintained by the nation. At present it costs about £2000 per annum, but the College would have a claim for the enormous outlay which it has made on it through a long series of years. It must be remembered that the Hunterian Museum forms but a very small part of the museum of the College, and that the pathological portion of the collection alone has cost the College of Surgeons a vast sum. We cannot believe that the Profession of Medicine would regard with equanimity the transfer of this noble collection to the British Museum. But this would certainly be its ultimate resting-place if the revenues of the College derived from examinations are transferred to the coffers of the Government. Other bodies would also have just claims for compensation. On the whole, we do not think that the evils of the present state are sufficiently great to make it in the least desirable to destroy all existing machinery in order to give a salary to a new Under-Secretary of State in a department of public health, and to transfer the examination, education, and regulation of the Medical Profession to the Medical Officer of the Privy Council. We therefore can only hope that the existing corporations may agree amongst themselves upon such a plan of united action as may gain the assent of the Medical Profession in the three kingdoms, and that the General Council, in its next session, may be able to furnish the Government the draft of an Act based upon such a scheme. If this be done, we may obtain a real Medical Acts Amendment Bill in 1871. We certainly are not sanguine as to anything being done in the present session.

A recent number of the *Times* contained a letter signed "F.R.C.S.," complaining of a breach of contract in the time of opening the new St. Thomas's Hospital. The contractors undertook that two pavilions, the resident Medical officers' quarters and the buildings for the Medical School, should be completed by Michaelmas, 1869, and the remainder of the buildings by Lady-day, 1870. From the present state of the building there seems little prospect that it will be opened before the end of the present year. In the meantime, the interests of the public suffer, the Medical staff lose pupils' fees, and the unfinished and unroofed buildings are being injured by weather. The writer of the letter hints at indulgence to the contractors on the part of the governing authorities of St. Thomas's. It is very easy to be kind at other people's expense.

Mr. Elliott, the magistrate of the Lambeth Police-court, has delivered an opinion on the question referred to him last week—whether lunatics are entitled to sick allowances as members of friendly societies. He said that he had fully considered the question, and he could not find that it had been decided by any court that incapacity to work caused by insanity was a ground for non-payment by a friendly society. He differed from Mr. Tidd Pratt, who, in a circular forwarded to the different societies, had stated that "in no case of insanity the manager would be justified in giving relief to a member so afflicted." Mr. Elliott supported his opinion on the ground that insanity frequently arises from physical derangement. From a Medical point of view it seems astonishing that the question should ever have been raised. The Medical Profession look on insanity as a disease depending on physical causes, to be treated as truly as any other. It seems highly unjust that a man who is seized with pneumonia should be entitled to receive benefit from his club, whilst one seized with acute mania is left unaided. Mr. Tidd Pratt's view is neither supported by science nor justice.

There has been a contest for the Coronership of East Berkshire. The polling took place on Wednesday, January 26. We regret to say that the Medical candidate, Dr. Sewell, was not successful. Mr. Weedon, a lawyer, was at the head of the poll. The numbers polled were—Mr. Weedon, 564; Dr. Sewell, 281; and Mr. Smith, 73.

Some foolish person has been hoaxing several charities (amongst others King's College Hospital) by sending them cheques which, when presented at the bank, have been dishonoured. We never thought the distribution of "triliteral" cheques for £1000 to the charities of London by an anonymous donor a very wise proceeding, however benevolent and modest were the motives which prompted it. Secrecy, for all practical purposes, might have been sufficiently insured without such a sensational method of giving.

Sir William Stirling Maxwell has declined the Duke of Richmond's nomination as Lord Rector of Aberdeen University, on the ground that in the election he did not obtain a majority of votes. Mr. Grant Duff will in all probability be elected.

It has been stated in the newspapers that the Highbury outrage was planned and committed almost exclusively by students of St. Bartholomew's Hospital, and that two of the students, having been identified, have been dismissed from that institution. Mr. Morant Baker has written publicly to

deny the truth of the charge. The *Echo*, however, the newspaper in which the allegation originally appeared, repeats it, although with some modification. It seems that the students were dismissed for a previous offence. We can scarcely credit the statement, but if true we are sure the conduct of these young snobs will be repudiated by the great body of the Medical students of London. We heartily wish that the police had been on the alert, and that the offenders, whoever they were, had received the public punishment they so richly merited.

Professor Halford's mode of treating snake-bites by injection of ammonia seems to answer well in Victoria, although it has failed in India. Two fresh cases of successful treatment by the injection of ammonia have been lately reported. Has there been any microscopical and chemical examination made of the poisons of different kinds of serpents? Why should ammonia answer in the case of Australian snake-bites, but fail in that of the cobra?

The public health of London has been tolerably good. The deaths last week were 142 below the estimated number. The number of deaths from zymotic disease, however, was slightly too high, and those from scarlatina were 29 in excess of the number recorded in the preceding week.

There is a vacancy in the Surgical staff of the Great Northern Hospital. Amongst probable candidates we have heard the names of Mr. Bellamy and Mr. Spencer Watson mentioned.

MANUFACTURE OF QUININE IN INDIA.

The Indians are now beginning to manufacture quinine in good earnest. The London Apothecaries' Society have contracted to supply them with three tons of pure concentrated sulphuric acid for the purpose.

THE ALEXANDER MEMORIAL PRIZE.

We have ascertained that up to December 31 five essays in competition for this prize had been received at the Army Medical Department from Medical officers on home stations. Three months are to be allowed to admit of the arrival of essays from foreign stations, after which some considerable time must elapse before the relative merits of the essays can be decided. It is hardly probable that the result will be known before May.

RESULTS OF COMPULSORY VACCINATION IN IRELAND.

A highly satisfactory report has just been issued by the directors of the Cow-pock Institution in Dublin. It appears that for many years previously to 1863 the average death-rate from small-pox in Ireland amounted to about 1000 annually, but that since, owing to the exertions of the Poor-law Commissioners, and in compliance with the recommendations of the directors, the compulsory clauses of the Vaccination Act have been established, the death-rate from the above cause has gradually fallen almost to zero. "Thus in 1864 the deaths from small-pox in Ireland amounted to 854; in 1865 to 347; in 1866 to 187; in 1867 to 20; the first three-quarters of 1868 return only 19 deaths, and it is a deplorable fact that in ten of these the disease was produced by a small-pox inoculator, and that, in open violation of the law, it was introduced with impunity by the same individual into the Castlebar Union in 1869, causing sixty-three cases and two deaths." The directors suggest that, as a penalty of six months' imprisonment of the inoculator has not prevented the commission of this offence, the parent or guardian of the victim also should be punishable, and that a reward of £50 should be given to the informer, to secure convictions. The directors state further "that the Registrar-General's Quarterly Returns report Ireland as without a death from small-pox for the quarter ending September 30, 1869, whilst only one death had occurred in the current quarter, and that in a case imported from the Baltic."

MEDICAL TEACHERS' ASSOCIATION.

At the last meeting of this Association the President, Dr. Allen Miller, delivered a most able and most valuable address, which dealt with the past and future work of the Association. He declared himself in favour of a single examining board, and, after fully discussing the subject, proceeded to consider the advisability of holding regular class examinations as a portion of the ordinary business of teaching. The address concluded with some observations on clinical instruction. Among the business which was transacted on the occasion was the adoption of a memorial to the Home Secretary requesting of him some interference towards obtaining an increased supply of subjects for dissection. The plan suggested was an alteration in the wording of one clause of the Anatomy Act rendering it *compulsory*, not optional, on masters of workhouses and guardians to deliver up unclaimed bodies to the Inspector of Anatomy for the purpose of dissection.

INVALIDING FROM THE ARMY ON ACCOUNT OF VENEREAL DISEASES.

A correspondent, addressing us on the subject of Miss Garrett's letter in a recent number of the *Pall-mall Gazette* in support of the Contagious Diseases Act of 1866 and its extension to the civil population, observes:—

"In one instance Miss Garrett makes a statement which appears open to remark. It is to the effect that the Household troops in London are, from venereal diseases, 'invalided' to the extent of 1 in 4, in Paris 1 in 33, and in Brussels 1 in 56. Miss Garrett probably means 'admitted into Hospital,' in which case she would be nearly correct in her statement; but 'invalided,' as understood in the statistical returns of the army, means 'discharged the service as unfit,' and, with this acceptation of the phrase, Miss Garrett has decidedly overstated the results of venereal diseases in the British Army."

DR. MCDOWEL'S DISMISSAL.

At a meeting of the Council of the Irish Medical Association held on Friday, the 21st inst., the following resolution was passed unanimously:—

"Resolved—That this Council, having taken into consideration Dr. McDowel's statement with reference to his recent dismissal from the post of Surgeon to Sir Patrick Dun's Hospital, feel it their duty to record their opinion that dismissal of an officer without a full and open inquiry into his alleged offence (especially when such inquiry has been demanded by the officer), is a proceeding of a most arbitrary character, and one which cannot be too seriously deprecated." Signed by Chairman and Vice-President of the Irish Medical Association.

THE VACCINATION LAWS.

A meeting was held last week at Durham against the vaccination laws. A great portion of the audience consisted of working men. The Mayor presided, but expressed no opinion on the laws in question. After a good deal of talk on both sides, most of which was unsatisfactory and inconclusive, it was determined to forward a petition to Parliament to repeal the vaccination laws. The tone of the meeting, the energy displayed, and the absurd statements made, prove the necessity for some impartial and exhaustive inquiry into the action of the laws regulating vaccination.

LIFE ASSURANCE CASE.

Vice-Chancellor Malins, in a case which came before him on Tuesday last, rejected the claim made by a Mr. Daintree on the winding up of the General Provincial Life Assurance Society. It appeared that Mrs. Daintree had a life interest in considerable property, and Mrs. Daintree employed a solicitor to insure her life for £20,000. The policy was declined in several offices, but was accepted by the Hercules for £3500, and by the Provincial for £5000. The claim of Mr. Daintree was rejected on the ground that he had not answered truly the following question:—"Have you ever been proposed or de-

clined by any other offices?" To this question the answer given was:—"I have been, and still am, corresponding with other offices, as the amount is large." The Vice-Chancellor came to the conclusion that there had been a material suppression of facts in the proposal, which ought to exonerate the Company, and he should therefore disallow the claim, but without ordering the claimant to pay costs.

CITY OF LONDON LYING-IN HOSPITAL, CITY-ROAD.

This institution was established in 1750 for the reception and delivery of poor pregnant married women. The annual report lately read to and adopted by the Governors showed that from January 1, 1869, to December 31, the names of 538 women had been entered in the books as qualified for admission, of whom 475 were admitted and delivered, and 480 children were born—viz., 233 boys and 247 girls, 10 being twins. There were 13 still-born and 6 apparently so, but restored by the exertions of the Medical staff. The income had been £2215 1s. 4d., in which was included £400 received under the will of the late Lord Henry Seymour. The expenditure had been £2195 1s. 5d. Public aid appears to be required for the Samaritan Fund of the Hospital, by which necessary comforts are provided for patients on being discharged.

In these days of discussion on the mortality of Lying-in Hospitals, it appears that information of a little more definite character as to the number of deaths among the 475 women who were delivered would be satisfactory on both public and Professional grounds. The City of London Lying-in Hospital in particular, as described to us by a recent visitor, might be expected to afford rather remarkable information if its returns of mortality were published. Contrary to the general rule in institutions of this kind, not only are the patients supplied with feather-beds, but in all the wards which our informant visited, the bedsteads, ten or twelve in number, were ranged closely along the opposite walls, the head and foot of each, except those at either end, being in close contact with the head and foot of adjoining beds, there not being an atom of interspace for the permeation of air—the object of this arrangement, as stated by the matron, being to allow a free passage along the centre of the wards, which are rather narrow. There are, to be sure, for severe cases, separate wards, in which comparative isolation may be attained.

It is a very noteworthy fact that, in spite of this apparently defective arrangement of beds and of the nature of the building, the Hospital is stated to have really enjoyed, ever since its establishment, a remarkable immunity from any form of epidemic disease, and that the average mortality has been little over 1 per cent. The wards are kept scrupulously clean, they are ventilated by windows, doors, and open fire-places; they open off passages common to all, even those, if our informant remembers rightly, intended for serious cases. The alleged healthiness of the Hospital, notwithstanding serious hygienic defects, is by some attributed to the immediate vicinity of a large vinegar factory, the fumes from which frequently permeate the whole establishment. The examination of air saturated with the fumes of vinegar would be extremely interesting in connexion with Professor Tyndall's late observations on the presence of such enormous quantities of organic *débris* in the atmosphere of London. We still, however, should like to see an authentic statement of the mortality of the City of London Lying-in Hospital.

FROM ABROAD.—MEDICAL EDUCATION OF WOMEN—AN INTERNATIONAL CURRICULUM.—THE MEDICAL FACULTIES AND MEDICAL PROFESSION IN FRANCE.

The unmanly insults recently offered by some of the Philadelphia Medical students to the lady-pupils have induced Prof. Clarke, of Harvard College, to republish the portion of his address to the graduating Medical class of that University which bears upon the "Medical Education of Women." In this he seems to us to place the question on its true basis. He strongly objects to all attempts at deterring women from the pursuit of any occupation they may think fit to undertake by obloquy, insult, or any other form of persecution, and he sees no kind of impropriety in their pursuing Medical studies. The real point at issue is whether their organisation is such as to allow of their undertaking the toil of the Medical Profession and successfully competing with men. He believes that the ultimate result of the experiment, if made, uninterrupted by any opposition, will be to show that women will prove as capable as men of mastering the science of Medicine, but that only in "exceptional departments" will they become successful Medical Practitioners. So much for the future, but the present point of importance is thus handled:—

"The admission of females into our Medical Schools, under the present organisation of the latter, involves not only the question of their Medical Education, but the propriety of teaching the two sexes at the same time and in the same room, with the same illustrations, human anatomy, physiology, and pathology. I do not admit that there is anything demoralising in these studies to either sex. On the contrary, they are ennobling; but it does not follow, because they are so, that it will elevate and purify boys and girls, or men and women, to study them together. A bath is a necessary, luxurious, and purifying process for all, but it does not follow that it is wise for the two sexes to bathe at the same time and in the same tub. A certain amount of juxtaposition of the sexes ennobles both, more than a certain amount degrades both. I will not undertake to argue this point with those who do not instinctively feel and acknowledge its truth. I would only say that I would not have a son of mine associate with any woman who *felt* no impropriety about dissecting the human body with him. I hope to live long enough to see, here in Massachusetts, the ballots falling impartially from male and female hands into all our ballot boxes; but God forbid that I should ever see men and women aiding each other to display with the scalpel the secrets of the reproductive system; or, with crucible and microscope, investigating the constituents of the urine, or charmingly discussing together the labyrinthine ways of syphilis. Do you ask, then, how women are to obtain the education by which to prove or disprove their ability to practise the art of Medicine? The answer is evident. Those who desire to have the experiment tried must furnish some of our existing Medical Schools with the means of giving separate Medical instruction, or they must build and endow separate schools for women."

While our somewhat unwieldy Medical examining bodies are engaged in what would seem to be rather a difficult task, devising a joint examination, which would seem to imply the absorption of some of them and the extinction of others, little Brussels—that land of congresses and international procedures of all kinds—puts forth a proposition which, if accepted, would render their labours superfluous. The *Art Médical*, backing up a previous suggestion of the *Gazette Médicale*, proposes that an international Medical congress should be assembled with the special object of considering and agreeing upon a programme of the course of studies to be required and the examinations to be undergone in order to obtain the diploma of Doctor of Medicine. The decisions come to by the congress would be then referred to the commissions appointed by each of the Governments of Europe, which would then determine in common the measures necessary to guarantee their being carried into execution.

"A uniform programme having been determined upon, the Practitioners of the nations which adhered to it, and which would secure its regular operation, would then enjoy the reciprocal benefit of freely pursuing their profession under the same title throughout the entire extent of the respective territories. Such a determination of the question would also completely satisfy another aspiration of the *Gazette Médicale*—the suppression of inferior orders of Practitioners, such as *officiers de santé* and the like."

Dr. Vacher, the well-known Medical statistician, has recently published a comparative view of the condition of the French Medical Faculties and Practitioners in 1847 and 1866. On January 1, 1866, there were enumerated in France 6081 Medi-

cal students—viz., 5316 at Paris, 313 at Montpellier, and 442 at Strasburg. The number of students, however, who were regularly pursuing their studies at Paris, only amounted to from 2500 to 2800. The number of foreigners only numbered 90, which is very insignificant as compared with twenty years ago, when they amounted to 400 or 500. At the present time, foreigners, especially Americans, only pay a passing visit to Paris, and pass on to Germany to study under Virchow, Helmholtz, Niemeyer, etc. Another serious sign of the decline of the importance of the Paris School is the fact that in 1847 the inscriptions were 3636, and in 1866 only 4137, while at Montpellier they rose from 613 to 1108, and at Strasburg from 249 to 1499; so that, while they remained almost stationary at Paris, they became doubled at Montpellier and sextupled at Strasburg. That the cause is a more general one than the defective teaching of the Medical Faculty is also proved by the fact that the inscription of law students declined from 11,652 in 1847 to 7659 in 1855. In 1866 it had rallied to 10,769, but has not again attained the number of 1847. The theological faculty is the only one that prospers, for while it registered a solitary inscription in 1847, it has now 89 per annum. At the secondary Medical schools the numbers are as follows:—Lyons, 111 pupils, with four Hospitals and two clinics; Bordeaux, 110, with two Hospitals and five clinics; Toulouse, 98; Marseilles, 97; Lille, 72; Rennes, 42; Nancy, 41; Nantes, 40; Clermont and Rouen, 36; Poitiers, 35; Limoges, 33; the other schools having fewer than 30 pupils. Altogether, the provincial secondary schools had 1002 pupils, the number of examinations being 1990, and of dissections 1530. At Paris the number of examinations was 3218, and of the dissections 1894.

As to the Profession itself, the number of Practitioners on January 1, 1866, or at all events those who had regular qualifications, was 17,310—*i.e.*, 11,643 doctors and 5667 *officiers de santé*. In 1847 there were 18,099—viz., 10,643 Doctors and 7456 *officiers*. It is evident, therefore, that, even in the absence of any special legislation directed to their abolition, the *officiers de santé* are undergoing a diminution of numbers that at no distant period will bring this about. The difference of the relative distribution of the two classes of Practitioners in the different departments is remarkable. In twelve departments the Doctors are in a minority, these being usually the departments of the North of France. In La Somme and the Pas-de-Calais there are 442 *officiers* to 186 Doctors. Taking the two classes together, they are found, of course, most abundantly in the richer and more populous departments. Thus Lot-et-Garonne has 1 Practitioner for 1609 inhabitants; the Bouches-du-Rhône 1 for 1210; the Seine 1 for 1010; Paris alone has 2016, or 1 for 905. Two centuries since it had 110 Doctors of Medicine and 200 sworn Surgeons, which for a population of 260,000 gave 1 for 1800. Among the less well supplied departments are the Hautes-Alpes with 1 for 3600, and Morbihan with 1 for 7260. The Hautes-Alpes, however, is, by reason of the great dissemination of its inhabitants, the least favoured of any, each Practitioner acting over a mean surface of 164 square kilometres—*i.e.*, a surface twice as large as the circumference of Paris. Here, too, the mortality is higher than in any other department, except the Ardèche, where it is 1 in 25, being during 1860-66 1 in 34·2 inhabitants, while for entire France it was only 1 in 44·2.

Warning to Medical Practitioners.—A pupil in one of the Dublin Hospitals, having occasion a few days ago to apply strong nitric acid to a diphtheritic surface, employed as the medium a piece of lint which had previously been used with carbolic acid, and which he supposed to have been thoroughly cleansed by subsequent washing. No sooner, however, had the lint been dipped in the nitric acid, than a violent explosion took place, severely burning the operator's face. We are happy to hear that no serious consequences are likely to result, though these were at first apprehended, but the occurrence is instructive, and worth recording as a caution in dealing with such agents.

ROYAL INSTITUTION OF GREAT BRITAIN, ALBEMARLE-STREET.

Friday, January 21, 1870.

Sir Henry Holland, Bart., in the Chair.

Professor Tyndall, LL.D., F.R.S., M.R.I., on dust and haze.

The learned Professor began his lecture by stating that a sunbeam on entering a dark room becomes visible by illuminating the particles of dust floating therein. A beam of powerful light, such as that of the electric lamp, will prove the existence of these floating particles in the air of this room, or, indeed, in that of any other, even of the best ordered drawing-room in London, although they are invisible by the light of ordinary candles or gas. Some months ago, when he was engaged in a course of experiments on the action of light upon various vapours, he found this dust exceedingly troublesome. The air was wholly loaded with it, and although in his experiments it was of great importance to have the air entirely free from it, it became a matter of considerable difficulty to get rid of it. An "experimental tube" was filled with air which had been passed through tubes containing fragments of glass wetted with concentrated sulphuric acid, and marble wetted with a strong solution of caustic potash; but although the air was thoroughly dried by this means, the particles of dirt were carried along with it, and a beam of light passed through the tube discovered them in quantities as great as in common air. But it was found that by passing the air over a flame before letting it enter the drying tubes, every particle of dust was destroyed, and the beam of light passed through the "experimental tube" was *invisible*, owing to the absence of any illuminated particles. What did this prove? It showed, to his own astonishment, that this floating dust consisted of particles of combustible, and therefore organic matter—that the air which constantly surrounds us, which we are continually breathing, is loaded with living organisms, which are of necessity constantly passing into our lungs—that the dirt of the air of London is organic, and not, as he had supposed, of the same nature as the sand of the desert of Sahara, inorganic, incombustible. To make this matter quite certain, Mr. Valentin, of the Royal College of Chemistry, constructed for him a gas furnace, so arranged as to heat a platinum tube and a roll of platinum gauze; the air was made to pass through this tube and gauze, so as to insure the contact of the dust with the hot metal, and the result is given by the following table:—

Quantity of air.	State of platinum tube.	State of experimental tube.
15 inches.	Cold.	Full of particles.
,,	Red-hot.	Optically empty.
,,	Cold.	Full of particles.
,,	Red-hot.	Optically empty.
,,	Cold.	Full of particles.
,,	Red-hot.	Optically empty.

That is to say, when the air was passed *cold* into the experimental tube, the floating particles were not destroyed, and passed along with the air; but when the particles were consumed by the hot platinum, the experimental tube was "optically empty," there being no floating dust in it for the beam of light to illuminate.

The following table gives the results of experiments in which the air was allowed to pass into the experimental tube under various conditions of speed and temperature:—

Quantity of air.	State of platinum tube.	State of experimental tube.
15 inches, *slow*.	Cold.	Full of particles.
,, ,,	Red-hot.	Optically empty.
,, *quick*.	Red-hot.	A blue cloud.
,, ,,	Intensely hot.	A fine blue cloud.

The cloud which appeared in the experimental tube when the air was passed quickly through the platinum was the smoke of the particles burned in the furnace. He had failed in his attempts to burn the particles in the open air by intense heat, but a flame of a spirit lamp held immediately under the electric beam gave a result which caused him the most intense astonishment. In common with every chemist he had hitherto considered the flame of a spirit lamp to be entirely smokeless.

What, then, was his surprise to find that, on holding the flame under the beam, volumes of intensely black "smoke" were given off, blacker than he had ever seen issue from the funnel of a steamer! He tried several other flames; he burned spirit of wine on cotton wool; he tried the flame of a Bunsen's burner with a tall chimney, but always with the same result. Wreaths of the blackest "smoke" ascended through the beam of light, showing themselves in the distinctest manner. The question then arose — Could this blackness be smoke at all? Could no other cause be assigned to explain the phenomenon? To settle this question, he tried a flame of pure hydrogen gas, in which it was impossible that carbon could be to make real smoke. But, on this being held beneath the electric beam, the same black wreaths ascended. A mass of red-hot iron gave the same result. What, then, was this darkness which was shown to exist in cases where smoke was impossible? It was simply the darkness of stellar space — the darkness caused by the absence of organic dust, showing that pure air is dark by virtue of its own intense transparency. Nothing could demonstrate more clearly the invisibility of the medium which renders all things visible. The flame held under the beam destroys the floating particles, and a stream of pure air ascends across the horizontal beam, which, jostling aside the dust-laden air, causes a black band of pure transparent air free from illuminated dust (in appearance exactly like smoke) to take its place across the beam. But it was also discovered that it was not necessary to consume the dust in order to produce pure air. It was found that a sphere of heated copper held beneath the beam of light produced the same "smoky" appearance, and that, too, even after the temperature of the copper had fallen below that of boiling water. Upon this it was suggested that a sphere of boiling water would produce the same result, and this was found to be the case, although in a less degree. The reason of this is simple; the heated body quickly heats the air immediately surrounding it, but not the particles; the pure hot air ascends and makes its dark track across the beam, but the particles are left behind.

The learned Professor then showed that any gas, provided it was free from these floating particles of dust, would produce the same dark mark across the beam of light. He took a common glass shade, and placed it with its mouth downwards so that the beam should pass right through it from side to side. The shade being full of the air of the room, the light was of course visible all the way through it. He then introduced into the upper part of the shade, above the beam of light, a tube connected with a reservoir of hydrogen gas. The hydrogen soon filled the upper part of the shade, and, occupying more and more space as its volume increased, it speedily filled the greater part of the shade, the beam of light *in* the shade fading from the sight of the spectators as the hydrogen occupied the space traversed by it. The shade being removed, the beam of light reappeared instantaneously in its place, but on the hydrogen being allowed to escape, a darkness as of a cloud of smoke passed across the beam, which immediately after its passage resumed its usual unbroken aspect. A gentleman present seemed inclined to question the success of this experiment, but the learned Professor partially repeated it, and completely proved his point. Having then observed that any other gas—*e.g.*, common coal gas—would serve equally well for this experiment, he said that, seeing that the air we are constantly breathing is so entirely laden with these particles of organic matter, the wonder is that so small a portion of it is sometimes hurtful to human life. For some time an opinion had prevailed that contagious diseases were spread by a malaria; it was believed that matter in a state of decay entered people's bodies and produced in them conditions of decay like to its own. It was seen that the process of fermentation went on in this way, and that a little leaven leavened the whole lump. Why, then, it was asked, should we not believe that diseases propagate themselves thus? But in 1836 an answer was given to this question by the discovery of the yeast plant, and fermentation was shown to be a process of life instead of one of decay. In 1837 Schwann discovered that meat highly heated and excluded from air never putrefied. Putrefaction is, then, the result of something derived from the air, which has the power of propagating itself in the body, and must be a living organism such as the dust of the air has been shown to contain. The "germ theory" of the propagation of disease has been slowly gaining ground in the opinions of Medical men, and, at a time when it was thought improbable by many of them, the President of this Institution was one of its ablest advocates. These germs floating in the air enter the human frame, and, growing there, produce various disorders. In this way the Asiatic cholera, from a small beginning in the delta of the Ganges, in seventeen years occupied nearly the whole world. And the action of these germs has its exact counterpart in another part of nature's field; for as an acorn will produce an oak bearing a crop of acorns each capable of reproducing its parent tree, and so a whole forest may spring from a single seedling, so a germ of small-pox lodged in the body will produce a crop of pustules each one capable of reproducing germs like to the original one. Medical men know well how important it is to exclude the air from abscesses when they are being operated on, and instruments are specially constructed for this purpose; yet although the pus extracted on the first operation is sweet, on the second and all other operations it is generally putrescent, and swarming with living organisms called *vibrios*. This is caused by the germs clinging to the trocar, and by it introduced into the abscess, flourishing therein under favourable conditions of temperature and food. The only way to "clean" the canula and trocar of these germs is to heat the instruments as highly as their temper will allow. It was an ascertained fact that the troublesome hay-fever was caused by these same vibrios.

Having shown that it is useless to try to blow away the dust from a beam by means of bellows, since the dust from the bellows immediately replaces that blown away, the learned Professor proceeded to experiment on the state of the human breath as it issues from the lungs. His lungs being full of the common air of the room, he breathed through a heated tube so as to cause the breath to ascend through the beam of light, at the same time preventing any cloud of condensed aqueous vapour. At first no extraordinary appearance was visible, but soon the familiar dark clouds denoting the absence of illuminated dust appeared. He contended that this showed the history of the air in the lungs as clearly as if his skin and breastbone were transparent. The air which entered the lungs at the end of taking breath, being also the first to leave them on expiration, had not had time to deposit its dirt; but the air which entered the lungs first, and left them at the end of the expiration, having deposited its dust at the bottom of the lungs, showed its freedom from floating particles by its smoke-like track across the beam. Again, he filled his lungs with air filtered through cotton wool, and, on expiration, the dark clouds were seen from beginning to end. This proves that a filter of cotton wool will exclude these particles, as might also be seen by filling the nozzle of a common bellows with lightly packed cotton wool, and directing the air across a beam of light. Instinctively acting on this principle, a Medical man, on entering an infected atmosphere, places his silk handkerchief over his mouth and nostrils; and, taking this hint, Dr. Bence Jones had tried the above experiment, substituting silk for cotton wool, and had obtained substantially the same result, though in a less perfect degree. In conclusion, the learned Professor recommended the use of a respirator of cotton wool as a means of giving pure air to the lungs to all who are likely to be breathing germ-laden atmospheres; and at the present time, when London was full of scarlatina, he would recommend these respirators as the most efficient protection; and, armed by one of these, he declared his perfect willingness to enter any atmosphere, however infected it might be by scarlatina or other diseases.

REVIEWS.

Handbook for Nurses for the Sick. By ZEPHERINA VEITCH, late Head Surgical Sister of King's College Hospital. John Churchill and Sons.

THE adoption, by highly educated ladies, of the profession of nursing the sick is a great institution. It is impossible for even the most prejudiced to deny that a great and important revolution has been effected in this department of the art of healing, and skilful nursing is as much a part of the science, although a subordinate one, as anything else connected with it, and, as Miss Veitch truly says, "nursing the sick is one of women's highest and holiest callings."

A careful perusal of this little book has convinced us that she has learned her work and practised her calling in a becoming spirit. One of the great dangers in affording ladies such an amount of professional knowledge as can only be gained in a Hospital will be that they may be tempted to take too much on themselves, and intrude upon the special province of the Medical man; but Miss Veitch has in a most becoming manner avoided this error, and has confined herself to a careful description and teaching of those duties which especially belong to a nurse. Her observations and instructions will be found to be most useful, are described very carefully and in

good language, even to most minute details. As an illustration we may refer to her description of dressing a blister at page 30.

We can cordially recommend this little book to one who wishes to make herself a thoroughly useful nurse, and who should lay to heart the following remarks of the writer:—

"In conclusion, a word to every nurse on the important subject of clearly understanding the line between what is strictly *her* duty and that of the Doctor. A good, intelligent, *obedient* nurse will always gain the confidence of the Medical man, but if for one moment she presumes on that confidence to interfere in any way with things beyond the line, she will lose it."—P. 43.

GENERAL CORRESPONDENCE.

THE PATIENT BROUGHT BEFORE THE MEDICAL SOCIETY OF LONDON.

Letter from Mr. J. Wickham Barnes.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having brought the patient suffering from aneurism before the Medical Society of London, on Monday last, I feel bound, in justice to myself and also to our worthy President (whose kindness of heart is known to all), to differ from you as regards the cruelty of proceeding. The man up to that day had followed his business as a butcher (though not doing the heavy work); he was pleased at the idea of coming, and was not an excitable or easily frightened subject. I believe at the Surgical Society of Paris it is the custom to bring before the meeting all interesting and doubtful cases, and then and there determine the treatment or operation. Why this case should be singled out in such a sensational manner, I am at a loss to determine; and if your theory was adopted generally, our meetings would be deprived of much of their interest and value.

I am, &c. J. Wickham Barnes, F.R.C.S.

126, Gower-street, Jan. 25. Hon. Sec., Med. Soc. Lond.

THE MEDICAL SOCIETY OF LONDON.

Letter from Mr. Peter Marshall.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is the feeling of many of the Fellows of the Medical Society of London that I, as President, should address you on the subject of your report of the Society's meeting in your last number, in order to remove certain misapprehensions which the report may excite in the public mind.

The report, if taken too literally, might convey that Dr. Maeloughlin, who was a visitor, had some cause for grievance in respect to the manner in which his observations were received by the Society. I beg to say that, while there was the widest difference of opinion between him and the Society on some points, he was listened to until the end of his speech with the fullest attention and courtesy. It is true that some of the Fellows did not thoroughly understand his view as to the non-existence of the disease called syphilis, and Dr. Richardson put a question through the chair in order to remove any possible doubt. But the question was submitted in the most orderly and proper manner, and, although the answer excited surprise, it certainly did not elicit the slightest sign of discourtesy. It is due to the Society to say so much, because no Society more scrupulously pays attention to its visitors, and it is due to myself to say that I faithfully maintained this very desirable custom.

I should like also to correct one other impression. The public might gather from your article that a patient was injudiciously brought before the Society for examination. It is one of the principles of the Society, and has been since its commencement nearly one hundred years ago, that the Fellows shall be permitted to bring to the meetings any patient whose case should present difficulties in respect to diagnosis or treatment, for the purpose of obtaining from the Society an opinion based on examination of the case. The practice is cherished by us as one of our most useful objects. It has repeatedly called forth the most important information, has corrected or strengthened the judgment of the individual Practitioner, and not infrequently has benefited, ultimately, the patient himself.

The case to which your report refers was strictly of the kind named. There was a doubt in the case as to the position and nature of a pulsating tumour in the chest. There was an important question, owing to the sudden development of the disease, as to the accident that produced it, and, so far from the case being "incurable," the disease was at that early stage when the actual question of cure comes fairly and forcibly under consideration. Had I been either the patient or his Medical attendant, I could wish for nothing more satisfactory than the spontaneous opinion of so many competent and thoughtful men as those who were present to conduct the direct examination of the case. In regard to the patient, he was brought to the Society with the greatest comfort, was received with every possible kindness, and was examined with the utmost delicacy and tenderness.

In my recollection of Medical practice, extending now over forty years, I have never before heard this practice of Medical men taking counsel with one another called in question. It is a practice carried out in almost all societies where Medicine is earnestly cultivated, and I must protest that if it be, as you think, wrong, it should be referred not to the Medical Society of London, as if that Society were exceptionally doing wrong, but to the Profession at large. I am, &c.

Peter Marshall.

STEDMAN'S TEETHING POWDERS.

Letter from Dr. Thomas Stevenson.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you permit me to state, in reply to your analyst, that morphia was detected in the Stedman's teething powders examined by me by other than the two tests I indicated in my former letter?

Having one powder left, I have repeated my experiments, extracting morphia, by the acetic ether process, in sufficient quantity to yield reactions with all the ordinary tests; and I have, moreover, proved the presence of nitrogen in the powder.

I have a right to assume that the powders examined by me were genuine; they were sent by the manufacturer as a sample through the post to a female relative of mine.

No one accustomed to use the molybdic acid test could mistake the reaction of sugar for that of morphia. The test is a good one when applied in confirmation of the more ordinary tests for morphia. I am, &c. Thomas Stevenson.

London, January 25.

REPORTS OF SOCIETIES.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, January 15.

Dr. Druitt, President, in the Chair.

An adjourned meeting was held to continue the discussion on Mr. Acton's paper, entitled: "Supposing the Legislature should determine to recommend the Introduction of the Contagious Diseases Act among the Civil Population, would it be possible and feasible to carry out its Enactments in the Metropolis?"

Mr. Berkeley Hill spoke of the expense likely to be incurred if the Act were extended to London. The Act at first could only apply to prostitutes known to the police, who were estimated at 6000. This number would include all the worst cases. Experience of the Act in garrison towns showed that at first the number of diseased among those examined exceeded that of the healthy, but that after a time the cases were less numerous, and of a milder character, rendering a shorter stay in the Hospital needful. Mr. Hill calculated that, as the average stay of each patient was found to be a little over a month, 500 beds would accommodate per annum about 5500 patients. The first cost per bed for the new wing at the London Lock Hospital was found to be £80, and the yearly cost £24 10s. Thus an expenditure of £40,000 for outlay, and £12,500 per annum, would be required. Surgeons' fees, police expenditure, might be put down at £5000, making a total of some £18,000 annually. This sum was far below Mr. Simon's estimate of half a million down, *plus* £100,000 per annum. If empty hulks were used, as had been proposed by Mr. Acton and others, the expenditure would be greatly lessened.

Dr. Stuart stated that examinations under the Contagious Diseases Act commenced at Greenwich on January 7, 1870. The number of women brought up had been 105, of whom 6 were unfit and 99 examined; 14 had been previously in homes

or refuges, and 3 of them twice over. Out of the 99 cases examined, 29 were sent to the Lock Hospital and 12 remanded for want of accommodation, making a total of 41 diseased. Of the 29 cases sent to Hospital, 17 were cases of sores, mostly syphilitic, 10 gonorrhœa, 2 vaginal discharges. The 12 remanded were cases of gonorrhœal and utero-vaginal discharges. At Woolwich, where the Act has been in force for some time, the number brought up since January 1, 1870, has been 175. Of these, 16 were unwell. Of the 159 examined, 17 were sent to Hospital. The cases were—sores, 4; recurrent sore, 1; gonorrhœa, 4; vaginal discharges, 8. Two of the cases of syphilis were those of women newly come into the town. The cases of disease among the resident prostitutes were comparatively mild, while those sent from Greenwich were many of them very bad ones. Referring to the alleged danger of propagating disease by means of the speculum, Dr. Stuart said that most of the severe cases could be distinguished without using it, and that the employment of disinfectants whenever the instrument was used rendered infection impossible. He said the women uniformly acknowledge the benefits they derive from the working of the Act, and that they had never made any complaint of oppression on the part of the police, or of any others engaged in enforcing it.

Some conversation ensued as to the alleged infectiousness of syphilitic matter, one drop of which, it was asserted, would make half a pint of water contagious. Dr. Letheby did not see any danger of infection as feared; pus, the infecting agent, would be destroyed by water alone.

Dr. Druitt said that the introduction of a law recognising prostitution would be a moral revolution in this country, and, as moralists and political philosophers, Medical men were bound to consider the question and give their opinion. It had been said that Medical men had nothing to do with the morals of the sick brought for treatment; and they had not. It was their duty to show mercy to all, no matter what vices had led them into sickness, and above all not to treat poor wretched women as outcasts. But for all that, it was their duty to discuss the general bearings of a question on the morals of a population, and more especially in a case like the present, where the object was to repress disease propagated by immorality. The prime question had never been settled yet—Is it the duty of society to interfere to stamp out disease; and, granting this, is syphilis a disease so exceptionally severe as to demand that special provision should be made against it, rather than against others? Now, most of the evidence adduced had been *ex parte*—the evidence of personages in high consulting practice, or in the habit of treating syphilis specially, who adduced testimony as to the horrible nature and wide prevalence of syphilis. Sensational articles had been published, and he referred especially to one in the *Westminster Review* of July, 1869, of great ability, but of unlimited exaggeration. "Thousands upon thousands," we are told, "are the innocent and defenceless victims of a pestilence whose march is so secret and whose attacks are so insidious that none can be certain of escape; many a trusting maiden radiant with happiness," etc., etc., finds her joy turned to mourning, her health to disease, her beauty defaced, and the innocent unborn babe in her womb tainted with a horrible poison which is transmitted from generation to generation. Now, of course, we all know that syphilis is prevalent enough amongst the army and navy, and reason enough is there that it should be so when men in the prime of life, idle, without resource, irritated by vexatious discipline, should seek the only relaxation possible to them in women and drink. Given a standing army, and you must and will have a standing army of prostitutes to match, and a wise government may take care that these indispensable camp-followers are as free from disease as possible. But as regards the general population, look at society; ask Medical men in good general practice in any walk of life, and we shall find that, although individual cases of syphilis, especially in old, or in young, scrofulous persons, may be very severe, yet that syphilis generally is mild and tractable, and the diffusion of it amongst the population insignificant. Compare syphilis with scarlet fever, with tuberculosis, with the diseases arising from close dwellings, foul water, bad milk amongst the poor, and say which ought to be the objects of public aid and solicitude. As for gonorrhœa, certainly, and soft sores, they need no special poison for their origin. Debauchery alone creates them, and they never can be extinguished by any measure that increases debauchery. But as for syphilis, if we want a measure of its fatality, where should we find it save in the fate of the poor women who are the very victims, vehicles, and seed-beds of this fell disease? And what do we find in the honest pages of Mr. Acton? Why, that "prostitutes do not die of syphilis." Not only so, but, says Mr. Acton, "if we compare the prostitute at 35 with her sister, who, perhaps, is the married mother of a family, or has been a toiling slave for years in the over-heated laboratory of fashion, we shall seldom find that the constitutional ravages often thought to be the necessary consequences of prostitution exceed those attributable to the cares of a family and the heart-wearing struggles of virtuous labour." (Acton, "On Prostitution," second edition, p. 39.) A terrible sentence this, as showing the contrast between the strait and the broad gates of life in this world, but conclusive as to the hollowness of all the sensational statements made about the wide diffusion of the venom of syphilis and its clinging to unborn generations. If all were true that is said about syphilis, there could not now be an untainted person in Europe. But let us admit that prostitutes are the vehicles of diseases more or less troublesome, the practical question follows, How are they to be recognised? Who is a prostitute? Let us turn to Mr. Acton, always truthful, even though his arguments tell against himself. Mr. Acton denounces all attempts at repression of prostitution, and for one reason—the magnitude of the mass to be dealt with. He will not mince the matter, he says, but will call a harlot a harlot. "I marshal in the ranks of prostitution each woman who in a pure society would properly be so construed." "But the accumulation," he says, "thus becomes frightful." "Prostitution," he elsewhere says, "abounds where in the course of their daily work the sexes are brought into close and intimate relations." Factory towns, therefore, must be included in the list of places peculiarly liable to the presence of prostitution." The state of things, he adds, may perhaps rather be called general depravity or immorality than prostitution proper. "The difference, however, is not very great, and for the purposes of this work immaterial." (Acton, p. 176.) Now let us consider these facts as practical men, who desire to put down not disease only, but its parent immorality. How shall lewd women be dealt with? We may thank Mr. Acton for teaching us that prostitution is but a transient stage in the life of women; that they get into it by slow degrees after their first lapse, and often rise out of it by marriage, occupation, and other avenues of reform. All that tends to ingrain prostitution as a profession or a habit, to make women public and keep them so, as the French system does, is simply abominable, and is repudiated, in word at least, by the framers of the English Contagious Diseases Bill. I would say, then, at all events, keep women out of the streets. Let known, notorious prostitutes be dealt with as habitual criminals, as members of the dangerous classes, accomplices of thieves. If women do not offend public decency, if they do not parade themselves in the streets, but keep to their own haunts, so that men who wish to sin must go to them, why should we interfere? We cannot prevent illicit commerce, though we can diminish it. "Temptation," says Mr. Acton, "should not be permitted to thrust itself upon the soldier. Measures should be taken for clearing the streets of the disreputable females who hang about the entrance of barracks after nightfall and entice the soldiers as they enter their barracks. The pickets which are sent out of an evening to bring in soldiers, clear public-houses, and prevent disorders, have no power to apprehend these dangerous women." (P. 194.) This, then, is the first desideratum: power which I am advised is given by the common law, to apprehend women of notorious lewdness, and to do for the civilian what Mr. Acton would do for the soldier. When women are apprehended, if minors and convicted of a lewd life, send them to a reformatory; only let not the diet and rules be so strict as to make the girls sigh for the liberty of their former wild life. Give them Hospital accommodation without stint, and so contrived as to be devoid of that "special" character which would blacken the future of her life who had ever been known to be an inmate. Give every opportunity for reclamation, but do not embark on the hopeless task of eradicating syphilis whilst you promote the immorality which is the source of it. As for "clean bills of health," actual or constructive, they are not to be thought of, for, in garrison towns certainly, I have been informed on unquestionable authority that men indulge on the plea that they can do so safely under the Government protection.

Dr. Gibbon's vaccination experience led him to think that syphilis was much more common than their President seemed to suppose. Some of the Hospitals would have nothing to do with such cases; and there was always a reluctance both in public and private practice to give the thing its right name. For this reason he placed no reliance on returns. He saw young people in his district covered with syphilis, yet under no treatment at all. He was prepared to go great lengths in order to stamp out the disease.

Referring to Dr. Letheby's remark that "with the moral question of the Contagious Diseases Acts we have nothing to do," Dr. Chapman maintained that, though Medical men choose to restrict their vision to the physical aspects of the question, when it is brought to the bar of public opinion it will be found to be an eminently moral as well as physical question, and that only by according a full recognition of the moral element involved shall we have a chance of being heard at all. His belief in the great prevalence of syphilis was based on the facts accumulated by the committee of the Harveian Society, and on the evidence of several eminent Medical men given to the committee of the House of Lords, and it seemed to him that the data thus supplied are the most reliable and authoritative of any accessible. He agreed with Dr. Druitt in thinking the common law of England is adequate for dealing with all disorders incident to prostitution which it is expedient to deal with legally; but he did not think the common law could sweep prostitutes from the streets, as Dr. Druitt thought it ought to do; nor did he think it desirable that it should do so: to suppress the symptoms of a disease is not to cure it. By making the ground of action of the law against prostitutes, not the diminution of disease, but, as Dr. Druitt proposes, "lewdness and disorder," we should either drive the women beyond the jurisdiction of the law, as has long been done at Oxford and Cambridge, or we should compel them to resort to clandestine prostitution beyond the reach of sanitary influence, as is done in many continental cities. Dr. Chapman protested vigorously against Mr. Acton's assertion—"The experience of all times shows that prostitution must always exist"—and said that had Mr. Acton lived 100 years ago he might have declared, with equal but no more reason, that inasmuch as railways never had existed, therefore they never would. Much has been said about the right of the State in this matter, and gentlemen argue, as Dr. Letheby has done, that one form of State interference justifies another. Dr. Chapman objected to the use of the word "right," as liable to lead to confusion in relation to the question. Properly speaking, the right of the State is the right to do those things which experience, or, in the absence of experience, analogical argument, proves expedient to be done. But ample experience, carefully recorded and justly interpreted, is completely condemnatory of both the principle and the application of the Contagious Diseases Acts. He had carefully studied the history and results of the systems of legal control and sanitary superintendence of prostitution adopted in several Continental cities, and he found that all the facts point in one direction and to one conclusion—viz., that as an expedient for lessening the amount and preventing the spread of syphilis, that system is a total failure. Wherever it has been applied, the utmost that it has achieved is the subjection of a small fraction of the prostitute population to sanitary control, whereas, meanwhile, the great majority of prostitutes resort to secret prostitution in defiance, and beyond the reach, of the police. Thus induced to conceal themselves, they choose, when infected with syphilis, what they deem a less evil than subjection to the police—namely, the effects of that disease—and rather suffer them than incur the risk of arrest by applying for Medical relief. The consequence is, that among clandestine prostitutes—those of Paris, for example—syphilis is extremely prevalent, and is increasing. Of the 1550 clandestine prostitutes (the average number) now arrested in Paris every year, 1 in 4 is found syphilitic, whereas from 1850 to 1854 the proportion syphilitic was 1 in 5, and from 1845 to 1849 the proportion syphilitic was 1 in 6. Thus, in the course of a few years, the proportion of clandestine prostitutes in Paris affected with syphilis has increased from $16\frac{2}{3}$ to 25 per cent. Prostitutes resist registration so resolutely that though, according to a moderate and authoritative computation, there are 30,000 of them in Paris, only 3850 are registered and under sanitary control. If the number now under control were as great in proportion to the population as it was in 1820, there would be 7000 registered prostitutes in Paris; but while the proportionate (and recently the actual) number of those registered is lessening, while the number of brothels is lessening, and while the number of girls living in them is lessening, the number of clandestine prostitutes whom even the Paris police cannot touch is steadily and enormously increasing, so that, as M. Lefort, Surgeon to the Hôpital du Midi, has recently stated, Paris has become the brothel of Europe. Simultaneously with the progress of this degenerative transformation, the recognition and establishment of prostitution as an indispensable element of civilisation have caused the social life of Paris to become more and more profoundly contaminated with sexual vice: the tides of immorality and dissoluteness have steadily risen, and have spread themselves through increasingly wider areas of domestic life. The most thoughtful men in Paris are appalled by the vast development of profligacy around them; and experienced men like M. Lefort, who dream of no remedy except that which may be applied by the forcible agency of Government, suggest that the only means of combating the evil with a chance of success is the appointment of a body of police sufficiently large to control 50,000 women, the compulsory residence of all the prostitutes of Paris in brothels—all women leaving them without permission being punished by imprisonment when recaptured, the appointment of a Medical staff sufficiently large to examine all the women in these brothels twice a week, and, finally, the condemnation of young girls (minors), after detection in the act of prostitution three times, to enforced residence in brothels as regular prostitutes—their parents' reclamation of them notwithstanding. Such is the final goal to which the system of Governmental control of prostitution in a large city inevitably tends, and the greater the city the stronger this tendency. What hope, then, is there of applying this system or any similar one to London? The advocates of the Contagious Diseases Act must admit that one of two results of its application to London would ensue: either a very small proportion of the prostitutes will be subjected to control, the great majority will become clandestine, characterised, like those of Paris, by horrible and more or less continuous disease, and the general character of the sexual relations of the people of London will be slowly assimilated to that of the people of Paris; or, as M. Lefort suggests with respect to Paris, all London prostitutes must be forced into brothels by the establishment of a body of police large enough to force them there and keep them there, and by the establishment of a paid staff of Medical men large enough to examine the whole of them twice a week. Is London—is England prepared for this? We are quite sure the answer will be an emphatic "No!" And, if so, is it likely that the men of this metropolis will allow their women to be subject to the detestable system of espionage by police in plain clothes, and to arrest on mere suspicion by policemen for the sake of such wretched sanitary results as those produced by that system in Paris? Again the answer, we are assured, will be a not less emphatic "No!"

Mr. Armstrong defended Mr. Acton's statement that prostitution must always exist. It had existed 6000 years, and he was not aware that they were on the eve of discovering any novel means of stopping it. The last speaker seemed to argue upon the basis that countenance was going to be given to prostitution. No such system was intended. Where the Act had been applied, no licensed houses had been established. As to the difficulty of laying down a fast line, this had been done already by the police. The 6000 prostitutes known to the police of whom they speak must have some distinctive characteristics. Why not then apply the Act to these, as it was found that syphilis prevailed most amongst this class, and that these women were spreading the disease and doing immense mischief?

Dr. Kidd, Staff-Surgeon, of the Army Medical Service, said the last report of the Army Medical Department was for 1867, and was published in September. The returns for the United Kingdom show that from 1860 to 1866, even before the application of the Contagious Diseases Act, there had been a progressive decrease in the cases of venereal diseases. In 1860 the proportion of admissions per 1000 of the strength was 369, in 1866 it was 258. In 1860 the proportion constantly sick from venereal diseases was 23·69 per 1000, in 1866 16·19 per 1000. In 1867 an increase had occurred. The proportion of admissions was 291, and of constantly sick 17·13 Dr. Kidd quoted statistics from Dr. Parkes's work on hygiene as to the relative number of soldiers attacked with primary venereal sores in 1868 at "protected" and at "unprotected" stations. "In the protected stations the number attacked in 1868 is not only below the mean in the previous four years in every station, but is, in every case, lower than the minimum of any former year, whereas, in two out of the four non-protected stations, the number of attacks in 1868 is above the mean of the previous four years; in one station is only just below, and in only one station is lower in 1868 than in any of the preceding years. The mean number of attacks in the five protected stations in 1864 was 108·98, and in 1868 was 67·63. In the four unprotected stations the corresponding numbers were 115·13 and 101·08." "On the whole, considering how imperfectly, and for how short a time, the Act has been applied, I think there is every reason to hope that the lessening of syphilis at all the protected stations in 1868 (though it is inconsiderable in the case of Aldershot) is really owing to the influence of the Act." Dr. Kidd thought the recruiting returns would furnish some means of comparing

the civil population with the army in respect to the prevalence of venereal diseases. The returns from 1860 to 1866 showed that the proportion of recruits rejected for venereal diseases was about 16 per 1000 annually, or very nearly the same as the proportion of soldiers constantly sick from the same causes during the last few years. While, however, there has been a marked diminution in the number of soldiers constantly sick, there has been no corresponding diminution in the proportion of rejected recruits for venereal diseases.

Dr. Bernays, Professor of Chemistry at St. Thomas's Hospital, entirely agreed to the opinions advanced by Dr. Chapman. He was adverse to the proposed extension of the Act. The tendency at the present day was to remove individual responsibility, and to weaken all moral sense by a system of inspection. Surely the state of the Continent did not warrant any great change in our laws with regard to prostitution. The arguments that were applicable to the Army did not hold good for the civil population, as the condition of military men was abnormal. If there was to be any extension of the Act, then let it be applied to men as well as women.

Mr. Gascoyen was confident that the majority of the women admitted to the Lock Hospital regarded the Act favourably. He had never heard complaints about being subject to examination, although there were some of being detained in the Hospital; but even these were few, and proceeded from women of the worst character. In proof of this, he stated that fully 10 per cent. of the women admitted to the Lock Hospital during the past year had sought inspection voluntarily, some of them coming from distant places not under the Act in order to place themselves under treatment. Mr. Gascoyen fully endorsed Mr. Acton's statements as to the marked improvement noticeable in the women since the application of the Act. Many have taken advantage of the opportunity to enter the Lock Asylum alone; some have gone to other institutions, and some again had been returned to their friends when cured. As to the diminution of syphilis, it was quite patent. The severe cases just sent from Greenwich—newly put under the Act—formed a marked contrast with the mild cases coming from "protected" districts. He protested against the monstrous assertion that the women were infected by the speculum. He had never in all his experience heard of such a thing, and he did not think there was a single authentic case.

Mr. Acton made a brief reply. He said that much of the reproach with which his good intentions had been met seemed to start from the presumption that those to whom he proposed to extend the Act were merely soiled doves, instead of unsexed women. This rectification made the greater part of these objections fall to the ground. He wished to say a word in reference to ladies' associations. Was it not ladies who, in many instances, drove young women to the streets? Let a young person make a false step, and that moment her mistress became a very dragon of virtue, and turned her adrift, in spite of the remonstrances of her husband. Ladies' associations might, on the other hand, do immense good by distributing tracts, giving kind advice so as to prevent seduction, or, in case of fall, to keep a poor creature from sinking lower and falling into despair. Mr. Acton thanked the meeting for the manner in which they had received and discussed his paper, and wished that when the subject came before Parliament the drift of the remarks made that evening would be appreciated.

Mr. T. C. Calvert, F.R.S., F.C.S., of Manchester, was elected a member of the Association, and Dr. Stallard was proposed for election.

We have received a lengthened account of the case of snake-bite treated by Dr. Dowling, of Talbot, from which we extract the particulars of most public interest. The snake, about five feet in length, was pinned to the ground through the tail at the time he bit Mr. Coutts, which he did twice. The case was of such severity that Dr. Dowling had to inject ammonia three times into a vein of the right arm, and twice into a vein of the left arm, before the cure was complete. After every injection, except the fourth, there was an instantaneous improvement, as marked by returning consciousness, better pulse, breathing, and complexion. The Doctor neither scarified the part nor applied any local remedy, wishing to trust solely to the ammoniacal injection. He thus concludes: — "Whatever may be the opinion of others who are much given to theorising and criticism without experience, of this I am convinced, that, for the poison of the brown or diamond snake, the ammonia is the direct antidote, and in any number of cases where they could be treated sufficiently soon, I should feel as confident as to their issue as we can naturally be of anything in our somewhat uncertain art."—*Australasian.*

NEW INVENTIONS.

A CLINICAL NOTE-BOOK FOR HOSPITAL AND PRIVATE PRACTICE.

This little pocket companion, which promises to be useful, has been introduced by Dr. Royston Fairbank, of Lynton, North Devon, and is published by Smith, of Long-acre. Each page may contain a case, with name, etc. Columns are given for date, day of illness, pulse, temperature, respiration, urine, and a page for remarks. Further on, there are arrangements for taking special cases, recording post-mortems, etc. But what seems to us the best idea of the whole is a little brass stencil plate, by means of which an outline figure can be drawn in a moment, leaving it to be filled in at leisure. The idea of this, Dr. Fairbank says, he owes to Dr. Richard Bright. The whole is capitally got up.

NEW BOOKS, WITH SHORT CRITIQUES.

Lectures on the Principles of Surgical Diagnosis, especially in relation to Shock and Visceral Lesions. By F. Le Gros Clark, F.R.C.S., Member of Council and late Hunterian Professor of Surgery and Pathology in the College, Surgeon to and Lecturer on Surgery at St. Thomas's Hospital, etc. John Churchill and Sons. Pp. 345.

*** These lectures were delivered by Mr. Clark in his professorial capacity before the Royal College of Surgeons, in 1868 and 1869. The lectures were highly esteemed, and many who heard them urged on the author the propriety of making them more public. They now appear very nearly in their original form, consisting altogether of twelve lectures. Of these the first two were, so to speak, introductory. In the third shock was handled. Next followed a discussion of fractures of the skull, lesions of the encephalon and other portions of the nervous system. After came fractures of the chest, with lesions of the lungs and other viscera; finally three lectures treated of injuries to the abdomen and pelvis. An exceedingly instructive course.

The Owlet Annual. Winchester: J. Wells, Bookseller, College-street. 1869.

*** We claim the privilege of noticing what our Medical brethren do, even in matters out of the Professional sphere proper, and hence we do not hesitate to call the attention of our readers to the "Owlet," which is pretty well known to be the production of the family of a distinguished Hospital Surgeon in the South of England, and to be a most creditable instance of literary culture and artistic taste. The "Annual" is a selection from a more fugitive monthly "Owlet," containing capital sensational tales, poetry, music (and this last original and of very high order), and pen-and-ink etchings of great cleverness and piquancy, letters from a Middy in Japan, and the other elements of a first-class magazine. We are sure that our readers will be glad to aid in giving a wider flight to the "Owlet."

Irregularities and Diseases of the Teeth. By Henry Sewell, M.R.C.S.E., L.D.S., etc. John Churchill and Sons. Pp. 66.

*** This small volume consists of reprints from the *Lancet* and *British Journal of Dental Science.* The papers on irregular teeth are well illustrated; the others are interesting. The whole volume is well got up.

The Enquirer: devoted to Free Discussion as to the Wine sanctioned by the Bible. Periodical. Edward C. Delavan, editor. Albany, U.S. August, 1869.

*** The reverend editor mixes up wine and tobacco in one common condemnation. Here is an extract:—

"In 1833 I was invited by General Cocke, of Virginia, to attend a meeting in Charlottesville of the State Temperance Society, of which he was president. He took me over his vast estate on the James River, where he was extensively engaged in the production of tobacco—a drug from which, above sixty years since, I was brought to abstain by a remarkable providence (as I have ever thought). After a short experiment, I resolved, with God's help, never to use the disgusting weed again, and I never have. All along these sixty years and over I have closely watched its deadly influence on the health, morals, hearts, and worldly prosperity of its devotees, as well as its effects on the children of its victims. In all the countries I have visited, commencing my travels in 1815, and revisiting the same country over and over again, at long intervals, I have noticed with painful regret the constantly increasing consumption of tobacco, so that the non-consumers are, as a rule, exceptions.

"I dare say your experience on this point is not unlike mine, extending, as it does, over the same period of time. Can the production, manufacture, sale, and use of this poisonous drug be other than a sin *per se*, and an offence against high Heaven!"

We would call the Rev. Mr. Delavan's attention to the fact that in England teetotallers are amongst the most furious smokers we have.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 25th inst. :—

Barnes, Edgar George, L.S.A., Eye, Suffolk, of St. George's Hospital.
Cogan, Lee Fyson, Northampton Infirmary, of Guy's Hospital.
Cumberbatch, Alphonse Elkin, Great James-street, Bedford-row, of St. Bartholomew's Hospital.
Deane, John, L.R.C.P. Edin., Waltham St. Lawrence, Berks, of University College.
Downing, Edward Hugh, L.R.C.P. Ed., Deptford, of Guy's Hospital.
Dondney, Edwin, Paramatta, New South Wales, of the Bristol School.
Helroyd, William Stephen, Hugh-street, Pimlico, of St. George's Hospital.
Leapingwell, William Thomas George, Oxford, of the London Hospital.
Pearse, Francis James, L.S.A., St. George's-square, of the Westminster Hospital.
Ranger, William Gill, Finsbury-square, of St. Thomas's Hospital.
Saunders, Herbert James, M.D., Kiegston, Canada, Peasenhall, Suffolk, of the Kingston School.
Smith, George, L.S.A., Newcastle-on-Tyne, of the Newcastle School.
Smith, Herbert Alder, L.S.A., Hatten-garden, of St. Bartholomew's Hospital.
Squire, Robert Hemington, Kilburn, of St. George's Hospital.
Stedman, Frederick, L S.A., Downham-road, of University College.
Stephens, Richard Frederick, L.S.A., Penryn, Cornwall, of Guy's Hospital.
Tait, Robert Lawson, L.R.C.S. and L.R.C.P. Edin., Wakefield, of the Edinburgh School.
Taylor, Reginald, L.S.A., Liskeard, Cornwall, of Guy's Hospital.
Turner, Henry Gunton, L.S.A., East Meon, Petersfield, Hants, of Guy's Hospital.
White, Richard Wentworth, Norwich, of King's College.

The following gentlemen were admitted Members on the 26th :—

Argles, Robert, L.S.A., Maidstone, of King's College.
Baumgartner, John Richard, Great Yarmouth, of King's College.
Boyer, Joseph John William Robert, Toronto, of St. Thomas's Hospital.
Cochrane, William Blakeny, Cradley, of the Birmingham School.
Coleman, Henry William, Pentefract, of the Leeds School.
Dayman, Barnfield, Penndstock, Stratton, Cornwall, of St. Bartholomew's Hospital.
Deacon, Henry Pelham, Clapham, of St. Bartholomew's Hospital.
Irving, Charles, Long Bennington, of St. Bartholomew's Hospital.
Latham, William Henry, Sandbach, Cheshire, of St. Bartholomew's Hospital.
McCann, Charles, L.S.A., Parliament-street, of the Westminster Hospital.
Manson, Richard Taylor, Wilten-le-Wear, near Darlington, of the Newcastle School.
Maynard, Charles Dudley, L.R.C.P. Lond., Hornsey, of Guy's Hospital.
Oldham, Charles James, Brighton, of Guy's Hospital.
Preston, Theodore Julian, L.S.A., Belsize-road, N.W., of St. Mary's Hospital.
Skrimshire, Frederic William, Holt, Norfolk, of King's College.
Taylor, William Bramley, L.S.A., Camberwell, of Guy's Hospital.
Turner, Horace, Norwich, of University College.
Walker, Hugh Eccles, Chesterfield, of Guy's Hospital.
Wayman, Clement Page Scott, Great Thurlow, Suffolk, of St. Bartholomew's Hospital.

It is stated that nine candidates failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their Hospital studies for six months.

The examinations for Membership were not brought to a close until yesterday (Friday) evening, and in the ensuing week there will be an examination for the Midwifery licence.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, January 20, 1870 :—

Bale, Henry Adney, Charlotte-street, Fitzroy-square.
Leake, George Dalton Nugent, Twickenham.
Minors, Richard, Sudbury, Derby.
Stedman, Frederick, University College Hospital.
Taylor, Reginald, Liskeard.
Wilkinson, Thomas Marshall, Wanstead.
Wilson, John Henry Parker, H.M.P., Millbank.

As Assistants in Compounding and Dispensing Medicines :—

Feottit, Charles Miller, Marlow, Bucks.
Pilley, Henry Thomas, Boston, Lincolnshire.

The following gentlemen also on the same day passed their First Professional Examination :—

Moore, Arthur Jackson, London Hospital.
Parker, Alfred Henry, London Hospital.
Rix, Benjamin, Guy's Hospital.
Way, Edward Willis, Guy's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Fox, Cornelius B., M.D., M.R.C.P.—Fellow of the Meteorological Society.

BIRTHS.

Barclay.—On December 22, at Bangalore, the wife of Dr. A. Barclay, Deputy Inspector-General of Hospitals, of a son.

Fox.—On January 17, at 67, Grosvenor-street, the wife of Wilson Fox, M.D., of a daughter.

Head.—On January 16, at East Grinstead, the wife of Robert T. Head, M.R.C.S., of a son.

Moseley.—On January 19, at 5, Grosvenor-street, the wife of E. E. Moseley, M.R.C.S., of a daughter.

Shepard.—On January 24, the wife of A. J. Shepard, Esq., Surgeon, Usk, of a daughter.

MARRIAGES.

Hoadley—Banks.—On January 18, at the parish church, Fulham, Robert Hoadley, M.D., M.R.C.S.E., to Mary Anne, second daughter of the late Percival Weden Banks, M.A., Gray's-inn, and niece of Daniel Maclise, R.A.

Kershaw—Holden.—On January 19, at the parish church, Prestwich, by the Rev. R. Hill, B.A., Vicar of Royton, John Kershaw, L.R.C.P., etc., Royton, to Harriet, second daughter of the late Thomas Holden, Esq., Highlands, Royton.

Lewis—Bignell.—On January 13, at the Church of the Holy Trinity, Barnstaple, the Rev. John Clarke Lewis, Rector of Alverdiscott, Devon, to Isabella Brisbane, youngest daughter of the late John Beavis Bignell, M.D., Barnstaple.

DEATHS.

Adamson, Alexander Rattray, M.D., formerly Resident Physician, Gate Helmsley Retreat, near York, at Cirencester, on January 23.

Bree, Anna, daughter of the late Dr. Bree, of Beansall and Stratford-on-Avon, at Eatington Vicarage, on January 24, aged 82.

Crawford, Georgina Elizabeth, the wife of Cooper Hayes Crawford, Surgeon, 2nd Regiment (King's Own) Staffordshire Militia, at Stafford, on the 25th inst., in her 24th year.

Dukes, Mary Ellis, the beloved wife of M. Charles Dukes, M.D., and eldest daughter of Thomas Sprague, Esq., of Camden-road, at the residence of her husband, Enfield-highway, on January 22, aged 38.

Finch, Cuthbert, M.D., at 58, Porchester-terrace, Bayswater, on Jan. 19, aged 67.

Hardy, Thomas Sansom Ingram, Surgeon, at 311, Albany-road, Camberwell, on January 23, aged 67.

Levea, John, C.W., late Senior Lieutenant H.M.'s 52nd Light Infantry, only surviving son of the late Dr. J. C. W. Lever, of 12, Wellington-street, London-bridge, and Guy's Hospital. Perished in the fire that occurred at the Star and Garter Hotel, Richmond, on January 12.

Smith, Mary Anne, wife of John Smith, Surgeon, at Blackheath-road, Greenwich, on January 20, aged 74.

Vidal, William Foet, M.R.C.S., etc., late of the Red House, Aveley, Essex, on January 19, in London, aged 45.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bristol Royal Infirmary.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to W. Trenerry, Esq., Secretary, on or before February 10.

Chelsea, Brompton, and Belgrave Dispensary, 41, Sloane-square.—Surgeon to the Western District. Candidates must be Members of the Royal College of Surgeons of London, Edinburgh, or Dublin. Applications and testimonials to the Secretary, on or before February 3, on which day candidates will be required to attend at 7 p.m. Election on February 17.

Great Northern Hospital, Caledonian-road, King's-cross, N.—Junior Surgeon. Applications and testimonials to the Secretary, G. Reid, Esq., 46, Great Coram-street, on or before February 9.

Highworth and Swindon Union.—Medical Officer for the Second District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on before February 1, election on the 2nd.

Highworth and Swindon Union.—Medical Officer for the Fourth District and Workhouse. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to "The Clerk of the Union," Swindon, on or before February 1, election on the 2nd.

Holbeach Union.—Medical Officer for the Sutton-bridge District. Candidates must be legally qualified and registered. Applications and testimonials to Mr. E. G. Ayliff, Clerk, Holbeach, on or before February 5. Election on the 7th.

Leicester Infirmary and Fever House.—House Surgeon and Apothecary; must be a Member of the Royal College of Surgeons of London, Edinburgh, or Dublin, and be L.S.A. Applications and testimonials to the Secretary at the Infirmary on or before February 1. Election on the 12th, at 1 o'clock p.m.

Liverpool Dispensaries.—Assistant Resident House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary on or before February 26.

Liverpool Eye and Ear Infirmary.—Assistant-Surgeon. Applications and testimonials to the Committee on or before January 31.

Liverpool Northern Hospital.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before February 7. Election on Feb. 11.

North Staffordshire Infirmary, Hartshill, Stoke-upon-Trent.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary at the institution on or before January 29. Election on February 3.

Nottingham Dispensary.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

Ross Union.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

St. Mary's Hospital and Dispensary for Women and Children, Manchester.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Board of Management on or before February 19.

Sheffield General Infirmary.—House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, or a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and also L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary on or before February 5. Election on the 9th.

South Lambeth, Stockwell, and North Brighton Dispensary.—Visiting Medical Officer; must be duly qualified and registered. Applications and testimonials to E. G. Syms, Esq., 250, South Lambeth, S.W., on or before February 9.

South-Western Provident Dispensary, 41, Denbigh-street, Pimlico, S.W.—Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Resident Secretary, on or before February 2.

University College.—Professorship of Medical Jurisprudence. Applications will be received till February 5. Further particulars may be obtained from the Secretary, John Robson, Esq.

University of London.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bridport Union.—The Fourth District is vacant; area 5908; population 2146; salary £46 per annum.

Honiton Union.—The Fourth District is vacant; area 14,040; population 5121; salary £112 per annum, no fees.

Kingston Union.—Mr. G. S. Clement has resigned the Teddington District; area 1620; population 2144; salary £45 per annum.

Uxbridge Union.—Mr. Robert King has resigned the Uxbridge District; salary £35 per annum.

APPOINTMENTS.

Eastbourne Union.—James P. Billing, L.F.P. and S. Glas., L.S.A., to the Second District.

Lutterworth Union.—Henry W. A. Coleman, M.R.C.S.E., L.S.A., to the First District and the Workhouse.

West Ward Union.—Warren Edger, M.R.C.S.E., L.S.A., to the Morland District.

In consequence of the illness of the Lord Chancellor of Ireland, the visitation at the King and Queen's College of Physicians, which stood adjourned to the 21st inst., has been necessarily further postponed.

Relapsing fever has decreased in the Metropolis, as a whole. Whitechapel, St. Giles's, and Camberwell still continue to send cases. The new Hospital at Hampstead was opened for male patients on Tuesday, and for female patients on Thursday.

A Compulsory Vaccination Bill has been rejected by the States of Jersey by a large majority—25 to 6. The Bill was introduced by Mr. A. J. Low, L.R.C.P. Lond.

At an extraordinary meeting of the Council and Senate of the University of Melbourne, held on December 1, the degree of M.D. was conferred (without examination) upon Dr. John Day, of Geelong, in consideration of his valuable researches on the application of chemistry to Medico-legal investigations, and especially to the detection of blood-spots.

A child 5 years old died the other day in Paris in convulsions, having been poisoned by the prussic acid contained in bitter almonds, of which he had eaten a large quantity.

On Monday last two girls were sent to prison by the Plymouth magistrates for not complying with the terms of the Contagious Diseases Act. One of the girls was sentenced to imprisonment for seven, the other for fourteen days. This is the first conviction under the Act at Plymouth. We understand that before they were convicted their yelling and screaming was enough to alarm the neighbourhood.

The result of the University matriculation examination, which was declared on Tuesday, shows a larger proportion of passes than usual. Of the 129 candidates who presented themselves 66 passed, the larger proportion of whom came from the public schools. The Scotch College was more than usually successful, having sent up seventeen students, all of whom passed. Of the nine candidates who passed in all the nine subjects, six were from the Scotch College, and of the six who passed with credit four were from the Scotch College.—*Australasian.*

Medical Society of London.—The discussion on Dr. Bell Taylor's paper on the Contagious Diseases Act will be resumed on Monday, January 31.

New Ophthalmic Institution in Glasgow.—Very commodious premises have been purchased in West Regent-street for the reception of patients. A Medical staff has been organised. Professor Macleod is Consulting-Surgeon, Dr. Charles Ritchie Consulting-Physician, Dr. Wolfe Acting-Surgeon, and Dr. Adams Physician.

Littlemore Asylum.—The annual ball at this institution took place on Thursday evening, the 13th inst. On Tuesday evening, the 18th inst., the Rev. E. W. R. Pulling gave the patients his magic lantern entertainment, which was, as usual, much appreciated.

The Nomenclature of Diseases of the College of Physicians.—A critic in the *Berliner klinische Wochenschrift* regards this work as a complete failure. Whether or not its inherent difficulties could have been partially met by a joint committee of men of different nations selected for their especial capacity, the authors of the present attempt have shown themselves quite unequal to their very difficult task. "This Nomenclature can be recommended to no one, and still less can it be officially received; and we doubt whether even in England itself it will gain any ground."

The Riberi Prize.—We may again remind our readers that the third award of the triennial Riberi Prize of 20,000 lire (£800) is to be made by the Royal Academy of Medicine of Turin in 1871. All works intended to compete for it must be delivered at the Academy, free of expense, by December 31 of the present year. The prize will be awarded to the author of the manuscript or printed work produced between 1868-70, or of the discovery made during that period which, in the opinion of the Academy, has most contributed to the progress and benefit of Medical science. The works must be in Latin, French, or Italian, or, if in any other language, a translation must accompany the original. Authors are requested to indicate to the Academy the most important points of their works.

Fatal Case of Suffocation from the Inhalation of Chlorine Gas at Dublin.—A case of suffocation, said to be from the fumes of chlorine gas, which deprived one man of life and brought two other men into a state of extreme danger, occurred on the morning of January 18, on board the schooner *Lavinia*, then lying in the river Liffey. It appeared that the cargo consisted of 140 tons of salt cake (sulphate of soda) and 150 casks of chloride of lime. Some of the salt was under the casks, and some stowed among them for convenience. It was given in evidence that such a cargo would not be dangerous unless the salt were hot or the chloride damp. The verdict of the coroner's jury was to the effect that the inhalation of chlorine gas was the cause of death, but that there was not sufficient evidence to show what the circumstances were which had led to the evolution of the gas. The jury added a recommendation that, in future, any vessel about to leave the port of Dublin, laden with a dangerous cargo, should be inspected by the city analyst.

The Position of the Promoters of the Contagious Diseases Act.—The following is the concluding portion of a paper read last week before the Medical Society of London by Dr. C. B. Taylor, of Nottingham. Dr. Taylor said the promoters and would-be extenders of the Contagious Diseases Act are bound to show that there is an adequate necessity for such laws, that they are certain to attain the end in view, also that no less disgusting measures would suffice to check the spread of venereal disease. In all these respects this law utterly, undeniably, indefeasibly, breaks down. Is it just to stamp a fallen woman with infamy for a fault which leaves her partner untouched and free to spread disease, or right that pure and virtuous women should be at the mercy of a low legalised espionage, in order that men may be vicious with impunity? The ladies of England have learned with horror the treason that has been practised against their sex—a treason which has swept away all legal safeguards of honour from the highest, and heaped misery and tenfold ruin on the lowest. Be assured that they will not endure that the most helpless of their sex shall be stripped of the right of *habeas corpus* and jury trial in matters so vitally affecting all that is dearest to them, and I warn you that now they have been so sorely wounded, their influence is about to be felt as never before in England. In conclusion, I must protest against the assumption that the vote of Medical men collectively is in favour of these acts; on the contrary, I have found the great majority, as fast as they understand their scope and objects, are vehemently opposed to them. In Nottingham, out of fifty-nine Medical Practitioners, there are but three who have not signed the most indignant protest against them. The same observation holds good of some other

towns, and I am convinced that when these measures are clearly understood, we shall as a Profession utterly dissent from the fundamental principles, moral, legal, and Medical which these acts embody.

ST. BARTHOLOMEW'S HOSPITAL.—The following petition is being circulated for signature. The absolute wisdom of the Hospital administration may be well open to doubt; and in some points—as, for example, the aggregation of a greater number of out-patients than can possibly be attended to by the existing staff—it is undoubtedly wrong. But we never heard corruption, embezzlement, or any act of culpability so much as alleged; every board of management must have some discretion allowed it and some chance of error. We should think the governing body would be the first to welcome an independent audit. "To the Commissioners of Charities for England and Wales.—Gentlemen,—We, the undersigned persons interested in the good government of St. Bartholomew's Hospital, beg respectfully to invite your attention to the fact that a number of statements have been made in the public press during the last year, and especially during the last four months, reflecting on the government of that Hospital and the administration of its revenues, and that the governors of that Hospital, so far as is known to us, have taken no steps to procure an impartial inquiry by other than interested persons into the truth or falsehood of those statements. And we respectfully ask you to institute such an inquiry by one of your inspectors or otherwise as may seem fit to you, into the matters alleged, as you may deem expedient."

COLLEGIATE EXAMINATIONS.—During the last few days the Court of Examiners of the Royal College of Surgeons have been much engaged in the pass examination of 85 candidates for the diploma of Membership; of this number 42 were examined also in Medicine. Of those already possessing Medical degrees or licences, and therefore not required to undergo the latter examination, there were—"L.S.A.," 17; "L.R.C.P. Edin.," 3; "L.R.C.P. Edin. and L.S.A.," 2; "M.D. Toronto," 3; "M.D. Toronto and New York," 1; "M.B. Edin.," 2; "M.D. Kingston, Canada," 1; "L.R.C.P. Lond.," 1; "M.B. Melbourne," 1; and "M.D. New York," 1. The diplomas of the other candidates will be retained until they have passed an examination in Medicine. The following were the questions in Surgery, etc., on the 21st inst., viz.:—1. Describe the appearances and symptoms which indicate congenital syphilis in an infant. Mention the treatment to be adopted in such a case. 2. Mention the coverings of the spermatic cord in its course from the internal abdominal ring to the scrotum. State from whence these coverings are respectively derived, and what relation they bear to an oblique inguino-scrotal hernia. 3. To what morbid changes are bursæ liable? Give examples, and mention such modes of treatment as you think most eligible. 4. Describe in their relative positions and, as they are brought into view by dissection, the structures which cover and occupy the space bounded by the posterior edge of the sterno-cleido-mastoideus muscle, the posterior belly of the omo-hyoid muscle, and the clavicle, including the relative anatomy of the subclavian artery. 5. Describe the symptoms of fracture of the neck of the thigh-bone both within and without the capsule, the treatment, and the usual result. 6. Explain anatomically the course which the blood takes to the lower extremity after the external iliac artery has been tied. The written examination on the Principles and Practice of Medicine took place on the 22nd inst., when the following questions were submitted, viz.:—1. You are called to a patient bringing up blood from the lungs or stomach. State what the different causes of the hæmorrhage may be, and how you would treat each particular variety of it. 2. What are the principal distinguishing signs of enlargement or tumour of the liver, of the spleen, of the kidney, of the ovary, of the uterus? 3. For what purposes do you use the following remedies internally?—Aconite, belladonna, bromide of potassium, chloroform, hydrocyanic acid, ether, Indian hemp, stramonium, lobelia. Give the preparations and doses you would use according to the British Pharmacopœia.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—The quarterly meeting of this Association was held on Wednesday evening last at the Freemasons' Tavern, Great Queen-street; Dr. Rogers, President, in the chair. The Secretary, Dr. Dudfield, read the report of the Council, which congratulated the Association on the introduction of the Dispensary system in the metropolis, and reprobated the conduct of the Bethnal-green guardians in reducing the number of their Medical officers, and making them resident only. The Chairman, in his address, noticed the activity of the Poor-law Board under Mr. Goschen in pressing upon boards of guardians the expediency of establishing dispensaries. The Chairman complained of the guardians of Bethnal-green in establishing only two dispensaries, and in cutting down their Medical staff, both in numbers and salary. The principle of residency for Medical officers was to be warmly opposed. Turning to Poor-law statistics, he found that Ireland presented a favourable contrast to England in the amount expended in the Medical relief of the poor. In Ireland the expenditure in the six months amounted to one-sixth of the whole poor-rate expenditure, whilst in England it was only one-twenty-seventh of the total cost. He contended generally that the Irish system of poor relief was in every way superior to that of England. Having obtained the mortality tables of the two countries for 1864, he found the deaths in the two countries to be as follows:—Fever—Ireland, 5152; England, 20,308. Scarlet fever—Ireland, 2635; England, 29,700. Diarrhœa—Ireland, 1962; England, 16,432. Measles—Ireland, 630; England, 8323. Hooping-cough—Ireland, 1735; England, 8370. Small-pox (which had since altogether disappeared in Ireland)—Ireland, 854; England, 7684. These figures needed no comment. In conclusion he recommended that the system of Medical relief in England should be assimilated to that of Ireland, the drugs should be provided by the guardians, and the salaries of the Medical officers amended and charged on the consolidated fund. These measures, accompanied by an improved system of registration, would, he thought, place our poor relief on a proper and satisfactory basis. The President concluded by moving the adoption of the report, which was seconded by Dr. Walsh, and carried unanimously. Mr. Benson Baker moved a resolution condemning the conduct of the Bethnal-green guardians. Mr. Baker dwelt particularly on the necessity of the Medical officers mixing with other persons besides paupers to counteract their demoralising influence. Dr. Stallard seconded the resolution, and confirmed the views of the previous speaker. Dr. Thomas proposed, and Mr. Defries seconded, a resolution empowering the Council to use their discretion as to opposing or supporting Parliamentary measures in the name of the Association. Dr. Stallard proposed, and Mr. Jabez Hogg seconded, a vote of thanks to the Chairman and the Council.

ROYAL COLLEGE OF SURGEONS.—From the last published Proceedings of the Council of this institution it appears that Messrs. Busk, Simon, Holden, and Erichsen were elected members of a committee to consider and report to the Council in what way facilities may best be afforded for holding meetings in the College of the Fellows and Members in accordance with the provisions of Section XVIII. of the bylaws. A letter was read from Dr. Pitman forwarding copies of resolutions adopted at a special meeting of the College of Physicians in relation to the institution of a conjoint examining board for each division of the United Kingdom, and inquiring whether the Council of the College of Surgeons was willing to co-operate with the College of Physicians in framing a scheme for securing the object in view. Whereupon it was moved by Mr. Charles Hawkins, and seconded by Mr. Spencer Smith—"That the receipt of Dr. Pitman's letter be acknowledged; that a copy of the resolution of the Council of October 7 last, expressing the opinion of the Council that a single examining board should be instituted for each division of the United Kingdom, be forwarded to him, and that he be informed that the Council has appointed a committee to consider and report on the practicability of establishing such a single examining board, and with power to confer with the Royal College of Physicians thereon." Moved as an amendment by Mr. Quain, seconded by Mr. Hancock—"That the receipt of Dr. Pitman's letter be acknowledged by the President, and that he be informed that the same has been referred to the committee, appointed by the Council on August 12 last, to consider and advise the Council on the desirability and practicability of establishing a conjoint examining board." The votes of the Council were thereupon taken on the amendment, and, on the demand of Messrs. Hawkins and Smith, the names of those voting for and against the same were directed to be entered on the minutes—viz.: Majority for the motion, 12, being Sir William Fergusson, and Messrs. Hilton, Quain, Solly, Lane, Busk, Hancock, Clark, James Paget, Holden, Gay, and Erichsen; minority against the motion, 7—viz., Messrs. Thomas Paget, Curling, Hawkins, Hewett, Smith, Simon, and Humphry. The amendment was consequently carried. It was then resolved that the President of the General Medical Council be informed of the resolution of the Council of October 7 last, stating that, in the opinion of the Council, there should be instituted a single examining board for each division of the United

Kingdom, and that the question of the practicability of instituting such a board has been referred to a committee to consider the same, and advise this Council thereon. Mr. Quain, in pursuance of his notice on the 11th ult., moved "That it is inexpedient that the students intending to become Fellows or Members of the College, if unwilling or unable to matriculate at the University of London, should be compelled (as they virtually will be) to resort for the preliminary examination in general knowledge to any institution having the power to grant degrees and licences to practise Medicine and Surgery, which the institution does not itself recognise as the test of the general knowledge necessary for its own degrees in Medicine and Surgery. And that it is unnecessary and inexpedient that the education or examinations of the candidates for the Fellowship of the College, which have hitherto been under the sole control of the Council of the College, should be placed in any degree under the control of the General Council of Medical Education and Registration, as is virtually proposed in the resolution of the Council of October 7, 1869." And the motion having been seconded by Mr. Hilton, an amendment was moved by Mr. Curling, and seconded by Mr. Hawkins—"That it be referred to the President and Vice-President to make the necessary arrangements for carrying out the resolution of the Council of the 7th of October last in respect of the preliminary examinations for the Membership, and to fix a date for its coming into operation." Mr. Quain, by permission of the Council, withdrew his motion. Messrs. Curling and Hawkins then moved and seconded the foregoing resolution as a substantive motion; whereupon it was moved by Mr. James Paget, and seconded by Mr. Quain—"That it be referred to a Committee to consider and report to the Council on the means offered to students entering the Medical Profession for passing examinations in general knowledge, such as may be satisfactory to the Council." The votes of the Council were thereupon taken on the amendment, and, on the demand of Messrs. Hawkins and Smith, the names of those voting for and against the amendment were directed to be entered on the minutes—viz.: Majority for the amendment, 14—Sir William Fergusson, and Messrs. Hilton, Quain, Solly, Lane, Busk, Hancock, Clark, Turner, James Paget, Humphry, Holden, Gay, and Erichsen; minority, 6—Messrs. Thos. Paget, Curling, Hawkins, Hewitt, Smith, and Simon. The amendment was therefore carried, and after some other business, of no interest to our readers, the Council adjourned.

A NEW preparation, consisting of quina dissolved in spiritus ammoniæ aromaticus, containing two grains of the alkaloid in each fluid drachm, has been made by Mr. Brown, chemist, of Russell-street. This preparation appears to be an elegant and convenient mode of administering a tonic in combination with a stimulant. The dose is the same as that of sp. ammon. ar. It may be prescribed in water or any suitable vehicle.—*Australian Medical Gazette.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. de Hartsen's letter (with enclosure) has come to hand.

Dr. Good's letter (with enclosure) has been received.

Verax.—The questions shall be fully answered next week so far as possible.

P. E.—We do not know.

C.—Sulphate of potass, a common nursery purgative, in doses of ten to thirty grains. Dangerous in very large doses, as all salts are. It does not depress the heart.

An Old Member.—There will be no Hunterian Oration this year. Professor Flower will commence his course of lectures on Monday, the 14th proximo, the anniversary of the birth of Hunter, and Professor Erasmus Wilson will commence his lectures on Monday next.

A. B.—The case should be referred to arbitration.

Civis.—The fee varies with the distance.

Brutus can sue for the amount in one of the superior courts.

A Minor is liable for payment of necessaries supplied to him. It has been held that Medical attendance is a necessary.

Vaccinator.—The appointment is in the hands of the guardians.

The Enquirer.—Teetotalism has no foundation in religion, or morality, or science. Temperance signifies self-government—the repression of tastes, desires, and instincts which lead to injurious indulgence in things lawful. In most ages fanatics have been found who reprobate any given pleasure because it may be indulged in to excess. Men have castrated themselves to avoid incontinence; Quakers dress themselves in a hideous uniform to avoid pride of dress. Some persons refuse animal food, and some wine. We might also, if the proscribers of wine were consistent, find them tabooing tea, coffee, tobacco, snuff, pepper, and every other thing that gratifies the senses, for all may be abused. If any man finds that abstinence from wine is good for himself, of course he should abstain; but why need he blow a trumpet for doing a mere matter of common sense? If any man thinks, further, that, by abstaining himself, he can induce others who indulge excessively to abstain too, he is quite at liberty, but need not vilify those who are under no compulsion to follow his example. As for the questions whether wine is *malum prohibitum* or *malum in se*, the experience of mankind says "No" to both. There are arguments contained in the Bible in favour of wine unmistakably, and there are arguments against its abuse. We act in the spirit of these, and, as free Christian people, do not want to be told what we are to eat and drink, and what not. All culinary and dietetic prohibitions, save those of a moderate and thankful enjoyment, are unknown to Christianity. As to the difference between *tirosh* and *yayin*, and *shekar*, they interest critical students, but need not interfere with the rest of the world. Whether champagne be *mesek* or *khamar*, it is uncommonly good as a fillip to mind and body under depression; and of all the kinds of *shekar*, commend us to Bass's bottled bitter beer. Hebrew roots may frighten the superstitious, but will not deter any sensible man from drinking a glass of good wine, if it agrees with him.

The Puff Oblique.—Mr. Puff, in his enumeration of the various kinds of puff, gives an illustration only of the "puff direct." That, said Sneer, "I can conceive." "Oh, yes," says Puff, "that's simple enough." But it would not appear that the puff "collateral," or the puff oblique, or by implication, was so easily illustrated, as no attempt is made in the *Critic* to do so. And yet how commonly we see glaring instances of both these kinds of puff!—some very clever, some very stupid, and some that would scarcely pass muster if it were not for the animus displayed in them. Take as an example the following in the last number of the *British Medical Journal*. Mr. Puff is asked a question. Here it is, with the answer:—

"AURAL SURGERY.

"Sir,—Will you kindly give me, through the *Journal*, the names of two or three of the best aurists in London at the present time?

"I am, &c. "TYMPANUM.

"*** The following are the Aural Surgeons at our metropolitan Hospitals:—Mr. J. Hinton, Guy's; Mr. J. Smith, St. Bartholomew's; Mr. Walter Rivington, the London; Mr. P. Allen, St. Mary's; Mr. Tomes, the Middlesex."

Now, mark the manner in which the real question is evaded, and the puff by implication carried out! Mr. Puff does not give the names "of two or three of the best aurists in London," but enumerates "the Aural Surgeons" attached to our metropolitan Hospitals. He could not say that all these were the best aurists in London in so many words, but he "implies" it. Mr. Sneer would no doubt exclaim, "That's pretty well indeed, Sir." So it would have been "pretty well" if the name of Mr. Rouse, of St. George's, had not been omitted from the list. Of course the editor never heard of Mr. Harvey, of the Great Northern, and therefore it was not to be expected that *his* name would appear with the rest. But is this a fair way of answering a question? We think not, and, in all seriousness, we regret to see the columns of our contemporary defaced by so glaring a "mistake." There is a story as old as the hills of a certain Quaker who was never known to give a straightforward answer to any question. A wager was laid that a direct answer could and would be extracted from him. "Has the post come in?" inquired a neighbour. "Friend," was the reply, "dost thou expect any letters?" This is all very well as a joke, but it does not do in journalism.

HEWSON AND GULLIVER.

Systematic plagiarism among high scientific characters must be very rare, since, as a class, they are "honourable men," and the practice is so petty and mean that it is sure, sooner or later, to bring its own punishment, for it is the proper business of conscientious journalists to take care of the purity of history.

As to that branch of physiological history which concerns the blood, it unfortunately happens that there are few subjects which have been so perversely treated. Witness the long-continued injustice to Richard Davies and William Hewson, whose undoubted merits were only vindicated in the Sydenham Society edition of Hewson's works, not long after the Hunterian Professor had made the preposterous statement that John Hunter was the discoverer of the coagulable principle of the blood (Hewson's works, Syd. Soc. ed., introd. p. xliv.). Hewson's editor also seems to have too much reason to complain that many of his own laborious researches have had no better fate. He clearly proved the importance of the *size* of the red blood-corpuscles, in connexion with respiration and animal heat, when attempts were made to pooh-pooh all this, and by those very persons who tried to claim or "convey" the discovery of some of his leading results. For example, Professors Milne-Edwards and Alphonse Milne-Edwards (*Recherches sur les Chevrotains*, p. 64, 4to, Paris, 1864) most erroneously assign to another person the discovery of the singular minuteness of the red blood discs of the Tragulidæ, referring in support of this misstatement to the *London Medical Gazette*, 1839-40, where are only some measurements of the pigmy musk deer's blood discs, by Mr. Bowerbank, under date of December 20, 1839; whereas the observations of Hewson's editor on the minuteness of the blood discs of the Java musk-deer were read before the Royal Medical and Chirurgical Society on the preceding November 26, published in vol. xxiii. of its *Transactions*, and in the *Dublin Medical Press*, November 27, as well as in the *Philosophical Magazine*, and in the *Annals of Natural History* of December 1, 1839. Such may be among the points alluded to in the "remarkable lecture" on the blood reported at p. 588 of

Scientific Opinion, December 8, 1869. And it is noteworthy that therein is given a curious and new instance of the importance of the size of the blood discs, as a zoological character, in that very rare Moschus the true musk-deer, and of which probably the only dissection of the recent animal is now being prosecuted at the Royal College of Surgeons.

COMMUNICATIONS have been received from—

Mr. W. Campbell; Dr. C. B. Fox; Dr. J. J. Phillips; Dr. A. B. Shepherd; Mr. J. W. Allan; Dr. Sankey; Sirians; Mr. J. Wickham Barnes; Mr. J. C. Sloman; Dr. Mercer; Mr. A. J. Shepard; Dr. W. C. Aanison; Dr. Geavis; Mr. J. H. Wathen; Mr. P. Marshall; Mr. J. Barbea; Dr. T. Stevenson; Verax; Mr. C. H. Crawford; Dr. A. D. Davidson; Dr. Kelly; Mr. J. Chatto; Dr. B. W. Richardson; Mr. Haynes Walton; Mr. T. M. Stone; Mr. J. F. Clarke.

BOOKS RECEIVED—

Knapp on Intra-ocular Tumours—History of Nine Cases of Ovariotomy, by Dr. T. Gaillard Thomas—American Journal of Obstetrics, November—W. M. Wilkinson on the Possibility of long-continued Abstinence from Food—Memoir of Dr. Robley Dunglison, by Dr. Gross—Transactions of the American Ophthalmological Society—Hints on Sanitary Reform, with a Plan for the Disposal of the Sewage and *Débris* of Glasgow, by Dr. J. Gray—Griffin's Homœopathy in Southampton—Our Domestic Fire-places, by F. Edwards, jun.—Gordon's Army Surgeons and their Works—Dubois on Artistic Cookery—Bernays' Notes in Chemistry—Galloway's Manual of Qualitative Analysis—Lawyers and Doctors, Orphans and Guardians. By David Read.

NEWSPAPERS RECEIVED—

Wellington Gazette and Military Chronicle—The Durham County Advertiser—The Glasgow Herald—Aris's Birmingham Gazette—Liverpool Daily Post—Philadelphia Medical and Surgical Reporter—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

January 29. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Scott, "Meteorology."

31. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 1.

Medical Society of London, 8 p.m. Discussion on Dr. Bell Taylor's Paper "On the Contagious Diseases Act."

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 1.

February 1. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. Dr. H. Weber, "Tubercular Meningitis and Tuberculosis of the Serous Membranes in connexion with Caseous Deposits." Dr. B. Sanderson, "Preparations illustrating the Communication of Tubercle by Ingestion of Tuberculous Matter." Dr. Barclay, "Tumour of the Spinal Cord." Dr. A. B. Squire, "Elephantiasis Græcorum and Accidental Ichthyosis," etc.

Royal Institution, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

2. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society. 7½ p.m.: Council Meeting. 8 p.m.: Dr. Willoughby, "Case of Cicatrices from a Burn requiring Division during Labour." Dr. Routh, "A Case of Absence of Vagina, with Retention of Menses in a Uterus behind." Dr. Braxton Hicks, "A Contribution to our Knowledge of Puerperal Fever."

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 2.

Society of Aats, 8 p.m. Meeting.

3. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 7½ p.m. Meeting of Council.

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

4. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Medical Society of London, 8 p.m. Meeting of Council.

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 3.

Royal Institution, 8 p.m. Mr. Ruskin, "Verona and its Rivers."

Western Medical and Surgical Society, 8 p.m. Dr. Barnes, "A Case of Obstruction in the Bowels." Dr. Painter, "A Case of Stone in the Urethra."

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 22, 1870.

BIRTHS.

Births of Boys, 1130; Girls, 1109; Total, 2239.
Average of 10 corresponding weeks, 1860-69, 2075·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	842	810	1652
Average of the ten years 1860-69	801·0	830·3	1631·3
Average corrected to increased population	...	...	1794
Deaths of people above 90	...	...	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	18	1	12	...	2	1	4
North ...	618210	2	14	27	2	9	5	4	3	2
Central ...	383321	...	...	15	2	3	1	2	3	3
East	571158	4	9	31	1	15	...	...	4	...
South... ...	773175	2	16	52	2	16	6	4	4	6
Total	2803989	8	41	143	8	55	12	12	15	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·252 in.
Mean temperature	36·1
Highest point of thermometer	48·0
Lowest point of thermometer	29·6
Mean dew-point temperature	31·1
General direction of wind	N.E. & E.S.E.
Whole amount of rain in the week	0·05

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 22, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending Jan. 22.	Deaths Registered during the week ending Jan. 22.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2239	1652	48·0	29·6	36·1	2·28	0·05	0·13
Portsmouth ...	122084	12·8	70	50	51·2	27·0	36·9	2·72	0·03	0·08
Norwich	81087	10·9	60	34	42·7	30·0	35·0	1·67	0·05	0·13
Bristol	171382	36·6	103	122	50·1	29·6	37·2	2·89	0·11	0·28
Wolverhampton ...	72090	21·5	48	26	49·0	30·3	36·3	2·39	0·10	0·25
Birmingham ...	369604	47·2	278	174	50·7	31·1	36·7	2·51	0·05	0·13
Leicester	97427	30·4	81	43	46·7	28·0	35·4	1·89	0·05	0·13
Nottingham ...	88888	44·5	66	53	48·0	27·6	36·0	2·22	0·06	0·15
Liverpool	517567	101·3	345	259	50·0	29·8	37·0	2·78	0·10	0·25
Manchester ...	374993	83·6	311	222	48·0	30·0	37·0	2·78	0·21	0·54
Salford	121580	23·5	100	70	47·4	29·4	36·8	2·67	0·21	0·54
Bradford	143197	21·7	103	52	49·5	30·0	36·8	2·67	0·12	0·30
Leeds	259527	12·0	229	129	47·0	32·0	37·0	2·78	0·15	0·38
Sheffield	247378	10·8	187	149	46·0	29·0	35·6	2·01	0·26	0·66
Hull	130869	36·7	84	53	42·0	23·0	33·9	1·06	0·10	0·25
Sunderland ...	94257	19·6	55	44	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	106	59	44·0	30·0	35·2	1·78	0·09	0·23
Edinburgh	178970	40·4	135	122	46·7	29·0	36·6	2·56	0·10	0·25
Glasgow	468189	92·5	377	340	43·7	29·7	35·4	1·89	0·23	0·59
Dublin (City, etc.*)	321540	33·0	189	179	57·5	30·8	40·4	4·66	0·09	0·23
Total of 20 Towns in United Kingd'm	7209603	33·6	5166	3831	57·5	23·0	38·4	3·55	0·11	0·28
Week ending Jan. 15 Paris	1889842	...	...	989	...	...	...	...	...	...
Week ending Jan. 8 Vienna	605200	...	...	319	...	...	35·4	1·88	...	...
Week ending Jan. 13 Berlin	702437	...	638	387	...	...	30·4	−0·88	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·252 in. The barometrical reading increased from 29·70 in. at the beginning of the week to 30·45 in. on Tuesday, Jan. 18.

The general direction of the wind was N.E. and E.S.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON METEOROLOGICAL READINGS IN RELATION TO SURGICAL PRACTICE.(a)

(*Concluded from page* 117.)

Special Meteorological Influences.

So far we have considered the general influences of the seasons on Surgical mortality, but to rest on this consideration would lead us into error. The seasons afford great outlines for study, but nothing more, and we should soon be plunged into a sea of troubles if we were to think of them only. We may have, in fact, different results in different seasons, because there may be and are differences in the same seasons which will rule and govern results. We are bound, therefore, to enter into details, and are forced to inquire what is there in some seasons that should lead to important differences in the mortality from those forms of disease which are marked by fever or increment of animal heat. My idea is that, on purely physiological grounds, we have reason of the simplest physical kind for that increase of temperature, sometimes fatal, which succeeds the performance of a Surgical operation of a severe character. I think the fever is due to resistance of motion. We have seen that whenever the animal temperature is raised there is danger, unless there be established a compensation by radiation, and specially by evaporation of water from the body. Now, when we come to consider the influences of atmospherical condition in relation to mortality, we find a series of direct agencies leading to interference with the process of evaporation when the mortality is high. Let us, in example of this fact, take the external conditions of the year 1868 at the height of 160 feet above the level of the sea.

Year 1868.

	Barometer.	Humidity of air.	Weight of cubic foot of air.	Temperature, mean.
First quarter .	29·845	82	552·3	41·4° Fahr.
Second quarter .	29·869	73·3	536	55·8° Fahr.
Third quarter .	29·773	70	526	63·9° Fahr.
Fourth quarter .	29·669	88·3	544·3	45·1° Fahr.

From this table let the eye be carried back to the tables and facts of mortality which have already been given, and the mind will then appreciate the special meteorological characteristics which run with the lower and the higher mortalities.

In a physiological point of view we see in these conditions of air all that is necessary to account for the attendant results. Low barometrical pressure, excess of humidity of air, and a temperature low, but not low enough to compensate for increase of heat by arrest of oxidation or by abstraction of heat. These are the precise conditions by which in experiment we should expect to produce an elevation of animal temperature with or even without injury. They are conditions the most unfavourable to equalisation of heat by evaporation and radiation. And thus I am brought to advance the general rules—not as absolute rules, but as approximations to the truth—that, with a barometrical reading below 29·670. humidity above 80, and a mean temperature below 50° Fahr., the conditions are unfavourable for recovery from large Surgical operations. On the other hand, the conditions are favourable with the barometer at or over 29·869, the degree of humidity about 73, and the mean temperature not less than 55° Fahr.

To enable the Surgeon to act on the rules thus submitted, I have requested Messrs. Horne and Thornthwaite to construct for me the small portable apparatus which is now before you. It consists of a little cabinet perforated on each side for the free admission and circulation of air, and provided with a dry and wet bulb thermometer and an aneroid barometer. This cabinet can be carried conveniently to the place where a Surgical operation is to be performed, and can be put in the ward or chamber where the patient lies. To make it more useful, I have added to it a few simple rules for the guidance of the Practitioner.

Fig. 2.

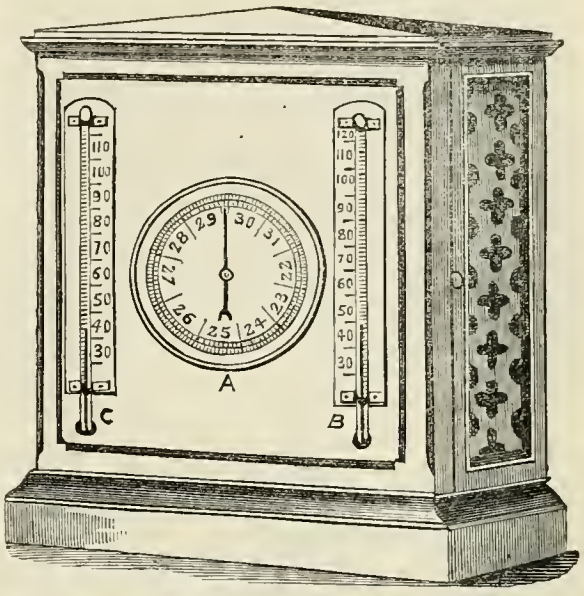


Fig. 2.—A, barometer; B, dry-bulb thermometer; C, wet-bulb thermometer.

You will observe that I have as yet said nothing respecting the presence or absence of ozone or the detection of it. There is not much to be said. At the present time the modes of determining ozone and the tests for ozone, in the external air, are very unsatisfactory. Ozone is so readily used up, in crowded communities, by organic decomposing matters in the air, that it may really be present and yet not be detectible by the common tests now in use. In a conjoint paper by Dr. Moffatt and myself, contributed to the Epidemiological Society in March, 1854, we showed that with certain of the winds there are periods of ozone, and that with other winds there may be no ozone, the ozone periods accompanying south or equatorial currents of wind, and the periods of absence of ozone being those when the north or polar currents of wind prevail. The periods of ozone correspond with those seasons when there is increase of febrile disease, and an argument might be raised that excess of ozone in the air would favour increase of animal heat. Indeed, I can induce increase of temperature in an animal by submitting it to ozone at a temperature above 70°. But I would not press this point further, because of the uncertainty of tests for ozone. The fact nevertheless of the concurrence of ozone periods with seasons which are favourable to fever, or increment of animal heat, ought to be remembered.

The direction of the wind is connected, in observation, with the barometrical readings and humidity. South and south-westerly winds are, I think, unfavourable to operation; westerly and north-westerly are favourable; north and north-easterly, and even easterly, winds are not unfavourable. As to the *force* of the horizontal movement of the wind, I have not been able to determine as yet that it makes any material difference in relation to mortality.

On the whole, I believe that the readings of the barometer and of the dry and wet bulb thermometers are the most practical and useful guides in respect to Surgical operations, and the hours favourable or unfavourable for the performance of operations.

Artificial Remedial Measures.

One other subject remains to be considered; I mean the artificial means which are at our command to meet atmospheric changes. We have at command the means for meeting two atmospheric conditions; we can regulate temperature, and we can determine humidity. These are always important considerations, and at all seasons, even the best, should have the fullest attention. With the little cabinet of instruments now before us, a nurse can read temperature, humidity, and barometrical pressure, with ease, in the sick room.

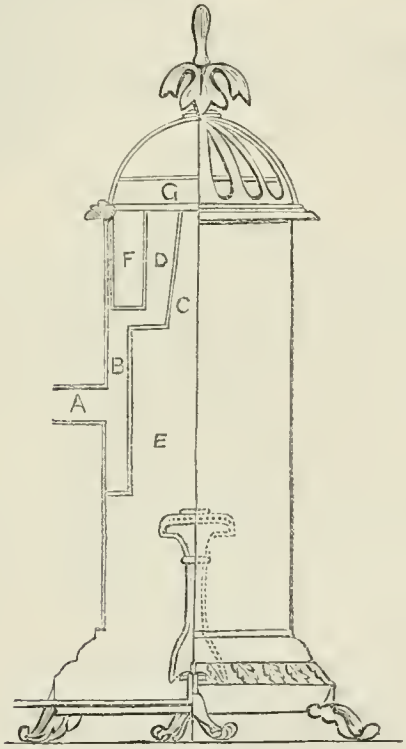
But to regulate temperature and humidity, a proper and

(a) Delivered on Tuesday, January 4, 1870.

scientific administration of air into the room or ward is required. Our present systems are a universal mistake. The open firegrate and open window are practically worthless proceedings; indeed, the open window is an absolute danger. We have, however, now at our service one or two methods by which we can regulate the amount of air, the warmth of air, and the humidity.

In the diagrams there are represented, in section, two stoves which meet the objects in view; the stoves themselves are on the lecture table. The long stove (Fig. 3), called by its inventor the "hygrometric," is invented by Mr. Jones, of Aylesbury, and was exhibited last year at the Medical Society of London, with a description of its action by Mr. Ceeley. The stove consists of a hollow metallic cylinder, the interior of which is heated by gas or by a large lamp. Through the tube, A, air is admitted from the outside; the space B is a chamber surrounding the inner stove, where the air is heated; through the chimney, C, products of combustion escape. The space E is the inner stove. The space F is a water-dish, over which, if required, the air from without can pass after being warmed; (this, also, could be made a drying-dish). The space D is the space between the water-dish and chimney, through which the warm air passes to the upper perforated vault or chamber, where it is deflected by the damper G, and then passes into the room.

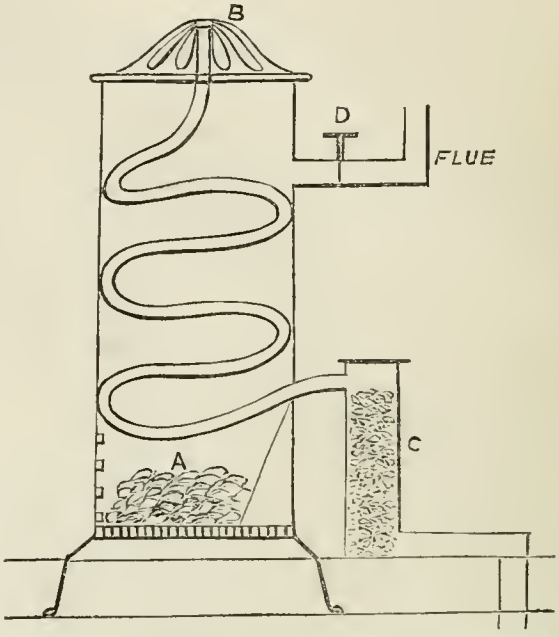
Fig. 3.



The shorter stove (Fig. 4) is the invention of Mr. Webb George. It consists of a furnace, A, surrounded by a cylinder of wrought iron. At the lower part of the stove and behind, a tube enters from the outer air, which tube forms a spiral within the stove, and terminates at the upper part, B. The air is thus simply heated by passing through the spiral, and the products of combustion are carried away by the flue, which is provided with a damper, D. By making an extra chamber at C the air can be carried over a drying surface, and can be brought into the room in any degree of humidity. This stove answers exceedingly well when it is properly managed, and by it, in a small room, the air can be raised to 140° Fahr. The introduction, rapidly, of pure air secures also a good ventilation.

But, after all, these arrangements do not meet the difficulty of atmospheric pressure. When the barometer is low there are changes in the body which are not easily explained. There is tendency to congestion of lung and to mechanical resistance in the pulmonary circuit; there is tendency to exudation of fluid from wounded surfaces, there is a feebleness in the healing of wounds, and in the body generally a susceptibility to disturbance which is not presented when the atmospheric pressure is firm and at its maximum. We are indeed, in health, made sensible of low barometrical pressure by many signs: tooth-ache, pains in the joints, what are commonly called nervous symptoms, these are signs, with others, with which we are most of us familiar; signs which one of our immortals, Jenner, has epitomised, in by no means contemptible verse, as an excuse for declining the invitation of a friend to make a country excursion.(b)

Fig. 4.



Lastly, when the barometric pressure is low, the production of secondary animal poisoning is a marked phenomenon. It is as though the fluids then secreted by wounded and diseased surfaces undergo a peculiar decomposition yielding products which by reabsorption excite, in turn, secondary fever. Mr. Wells's cases afford striking evidence of this practical fact. In some of his cases the increment of heat, the Surgical fever, is primary, comes direct with the reaction, and causes death in forty or fifty hours; in other cases the fever is secondary, comes on many hours after the operation, and causes death on the fourth, fifth, or sixth day.

We want, then, proper means for regulating *all* atmospheric conditions in the sick ward. Meanwhile, the Surgeon, when he is not pressed for time, may constantly take advantage of simple natural conditions favourable to his operative work. What these natural conditions are may be stated under a few separate heads.

General Rules for reading Meteorological Conditions, as a Guide to Major Surgical Operations.

The time is favourable for operation—

(*a*) When the barometer is steadily rising.

(*b*) When the barometer is steadily high.

(*c*) When the wet-bulb thermometer shows a reading of five degrees lower than the dry-bulb.

(*d*) When, with a high barometer and a difference of five degrees in the two thermometers, there is a mean temperature at or above 55° Fahr.

The time is unfavourable for operation—

(*a*) When the barometer is steadily falling.

(*b*) When the barometer is steadily low.

(*c*) When the wet-bulb thermometer approaches the dry-bulb within two or three degrees.

(*d*) When, with a low barometrical pressure and approach to unity of reading of the two thermometers, there is a mean temperature above 45° and under 55° Fahr.(c)

(b) See life of Jenner, in "Lives of British Physicians," edited by our friend, John Fernandez Clarke, who seems to live—and may the life be long—with his illustrious brethren of the dead.

(c) For particulars as to method of reading the instruments in the Medical meteorological cabinet, I would direct the reader to Mr. Glaisher's admirable little work entitled "Hygrometrical Tables," published by Taylor and Francis, of Red Lion-court, London. I would also return my thanks to Mr. Glaisher for having most kindly read for me the "revise" of this lecture.

I have said before, and readily repeat, that these rules are approximative only; but I venture to affirm that if in our large Hospitals careful observations were carried out bearing on the question of mortality in relation to meteorological conditions, the rules would be proved as substantially correct. I believe, further, that if the results of operations performed in those places where the air is dry, the temperature uniformly high, and the mean barometrical pressure high, were compared with results obtained in other places where the opposite general conditions obtain, the correctness of the rules would also, in the main, be substantiated.

A word in conclusion respecting the mortality of operations in patients of different ages. We know as a general truth that the mortality after great operations is lower in the young than in the advanced in life. In one operation—lithotomy—we have fairly discovered the rate of difference. The reason of the difference seems to me intelligible enough. In the young the tissues of organs are elastic, the organs are more faithfully acting in accord, the excretory power is free, the muscles on which the organic life depends are vigorous, and the body generally is not embarrassed with non-conducting fatty substance. In those who are advanced in life the conditions are not the same; the tissues are firm, some organs are failing in power, secretion is less active, the heart and respiratory muscles are feebler. In the young, consequently, there is capacity for compensation; in the thoroughly formed body there is less capacity for compensation to meet *resistance*.

Errata.—In Dr. Richardson's lecture of last week, at p. 116, column 1, and line 3, *omit* letter n, and *read* "capillary coils terminate in the return wires, which," etc. At page 117, column 1, and line 47, *for* "frequency" *read* "mortality;" and on same page, column 2, in line 29, *for* "class" *read* "fatality."

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon to the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(Continued from page 59.)

It is impossible to describe all the appearances in the living eye that hard cataract and soft may present, in the several stages of primary changes and secondary. The many physical characters are easily learned from actual observation. It is necessary for me, notwithstanding, to caution the student not to mistake the hard cataract that has passed into the secondary degeneration, with whitened surface, for soft cataract, that which can exist only in children and young persons. A hard cataract in which the secondary change has affected the greater part is, strictly speaking, more soft than hard, and must be entirely soft if the nucleus also be secondarily degenerated; but it is at once apparent that any exceptional pathological condition of this nature is a very different thing in its kind, from what has been described generally as soft cataract. The practical importance of the matter, is that there may be a dense nucleus within the whitened and semi-fluid cortex, or fluid, as above described, and therefore a different operation required from that which is applied to soft cataract.

When cataract arises from a constitutional cause, it occurs for the most part in both eyes. The one may precede the other in the disease, or both be affected alike. In an adult the right eye is almost always the first to be involved.

Traumatic Cataract.—This term is used merely to express the manner in which the cataract originates. Nearly always it is produced quickly; by a wound that cleaves the capsule and the lens, or the capsule, enough to admit aqueous humour to the lens tissue, and less frequently by a blow on the eye, or on the face or head, by which the capsule is torn. Still more rarely, it is produced by a blow on the eye, or the head, or face, without any tearing of the capsule, at least without such being apparent.

A great many experiments have been made on some of the lower animals respecting traumatic cataract, and some of the results merely, have been given in ophthalmic works. Trials have been conducted on brutes to ascertain how far the capsule can be pricked without causing cataract, and as to what repair the lens is capable of after pricks with a fine needle. As sometimes it is not stated that the lower animals have been the subjects and the several effects, the result of carefully conducted scientific research, the reader of course concludes that such information was got from operations and accidents on man. It is unnecessary to point out the fallacy that may thereby be established.

It has long been known that the lens is capable of reproduction to a considerable extent in the cat, rabbit, and dog.

In a rabbit that was killed six months after extraction of the lenses on both sides, the crystalline capsules were perfectly transparent, and no cicatrix could be discovered. They contained crystallines perfectly similar in size and consistence to those which had been extricated. To be more certain of their nature, they were plunged in boiling water. They became opaque, hard, and friable, just like the original lenses. (*Journal de Physiologie*, tom. vii. p. 30.)

The cataract will be hard or soft, according to the period of life at which the accident happens. In childhood and in youth it will not materially differ in density from idiopathic cataracts at these times. In the elderly and old, it differs from the ordinary senile cataract in never being so dense. There are not the slow pathological deposits in the nucleus, by which it is made more dense, nor the absorption of the more fluid portions of the cortex. The surface is never brown, but always whitish. This influences treatment. It may be said to be opacity of the lens, without the other alterations of cataract.

Traumatic cataract, according to my observation, is always capsulo-lenticular. It is said that exceptions have been seen.

The aspect of traumatic cataract is generally cloudy, and in proportion as the capsule is thickened, so will it be whiter. There can be no error in diagnosis, as the history of a case is a safeguard against this.

The cause of the traumatic cataract, the blow or the wound, is often the cause also of other injury to the eye; hence we may have detachment of the retina, blood effused into the vitreous humour, and tearing of the choroid.

Capsular Cataract, or Disease of the Capsule.

Anterior capsule. It used to be thought that the capsule loses its transparency, until Stellwag examined about fifty cataracts with altered capsules, obtained at post-mortem examinations in the General Hospital at Vienna, and confirmed what had been stated by Müller, to the effect that the opacity here, which is called cataract, is generally due to deposits from the diseased lens, looking like fibro-granular mesh-work or cloudy membrane, and that it is capable of removal by mechanical means or chemical. With this alteration the natural elasticity is lost, and brittleness acquired. It is made out from this, that the true capsular tissue or hyaline membrane is not altered in itself, that it maintains its integrity.

This great observer has detected opaque spots in the capsule, enclosed in thickened portions of it, but not as transformations from itself. It is said that the possibility even of the capsule becoming opaque has not been proved. Deposits may form on the outer part of the anterior capsule as a rare occurrence, when, for instance, the lens enclosed in its capsule is dislocated into the anterior chamber. Here the material is from the aqueous fluid.

Fibrous deposits on the front of the capsule are common results of inflammation of the eyeball, in which the iris participates. Those which form under the iris are more or less mixed with the uveal pigment, hence their blackness. Those within the area of the pupil are not coloured.

A very small central spot is sometimes seen after severe purulent ophthalmia in children, when there may be a corresponding dot on the back of the cornea. This is more frequent in the one eye. There can be no doubt that the cause is contact between the inflamed cornea and the capsule of the lens. The child's lens is very convex, and stands out a little beyond the pupil. Besides, the anterior chamber at this time of life is remarkably small. It is easy, therefore, to understand how the swollen cornea may touch the lens, especially as, in all probability, the lens is pushed forwards by congestion of the eyeball. The dot may be the result of the effusion of lymph. Probably the lymph is always deposited on the cornea as well, but sometimes it gets absorbed. I have seen a delicate film passing between the cornea and the capsule. For more minute details the reader is referred to the writings of Stellwag, and to the extensive researches, in the French edition of Dr. Mackenzie's work on the eye, by MM. Testelin and Warlomont.

When the capsule touches the swollen cornea in purulent ophthalmia, an opaque deposit on it like a dot marks the point of contact.

I shall continue to use the term opaque capsule, as it is generally employed. Surgically speaking, it is unobjectionable.

In ordinary cataractous capsular opacity, that is, in the absence of any appreciable inflammation, the opaque deposits are on the interior of the capsule, are but thin, and consist of the nucleated lens cells, thickened, dark, and granular, and condensed cataractous substances of a granular basis, or fatty material or chalky, with a certain amount of pigment in which are scattered in conglomerated groups, lime-salts and cholesterin crystals, and plates of muriate of lime, and still more rarely black crystals. There may be, too, a thickened layer of disintegrated lens tissue, with new cell formations in retrogressive metamorphosis. The hexagonal lens cells undergo, therefore, little change, but if there be complication with inflammatory affection of the interior of the eye, much alteration ensues with proliferation. The conclusion is inevitable, therefore, that the capsule spoiling is intimately connected with degeneration of the lens surface.

When there is much capsular change in the density and in the thickness of the deposits, there is a departure from the usual course of the lens atrophy, more morbid action, and generally some other ocular disease.

Very marked capsular changes are in all probability the result of inflammatory action. There is a thick stratum between the capsule and the secondarily metamorphosed cataractous mass, in which the disintegrated remains of the lens tissue mingle with well-formed elements that have originated from proliferation.

The capsule may get very dense, when there is marked secondary lens degeneration, and the lens tissue nearly metamorphosed, especially in soft cataract, from a layer of hard, firm connective tissue being generated on the internal wall. This is most common in congenital cataract. Sometimes chalky deposits predominate, and increase the thickness; hence the chalky capsule. It (the capsule) may become ossified. It is common for a characteristic capsulo-lenticular cataract, at all periods of life, to coexist with other ocular disease, especially with a congested state of the eyeball. Sometimes the iris is altered in colour.

The opacity of the capsule, together with the fullest pathological alterations, are most marked in soft cataract, and particularly in the complete congenital form. As it is not uncommon to find an otherwise unhealthy condition of the child's eye, in consequence of which full success in operating is often not obtained, I am induced to suppose that some inflammatory action of the eye, in the womb produces the cataract.

The most marked forms of capsular cataract, occurring after birth, exist when there is fluid degeneration of the lens, in part, or in whole. A fluid cataract in an adult is never uncomplicated.

The posterior capsule, differing from the anterior, being so much thinner, and not resting on nucleated cells, has not the same tendency to become opaque, but it may be so influenced, in dots or patches, or entirely. It may be affected alone, or along with the anterior.

Partial capsular cataract may exist without the whole of the lens being opaque, and this on the anterior capsule or the posterior. The commonest condition of the partial state is met with in very obvious partial lenticular opacity. Even in this partial form there is always some lens change as the cause of the opacity. Such, however, must at times be very slight indeed, and probably limited to the hexagonal cells; for, to judge occasionally from what is discernible in the living eye, the opacity would seem no thicker than what the thickness of the capsule would account for, and these remarks apply even more to partial cataract of the posterior capsule.

Complete double or entire capsular cataract after birth, I believe always to be secondary, and to depend on previous disease of the lens, as in the entire cataractous state, and is associated with complications.

The capsule is affected by the secondary changes of loss of bulk in the lenticular cataract, accommodating itself to the lessened contents; it contracts and wrinkles, and, to a corresponding degree, loses connexion with the hyaloid membrane and zonular attachments. This explains the occasional unexpected separation of the lens and the capsule during operations, and it accounts also for the spontaneous separation of a cataract when the vitreous humour is not fluid.

I am unable to say whether the capsule may altogether and absolutely escape opacity when the lens is opaque. It may keep clear so long as the nucleus of the lens only is opaque, and there remains a layer of clear lens material next to it. If it be always more or less affected in complete idiopathic lenticular cataract, the opacity is generally so slight in the uncomplicated hard cataract as not to be practically recognised during primary changes. Very slight opacity is probably very often overlooked. It is not unlikely, I suppose, for a complete slight capsular cataract to form, without the whole lens also at once becoming opaque.

The many changes in appearance that the capsule undergoes, have induced surgeons to give distinct names to the cataracts. This confuses rather than enlightens.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
Physician to the Bristol Royal Infirmary.

(*With a coloured Diagram.*)

II.—FEBRICULA—TYPHUS—ENTERIC FEVER.

Febricula.

It is difficult to understand on what grounds febricula and simple continued fever have been distinguished as separate diseases in the new nosology. It is true that cases which have been placed under one or other of these headings vary extremely in intensity and in duration; but judging from the examples met with in Great Britain, and excluding the primary and secondary fever of wounds, Surgical operations, and childbed (all which are included by Wünderlich under this group), we may divide this condition mainly into two sets of cases—those in which a high temperature is reached on the first or, at most, on the second day, and those more protracted cases which seem to be really examples of very mild enteric fever. This latter point is evidently acknowledged by Wünderlich, when he says "that sometimes the conditions of febricula represent the effect of the influence of the specific cause of disease in cases of insufficient infection, or in individuals very slightly susceptible to it." Patients have died of perforations who have been considered merely affected by febricula during life.

Simple continued fever, however, may be distinguished from enteric fever by the fact that the temperature rises to a high point much earlier in the former than in the latter disease. On the evening of the first day of the attack, or on the morning of the second day, the temperature will stand at 103° or more, whereas in enteric fever it will seldom reach that point until the third or fourth evening. The ascent is continuous until the highest point is reached; the temperature may then remain high for twenty-four or even forty-eight hours, with morning remissions, and will descend most usually by lysis, and without entire regularity, evening exacerbations occurring sometimes to a degree exceeding the point reached the evening before. In cases induced by heat of the sun in children the subsidence may be more rapid, and may seem to be by crisis. Very rapid ascent, therefore, a brief stationary period, and generally gradual subsidence, characterise this malady, the whole condition being over in the space of ten days when there are no complications, and when the disease is not merely a very mild form of enteric fever. Complications, especially of pulmonary disease, will of course raise the temperature anew, and delay convalescence.

Typhus.

The fever in maculated typhus is of shorter duration than that of any condition recognised as enteric fever, but is longer than that of any other of the exanthemata.

It differs from enteric fever in the rapid rise of temperature in the ascending period. It may reach 104°, or even 105°, on the first evening of the disease succeeding the preliminary rigor. This rapid rise continues until the fourth evening, the morning remissions being generally slight, and the thermometer may even show a temperature on the third or fourth evening of 106° or more. Commonly, however, the highest point is not much above 105°. Cases are slight in which a remission takes place on the fourth day, whilst the temperature does not rise much after this period; but in ordinary cases the acme is not reached until the seventh or eighth day, and may extend to a point that is unusual in enteric fever, except when death is imminent.

The stationary period in typhus varies in duration in proportion to the severity of the attack. In light cases there is often a temporary remission between the seventh and ninth day, and this sometimes seems to usher in a gradual subsidence of the pyrexia. In cases of greater severity the evening temperature will remain at the maximum point until the eleventh or twelfth day, and defervescence will then begin with greater or less rapidity. But in thoroughly severe cases the high evening temperature, with small morning remissions, will persist until the thirteenth or fourteenth day, and even longer.

In the very localised epidemic that occurred in Bristol in 1864-5, all the severe cases that recovered kept a high temperature until the evening of the thirteenth day, and then ended by a rapid critical defervescence. In the cases most likely, from their gravity, to attract special notice, the temperature will seldom diminish before the thirteenth evening.

The descending period varies a good deal in typhus. Unless careful thermometric observations are taken, the disease will seem to end most frequently by crisis. The rule, however, is perhaps just the contrary. No doubt crisis is one mode of defervescence in typhus, the temperature falling rapidly and continuously until it reaches the normal point in from twenty-four to forty-eight hours. Sometimes the fall on the thirteenth day is very intense and rapid, but is followed by a rise of three degrees the next day, as in Case 12, and the subsidence may extend over a period of several days.

Not unfrequently the defervescence is gradual, beginning between the thirteenth and seventeenth day, taking even ten days to reach the normal point; but it differs from the defervescence of enteric fever in that it seldom manifests any evening exacerbations.

Both Cases 10 and 12 show examples of what Wünderlich describes as the critical perturbation that precedes the fall, the temperature rising on the day before the subsidence one or two degrees above the highest point of the day before.

It is this peculiar mode of defervescence, so much more rapid in most cases than in enteric fever, that distinguishes typhus from this disease. The extent and duration of the acme, on the other hand, serve to distinguish it from other diseases, which show an equally rapid subsidence.

The temperature may be lower than normal during the convalescence, and especially when the previous range has been excessive; and during this period the mercury may rise again by two degrees for a day or two without any reason that can be traced.

Complications may interfere with the ordinary course of temperature, either by keeping up the acme beyond the beginning of the third week, or by raising the temperature anew after the normal point has been reached in the descending period. Pneumonia and parotid swelling seem to be two of the most common complications. Diarrhœa may also be a troublesome complication, and may cause a temporary subsidence of temperature at any period of the disease. In the epidemic in Bristol of 1864-65, almost all the first thirty or forty cases suffered from diarrhœa.

Case 11 was an instance of death on the fifteenth day, the temperature not being very high, the fourteenth day showing the remission commonly met with about that period.

In uncomplicated cases, likely to be fatal, there is no remission between the seventh and ninth day; the temperature usually keeps more or less high until death in the second or third week, and just before death may rise to a very extreme point. Wünderlich has even noted a case in which the temperature at the time of death rose to above 109°. If a high temperature persists during the third week, the prognosis is bad. Cases, however, occur, and several are reported in an excellent paper in the *Medical Press and Circular*, 1866, by Dr. Grimshaw, in which death was preceded by a temperature of collapse, 95° and 96°.

Death from the complication of bronchitis does not seem usually to be attended by so high a temperature as death from the virulence of the disease itself, or from the complication of pneumonia.

It is a very bad sign if the temperature falls rapidly at any period of the disease, whilst all the other symptoms remain as they were.

The severity of the disease, and its gravity as to prognosis, may be gathered from the height of the temperature and its duration through the whole of the second week.

Relation of Temperature to Pulse.—The pulse may remain low all through the disease, even when the temperature is very high. More commonly there is a tolerable relation between them, the pulse rising as the thermometer rises. Typhus seldom shows the low pulse, with gradually increasing temperature, that we often meet with during the first week of enteric fever.

During the first two periods, before the commencement of defervescence, there is an increase of urea in the urine, even when little food is being taken. The urea is diminished during the early part of convalescence. There is an almost complete absence of the chlorides during the pyrexial period, due partly to the fact that a less quantity of them is taken in the food. It is believed that there is a certain amount of retention of them during this period, with increased elimination afterwards (Squarey). All through the disease the urinary water is decreased.

Wünderlich differs from English observers in placing the ordinary temperatures of the pyrexial period considerably higher than we do, and he objects to Dr. Grimshaw's observations on the grounds that the temperature was taken only once daily, and by whole degrees. The objection of the single observation daily may apply to the three cases scheduled in this paper. The temperature in these cases was taken in Dublin by my friend Dr. Edward Collins, whose researches on cerebro-spinal meningitis prove him to be a most competent observer. It is probable that had the temperature been taken late in the evening, higher points would have been recorded. But making all allowance for this, it may be seen by reference to Mr. Squarey's observations, *Med. Chir. Trans.* 1867, that the evening temperature in his cases scarcely ever exceeded 105°, and we are forced to believe either that typhus in Germany is associated with a higher range of temperature than in England, or that Wünderlich, as he seems to hint himself, has not observed a large number of cases.

Enteric Fever.

The maximum temperature reached in enteric fever and the duration of the various periods differ according to the intensity of the disease in individual cases; but the general relation of the periods to each other persists, notwithstanding these individual differences. The period of ascent is gradual, showing a little increase each day, to the extent of about 1½°, with morning remissions of nearly a degree. The daily increase may be less than this, or may be a little more; but the general ascent is invariable, and is not interrupted by any remedies. The duration of this period is four days, sometimes five.

These rules are useful in the diagnosis of this disease. 1. A temperature very near 104° on the second day is not enteric fever. 2. A temperature which, after the evening of the fourth day, is not above 102½°, is not enteric fever. 3. A patient whose temperature after the first day has been normal once in the first week has not enteric fever.

The stationary period may have a duration of from seven to twenty-three days, or even longer. The characteristics of this period are the absence of ascent from day to day, and the slight morning remissions. The evening temperature may not be always the same. It may be lower for a day or two by a degree or half a degree, and again rise. If it is maintained at or near 105° for two weeks or more, the case is one of grave severity, but may do well. In this stage a temporary subsidence may occur from the exhibition of certain drugs, especially digitalis, but the temperature recurs to the same point as before, and the course of the disease does not seem to be at all checked. I believe, however, that the height of the temperature (not the duration of the disease) may be lessened by the use of alcohol.

In many cases, and especially in cases in which the duration of this period is prolonged, it seems to be divided into two stages, one in which the evening temperature remains at the maximum point reached in the ascent, and the other in which the maximum temperature is somewhat lower. It would seem as if this latter stage of the stationary period was ushering in the gradual lysis of the descending period.

As the descending period begins, the morning remissions are more marked, whilst the evening temperature remains the same. After the first three or four days the evening decrease commences, whilst the morning remissions become greater. The daily oscillations may amount to a degree and a half, two, or even three degrees. The duration of this period may extend from seven to twenty-one days.

Case 13 (Mary D., aged 12) is an example of enteric fever of only moderate severity, and shows the two stages of the stationary period, and a normal period of descent.

The ascending and stationary periods correspond, as Professor Jaccoud has remarked, to the period of infection, or infiltration of Peyer's patches, and of elimination of the products of infiltration, and the descending period to the stage of

repair. Whenever the curve of temperature is seriously interrupted, the change is foreign to the disease itself, and is evidence of a complication.

Case 14 (Walter J., aged 14) is an example of relapse in enteric fever. This boy was admitted on the fourteenth day of fever. He immediately began to convalesce, and his case seemed to be one that would end in recovery in the fourth week, when on the twenty-sixth day the temperature began to rise again, went through a five days' period of ascent, a five days' stationary period, with evening exacerbations not much below 105°, and a descent of about eight days. These relapses, not uncommon in enteric fever, seem to depend on a reabsorption of fever poison from the surface of the intestine, and are accompanied by a fresh ulceration of the glands, and often by a fresh eruption on the skin. Such a condition must be distinguished from the elevation of temperature due to a complication.

The thermometer is useful in the diagnosis of enteric fever in that the mode of ascent, the line of ascending oscillations, distinguishes it from other diseases with which it might be confounded. In pneumonia the ascent is much more sudden. In ague the temperature is normal for a part of the day. In febrile gastro-intestinal catarrh the height of the temperature on the second day may be above that of enteric fever, and so exclude it, and at any rate the remissions will be much more considerable. In acute tubercle the oscillations are as irregular as in enteric fever they are regular. There is no fixed point as to the maximum of temperature; the morning remissions are always more considerable than in enteric fever; the stage of decrease in the stationary period and the period of decline are wanting. (See Jaccoud, *Clinique Medicale;* and E. L. Fox, *St. George's Hospital Reports*, vol. iv.)

We postpone to the next paper the complications of enteric fever, the value of the thermometer in the prognosis of the disease, and the relations of the temperature to the pulse and the urine.

BELLADONNA IN THE TREATMENT OF TYPHOID FEVER.

By B. KELLY, M.D., L.K.Q.C.P., L.R.C.S. Edin.

Without entering into the fruitless question as to whether fevers be due to specific germs or to pythogenic fluids or gases, all of which, up to the present, have failed to be detected by the microscope and the most searching chemical tests, I would merely state that my own convictions lean strongly to the theory that this class of diseases owe their origin to the introduction into the circulation of septic vapours or gases, and that these subtle agents (fomites) are not unfrequently developed on the surface of the bodies of the individuals subsequently tainted by them. Hence the prevalence of these maladies among the poor and all those who, from ignorance or other circumstances, ignore the practice of frequent ablutions and personal cleanliness. But more, there must exist, as a *sine quâ non*, a predisposition on the part of the patient, as well as an exciting cause for the effectual production of fever. Now, of all the predisposing elements, there is none, perhaps, more powerful than poverty, with its concomitant train of filth, squalidness, and misery.

The treatment of fever has been as conflicting and dwersified as have been the opinions of Physicians respecting its pathology. When the inflammatory theory was in vogue, bleeding, blistering, and purging were pressed into service with terrible effect, as shown by the awful mortality which attended this form of treatment. And it has not seldom happened that the disease had been mistaken by a similarity in outward appearance with the phenomena of some local phlegmasia, and doctored accordingly, as we have good reason to suppose, judging from the lesions presented in post-mortem examinations. No one can read the clinical works of Broussais without being seriously convinced of the truth of this statement. Now, that the zymotic, or putrid, and germinal theories reign supreme among the more orthodox members of the Profession, the antiseptic plan of medication, based, as I believe it to be, upon sounder pathological doctrines, has superseded the more heroic method alluded to, and, comparing the results of both, with decided benefit to patients.

The treatment which I now propose has neither been predicated by the inflammatory nor yet by the zymotic nature of the disease, and consequently cannot be styled either antiphlogistic or antiseptic, at least in the ordinary acceptation of these terms; and yet, viewing it in the light of its action in preventing congestions and inflammations and dissipating the putrid epiphenomena of fever, it well deserves the title of both.

Nearly six years have now elapsed since I recommended, on physiological grounds, belladonna in the treatment of enteric fever. During this time ample opportunity has been given me of testing its therapeutic virtues. Believing firmly, as I did, in the correctness also of the pathological deductions upon which the new treatment was especially based, I entered, I must confess, upon the trial with rather sanguine hopes of success. Never, I can say, have expectations been more fully realised, or crowned with happier results. Indeed, the greatest difficulty I now find is to speak of it in such a way as not to detract from its merits by false moderation, or, by falling into the opposite and equally reprehensible extreme, to puff it up with unbounded praise. Suffice it to say that not more effectually is the tetanic action of strychnine on the system neutralised by tobacco and woorari, or paludal fever combatted by quinine, or anæmia removed by chalybeates, than is the poison of typhoid counteracted by belladonna. It completely changes the whole character and outward manifestation of the disease. Delirium, coma, and subsultus quickly vanish, and are succeeded by calmness and clearness of the intellect, by natural sleep, and complete control of all the voluntary muscles. Diarrhœa is checked, and healthy consistent evacuations are established. The appetite, if excessive or deficient, is restored to something like a normal standard. The pulse, from being frequent, fluttering, and compressible, is rendered slow, strong, and equable. The morbid temperature of the body—the *calor mordax* of Roman, the *causus* of Greek Physicians—falls to a natural level. The vital changes induced in the blood, glandular and other organs, as shown by passive hæmorrhages, tenderness of the abdomen, hypostatic congestions, and ulcerations, are all arrested *in limine;* and the deranged functions of the economy return to their original equilibrium, and are performed with the same regularity as in health. The patient, after an inconceivably short space of time, usually from twenty-four to forty-eight hours after the first administration of the remedy, wakes up, so to speak, and pronounces himself as well as ever; and indeed, to look at him, he really appears so. If, however, the Physician be not thoroughly on his guard, and do not keep the patient quiet in bed pending the ordinary course and duration of the disease, serious consequences will almost inevitably follow. This precaution is all the more necessary, as both the patient and his friends often become clamorous, and, unless gifted with more than a usual share of charity and subordination, may impute sinister motives to the ill-starred Medical attendant. Under such circumstances he should never neglect to impress upon them the important fact that, favourable appearances to the contrary notwithstanding, the disease must run a certain limited course; and that relapses, always dangerous in themselves, are only to be prevented by watching the patient closely and combatting untoward symptoms as they arise. These tactics I have never known to fail. Now a word as to the proper time and mode of administering belladonna.

When called to see a patient in fever, I usually wait, if it be yet in its incipient stage, till all or most of the prominent symptoms are well developed before I venture to prescribe the drug. By doing so, I have the advantage and gratification of witnessing its effects in all their physiological force, while I avoid the possibility of making a mistake in diagnosis. If the patient be an adult and vigorous, I do not hesitate to give from twenty to twenty-five drops of the official tincture of the British Pharmacopœia every four hours. This dose must necessarily vary to suit individual ages and constitutions. The following is the formula I generally employ:—℞. Tinct. belladonnæ ʒij., syrupi aurantii ʒ ss., aquæ menth. pip. ʒ vijss. Ft. mist. Dosis: Pars sexta omni quartâ horâ sumenda. As the whole of this mixture is usually consumed in twenty-four hours, and as it is repeated with little or no variation, day after day, for generally not less a period than two weeks, we may well imagine the enormous quantity of the narcotic that may be used with impunity, especially when the system is fully under the influence of an agent like the poison of typhoid fever. I have never known anything more serious than moderate dilatation of the pupils (which I look upon as an admirable criterion of the safety of its therapeutic action) and slight dryness of the fauces to attend its administration.

The most remarkable effects of belladonna, perhaps, are shown by the suddenness with which the patient recovers his intellectual faculties and the full power and control of his muscles. The latter he often takes pleasure in exercising by rapidly flexing and extending his arms—a circumstance which he adroitly wields as an argument in his appeals to the Physician to allow him to get up and resume his ordinary

vocation. All this was well exemplified in a stalwart Englishman, a patient of Dr. Samuel Giles, of New-cross, Deptford, whom I attended as *locum tenens* a little over a year ago.

As belladonna completely prevents the specific lesions in all the tissues and organs of the body naturally consequent upon the absorption of the typhic poison, it becomes an important question to decide whether the patient is rendered obnoxious or not to subsequent attacks. This is an enigma which neither experience nor observation, so far, has enabled me to solve. Reasoning, however, from analogy, we may expect the disease to reappear, if at all, under a modified and milder form.

When is it safe to withhold the belladonna from the patient? As nervous symptoms, resembling those following the sudden suspension of an habitual stimulant, are apt to supervene upon the abrupt cessation of the drug, I deem it prudent, after the disease has continued about twenty-one days, and the eruption and other accidents have entirely disappeared, to diminish the dose, and extend the intervals of its exhibition gradually. This may be safely and conveniently done during the whole period of convalescence.

As regards the matter of stimulants, I absolutely interdict them in every form and shape to patients while under the treatment of belladonna, as one of my objects is to see that neither its action is masked, nor its virtues rendered doubtful, by the complexity of remedial agents. I occasionally permit a teaspoonful or two of milk punch to be given at long intervals, certainly not with a view of thereby benefiting the patient very materially, but as a *placebo* covertly addressed to the minds of over-anxious friends.

The regimen of patients, while under treatment, should be attended to with the most scrupulous care, as the slightest excess, either in eating or drinking, is sure to be followed by an attack of indigestion and an aggravation of all the febrile symptoms. I have found the following bill of fare to answer admirably in most cases:—A quart of soup made from cow-heel and a pound of beef; a pint of milk boiled with arrowroot; an ounce of cocoa prepared in a pint of milk. These, together with a slice of toast, and a little salt and pepper, constitute the ordinary daily rations for an adult. The proportions given must of course vary in many cases, but the articles themselves will be found well adapted to the debilitated powers of digestion commonly arising in the course of continued fever.

Dublin.

TWO CASES OF VIOLENT DEATHS, WITH SOME REMARKS ON FRACTURE AT THE BASE OF THE SKULL.

By FREDERICK R. WILSON, M.B.,
Staff Assistant-Surgeon.

Case 1.—On the morning of July 7, 1869, a trooper of the 3rd Dragoon Guards, who was late for early stables, mounted his horse, contrary to orders, with the view of reaching the riding-school rapidly, but was run away with, and pitched violently off against a wall—the horse falling against him, and crushing the unfortunate man's head and shoulders against the brickwork. Curiously enough, the horse escaped without a scratch, as the injured man had acted as a "buffer" with respect to his charger. After the receipt of the injury he was able to get up, and walked about thirty yards, but was without delay carried on a stretcher to Hospital. Here he was seen by Surgeon-Major Watt, who reduced a comminuted fracture of the right humerus, and administered some diffusible stimulant and warm tea as soon as the patient could swallow. Blood to some amount was observed to be oozing from his right ear, and there was a tremendous contusion over the left side of chest; but a further examination was inadmissible on account of the patient's state of prostration. He continued sensible to the end, and complained mostly of dyspnœa, but was able to swallow a little warm tea within a few minutes of his death, which occured about two and a half hours from the time of the accident.

On examination of the body after death, besides the palpable injuries it was remarked that he was a peculiarly round-thighed man, which might account for his having been a most indifferent horseman. No general emphysema was present.

On opening the head, and removing the calvarium, etc., an irregular fracture was detected, extending for about two inches obliquely across the middle cranial fossa (at the base of the skull), involving portions of the sphenoid, temporal, and occipital bones, with injury to one of the sinuses, and extensive effusion of blood and serum. The right humerus had sustained a comminuted fracture at its upper third, while the left clavicle and six of the ribs on this side were fractured, with considerable displacement, three also of the same ribs being broken at their posterior angles also. The first rib, as is usually the case in such injuries, had escaped all damage. The left lung was very slightly penetrated in two situations, and there was a small effusion of blood in this pleura; but the most singular appearance about both lungs consisted in their being profoundly collapsed, so as to resemble precisely the physiological condition of atelectasis as seen at times in stillborn children.

In addition to the ordinary shock effects, the unfortunate man in fact died ultimately of apnœa, the result apparently of concussion or other injury to the medulla oblongata and cerebro-spinal axis generally, as there was insufficient emphysema to account for the pulmonary collapse, especially as the right lung had escaped without injury.

Case 2.—The second case of fatal injury was a sergeant of the 20th Regiment, who, in October, 1866, while in a state of mental despondency, precipitated himself from the second story of the new military barrack, Fort William, Calcutta, a height of more than thirty feet. In falling he struck the ground with his right thigh, side, and forehead.

He was immediately removed in a dhooly to Hospital, and a fracture of the right thigh reduced, but he gradually became insensible and collapsed, and died without any attempt at reaction within three hours of the fall. A considerable amount of clear serum had been observed trickling from his left ear, and fracture of the base of the skull from *contre-coup* was suspected; but at the post-mortem examination, in which Mr. Edward Howard, late Surgeon-Major of the regiment, took a part, no fracture of any sort could be detected, though there was tearing of the meninges at the opposite side from the frontal bruise, and much sanguineo-serous effusion at the base of the brain.

The thorax had escaped without injury, but on opening the abdomen its cavity was found to be full of blood, which was traceable to rupture of some of the hepatic vessels, and of a small portion of the substance of the liver itself.

In this case, in addition to the results of the shock, the ultimate cause of death appears to have been internal hæmorrhage.

Thus, in both these cases there was excessive violence and death within three hours accompanied by fracture of a limb, severe injury to the brain or its coverings, and intense concussion effects on the trunk itself; but in one case the cause of death was apnœa, in the other internal hæmorrhage.

It is worthy of remark that in the case in which escape of clear serum from one of the ears had been observed before death no fracture existed, whereas in the other, where only clear blood flowed from either ear, an extensive fracture at the base of brain was demonstrated; and this would appear to throw some doubt on the absolute accuracy of this symptom of the escape of serum from the ears in a diagnostic point of view as pathognomonic of basic fracture of the cranium.

To conclude, I believe the condition of the lungs, whether collapsed or otherwise, may be a most valuable aid to diagnosis in some injuries at the base of the brain, and worthy of further inquiry.

Colchester.

"BYRON'S insanity, such as it was, was of his own making. He forced and encouraged himself into mental and moral disease. There is no greater truth than that mental and moral disease is too often of our own creating; and that we can control our insane tendencies, just as we can control our appetites. A man is as responsible for bringing himself into that state in which Byron's life was spent as he is for indulging in excesses which bring on delirium tremens."—*Saturday Review.*

THE LATE DR. CROKER.—At the last meeting of the governors of Sir Patrick Dun's Hospital, Dublin, the following resolution was passed unanimously:—"That the Board of Governors desire to express their deep regret for the great loss which Sir P. Dun's Hospital has sustained by the death of the late Charles Phillips Croker, M.D., who, by his constant attendance at this Board, and his solicitude for the welfare of the institution, contributed much to advance the best interests of the Hospital during the last thirty years."

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

WOOD'S OPERATION FOR THE RADICAL CURE OF HERNIA.

(Under the care of Mr. BERKELEY HILL.)

JOSEPH H., 3 years old, had been an out-patient for several weeks, with a freely descending, but reducible, right inguinal hernia. The external ring admitted the tips of the fore and middle fingers readily, and several trusses with variously shaped pads failed in turn to retain the hernia within the abdomen. For this reason Mr. Hill admitted the child into the Children's Ward, and on September 20 drew the margins of the abdominal ring together and to the free border of Gimbernat's ligament with a stout whipcord ligature in the manner described by Mr. John Wood. At the operation some difficulty was experienced in invaginating into the canal as much of the subcutaneous structures as is directed by Mr. Wood, but the cord was easily avoided by the needle in carrying the stitches across the canal. On the fourth day after the operation fever set in, and matter formed along the course of the sutures, with considerable swelling of the parts around. The matter escaped along the course of the stitches, which were, nevertheless, retained until the tenth day after the operation and were then withdrawn. The febrile reaction subsided on the seventh day, and matter continued to escape from the punctures for about three weeks. At the end of this time the sinuses had closed, and the groin was occupied by a hard mass about as large as a man's little finger, beyond which the hernia never descended. A light truss was then applied, to be worn continuously until the beginning of December, when the child was brought to the Hospital for inspection. The mother reported that the rupture had never descended since the operation, and the hard mass in the groin had subsided to a firm general induration of the skin and parts immediately beneath. The truss was then discontinued. On January 6, 1870, the child, having been one month without his truss, was seen again. The rupture had not returned, the groin was quite clear, and the external abdominal ring hardly distinguishable from the cord.

ST. MARY'S HOSPITAL.

ASCITES—HYDROTHORAX—PARACENTESIS THORACIS—RECOVERY.

(Under the care of Dr. HANDFIELD JONES.)

FOR the notes of this case we are indebted to the kindness of Mr. C. H. Joubert, the Resident Medical Officer.

C. S., aged 19, ironfitter, attended for several days as out-patient, suffering from abdominal pain, and was admitted on July 20, 1869, under the care of Dr. Handfield Jones, with enlargement of abdomen.

July 21.—Abdomen distended with fluid, measuring thirty inches in circumference. No pain whatever, and pulse 85, and weak; passes very little urine, which is high-coloured, full of lithates, but no albumen.

22nd.—Troublesome hacking cough; very slight abdominal pain.

24th.—Abdomen 31·7 inches in circumference, very tense; liver not below the ribs; heart displaced upwards, apex beating in third space inside the vertical line of nipple; cough troublesome; urine scanty, and as before.

No change occurred in his symptoms till August 4, when he complained of pain in the left chest, inability to lie on right side, and dyspnœa. The left chest was found to be universally dull; vocal vibration absent; respiration distant, tubular; pectoriloquy, and the heart displaced to right, pulsating in the third, fourth, and fifth right intercostal spaces; over right lung percussion was good, but much fine inspiratory crepitation existed at base anteriorly and posteriorly.

August 9.—Signs unaltered, but has passed the natural amount of normal urine since last entry; pulse 105; respiration 30; wishes for more food. Paracentesis thoracis performed between sixth and seventh ribs, and eighty-six ounces of clear serous fluid withdrawn. A violent fit of coughing followed, lasting half an hour. Left chest became hyper-resonant, and was filled with loud, fine inspiratory crackling; heart nearly returned to normal position; abdomen unchanged; the patient much relieved.

In four days the crepitation was replaced by healthy breath sounds, and the ascites had nearly disappeared. In a week the patient was walking about and eating ravenously.

Discharged August 27, cured.

The points to notice are—the sudden appearance of the ascites from a slight cause, followed by hydrothorax, and the rapidity with which the ascites disappeared when the chest was relieved of its fluid. The medicines taken before the operation were ordinary diuretic mixtures, and afterwards tonics.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 5, 1870.

THE CONTAGIOUS DISEASES ACT.

IT is clear that further discussion yet is needed on this Act, because neither the opponents nor the advocates are agreed amongst themselves as to their principles. Amongst the advocates of the Act there are some who are logical enough to see that, to be at all consistent, they must demand the seclusion of diseased men as well as of women, and if no Act is passed till a provision of this sort is included, they must wait till doomsday. The opponents again are divided on the radical question of "liberty." Some oppose the Act because it will tend to deprive women of natural rights "older than Magna Charta"—of the right, we suppose, to traffic in their own bodies—not to mention the possible slur that may be cast on innocent and respectable women, who may be subjected to unpleasant espionage, or may even be proceeded against through mistake, corruption, or malice.

The only rational ground of opposition that we see—and it is one that seems insuperable—is this:—Prostitution is an offence against every law, divine and human, and we have no right, directly or indirectly, to encourage or condone the offence, for the sake of getting rid of some of the evils which are incidental to it, even could that be done, which we deny.

Step the first in the proceedings under the Act is this:—

"Where an information on oath is laid before a justice by a superintendent of police, charging to the effect that the informant has good cause to believe that a woman therein named is a common prostitute, the justice may, if he thinks fit, issue a notice thereof addressed to such woman, which notice the superintendent of police shall cause to be served upon her."(a)

Now, let us take the case of young girls from 15 to 20—young creatures whose career of vice has had its cause in ignorance, poverty, overwhelming temptation, want of all moral discipline at home, or perhaps even cruelty at home from a drunken father or vixenish mother-in-law who would rather

(a) Contagious Diseases Act 1869, 32 and 33 Vict., c. 96.

drive the girls into the streets than keep them at home or teach them honest labour. Now what should a moral, civilised—we will not say Christian—but let us say politic, or economic community do with such unfortunates? We say, allow no such persons to flaunt their vice in the streets, to tempt men into sin, to aid as provocatives and accomplices in drunkenness and theft, and to exhibit their tawdry finery, acquired by idleness and vice, as a temptation to other young girls already, as the Roman poet says, inclined *a labore in libidinem*. Cure their disease first by all means, then send every one to a reformatory or industrial school, and make the attempt at least to restore them to their families, or to put them again into some honest occupation. Is there any doubt but that these women ten years hence would be grateful? Moreover, we are assured on good authority that the subtraction of these mere children would leave the prostitution-market sadly overstocked.

On the other hand, under the provisions of the Act, if the girl informed against and summoned be found not diseased, or if she be cured, the Act would enable her to go on in her sin. Here, again, let us quote from Mr. Acton, who writes honestly and plainly in utter unconsciousness of the hideous character of what he says:—

"Additional precautions there are," says Mr. Acton, "not provided for by the Act, which should be taken; and if they are not introduced I fear the result will be that much of the good effected by its provisions will undoubtedly be virtually nullified. For instance, *it is not sufficient to detect, cure, and discharge diseased women;* steps should be taken to render their career after leaving the Hospital less dangerous. With this end in view, they should have strongly impressed upon them the necessity of cleanliness, and be made to understand how greatly it lessens the chances of receiving infection. They should also be instructed to have frequent recourse to ablutions and injections; and it might, I think, be useful to supply them, on receiving their discharge, with syringes and lotion, either free of expense, or at a price that would induce them to purchase these instruments and yet entail no loss on the Government, who should supply requisite lotions and instruments at cost price."(b)

Words would be weak to characterise the horrors of this notion. Only mark this—the Act itself "nullified," unless the Government undertakes a trade half Dr. Eadie, and half Holywell-street. What department of Government, let us ask, is to be engaged in the syringe and lotion business? Will a kind of "co-operative" or "Civil Service" shop for these delicate articles be established? Well did the Medical Officer of the Privy Council denounce these plans of disinfecting prostitutes.

DUST AND SPRAY.

In a series of short papers on the atmosphere, which perhaps our readers will recollect, we brought into prominence the fact that sanitary science has to do with the minute, and not with the gross, chemistry of the atmosphere.

Deficiency of oxygen in the air of an ill-ventilated building is, as a practical fact, a thing that never happens. Neither as a matter of fact do we ever suffer from accumulations of carbonic acid. But we do suffer from minute changes in the air; in some instances disease is propagated by minute germs floating in it. And it is probable that the special therapeutic effects assigned to the air of some of those spots to which invalids resort depend upon the presence in the air of different mineral substances in the form of microscopic spray.

The sanitary chemistry of the air is much like that of drinking water, there being a curious parallel between the proportion of carbonic acid in the former and the proportion of saline residue in the latter. About the same proportion of carbonic acid exists in the air of London which we breathe as there is of fixed saline matter in the water of the river Thames which we drink. And we may say that the organic matter in the air bears much about the same ratio to the carbonic acid in the air as the organic matter in the river to the saline matter in the river. Both are minute quantities, and for the investigation of both the ordinary processes of chemical analysis fail. For both the processes of micro-chemistry are demanded.

As we pointed out some time ago, under the title "Town Air and Country Air," this minute chemistry of the atmosphere has been for some time past undergoing investigation by Dr. Angus Smith, who, in his capacity as guardian of the purity of the air of districts which are infested with the noxious fumes arising from various kinds of chemical factories, has found it his duty to make micro-chemical investigations of this kind for the Government. We have already called attention to the very interesting character of the last report under the Alkali Act, and we are informed that the next report is likely to be still more interesting. Meanwhile, as many of our readers will doubtless know (and especially our metropolitan readers), the same subject has been recently illuminated by Dr. Tyndall in his own very striking and peculiar manner. We say *illuminated*, for the word is physically as well as metaphorically applicable. In place of a refined chemical or microscopical analysis of a specimen of air, Dr. Tyndall proposes simply to make a ray of bright light traverse it, and then to make the observation whether or not there is that which is popularly known as a sunbeam. In air which is germ-bearing, there we see the sunbeam; in air which is not germ-bearing (nor loaded with spray nor other liquid or solid particles), there we see no sunbeam. Such is the Doctor's test for germs. The purification of the air he proposes to carry out by heating it, or, still better, by causing it to traverse cotton-wool; and he appears to have a vision of the future that is coming when the human inhabitants of a town wherein infectious diseases are raging go about armed with respirators of cotton-wool to keep the disease out of their lungs. The suggestion is certainly not novel. We heard some months ago of the failure of cotton-wool respirators, worn, however, not by the human subject himself, but by a public institution, which had armed itself with cotton-wool screens across the ventilators through which it communicated with the outer air. The cotton-wool sometimes got clogged up and sometimes shrunk, and was, for all practical purposes, valueless. And what happened to this institution may happen to Dr. Tyndall's disciples.

(b) Acton "On Prostitution," 2nd edition, p. 161.

ON THE INFLUENCE OF A STRICTLY VEGETABLE DIET ON THE HUMAN CONSTITUTION, AS ILLUSTRATED BY A VISIT TO THE TRAPPISTS.

Some years ago, being desirous of ascertaining from personal observation the effects of a strictly vegetable diet on the human constitution, Dr. Fonssagrives spent some days in a Trappist convent (the Abbey of Notre-Dame-de-Grâce) at Briequebec (Manches). The results of his investigations are very interesting, and serve materially to solve the question he had in view.

The dietary system of the Trappists is arranged as follows:—From September 14 to the first Saturday in Lent, they have only one meal in the twenty-four hours; it is served at half-past 2 in the afternoon, exactly twelve hours after the monks have risen. This appears to be a considerable time to wait, seeing that the interval is employed in manual labour and religious exercises; the monks, however, preserve their health remarkably well, and any disturbance of their digestive organs is of rare occurrence in the community. It is worthy of notice that the change from the one meal to the two meals which are allowed during the summer, is always marked by some form of indisposition, and principally by a tendency to diarrhœa, which may perhaps be attributed equally to the increase of food and the change of habit. When, on the other hand, the Trappists return to their winter rule, they suffer less by the change, only feeling an unusual sensation of hunger at the hour they had previously been indulged with their second repast; in a fortnight, however, this inconvenience gradually disappears. As a frequent effect of the change

from one to two meals, there is an uncomfortable sensation in the stomach accompanied by a feeling of fulness and an inclination to sleep, which is never experienced during the rigid winter diet. When, in the ordinary conditions of life, we prolong our fast far beyond the usual hour, it has been observed that, as the food enters the stomach, a sudden flow of blood rushes to the head, which becomes much heated—in fact, it causes a kind of momentary congestion. This reaction of the stomach upon the brain shows what importance should be attached to fixed times for taking food by those with any tendency to congestion of the brain or skin diseases of the face. Dr. Fonssagrives seems to have been much struck by what he considers a *strange* fact, that the single meal for the day, which, as we know, is composed of the most simple and only slightly nutrient materials, causes the face to flush in an extraordinary degree. Is not this a common effect of a starvation diet? The novices are specially subject to this inconvenience. Some of the monks, even in the time between meals, retain a very high colour, which depends on the frequency with which the congestion recurs, and at length ends by vascularising the skin of the face.

The Trappists' ordinary fare consists of 370 grammes (or nearly 14 ounces) of bread, to which they are permitted to add potatoes, some soup made without any fat, butter, or oil, and to which milk is added only at stated seasons, and a dish of vegetables cooked with water. Meat, fish, butter, and eggs are forbidden to those who are enjoying good health; oil is only used for salad. Their usual drink is half a litre (nearly a pint) of cider. This insipid and monotonous meal ends by a dessert of fruit, cooked or uncooked, or sometimes radishes; cheese is strictly forbidden.

It is scarcely needful to say that indigestion, except in its milder forms, is unknown, and that gout, the common punishment of too good living, must, as the proverb says, *planter son piquet ailleurs*. Gravel also is a disease almost unknown, there having been only one case since the community was founded in 1829. That indigestion, gout, and gravel are not to be found at La Trappe is not surprising, but it is difficult to understand how such poor food can yield sufficient nourishment to sustain life. The quantity of food is far from giving the 20 grammes of nitrogen and the 310 grammes of carbon which our knowledge of chemistry tells us that we require from our two or three daily meals. This may be partly explained by the fact that during the many hours of a Trappist's life that are spent in meditation there is comparatively little waste of the tissues.

Moreover, in certain provinces, as Corsica, Limousin, and Brittany, for example, we meet with a diet almost entirely composed of farinaceous matter sufficient to keep the inhabitants in perfect health and strength. Scurvy, which proceeds from many causes, but chiefly from too poor living, or from want of variety in the food, is an illness quite unknown at La Trappe, even in its slightest manifestations. This, however, does not cause Dr. Fonssagrives any surprise, as he believes that the essential generating cause of scurvy is that the animal or vegetable food is in a state of chemical change, in consequence of its having lost the influence of vitality. The food of the Trappists, insufficient as it is, is perfectly fresh, and is the product of their own labour.

It has been already mentioned that indigestion was rare at La Trappe. There was an exception in the case of one of the strongest monks, who, since he entered the brotherhood, had contracted the habit of ruminating. Can the exclusive use of vegetable diet have helped to produce this peculiar condition?

The appetite of the Trappists is generally good; the short time they allow for sleep, the unsubstantial character of their food, and the earnestness with which they pursue their agricultural labours, are the causes that excite hunger. This manifests itself chiefly amongst the novices, who almost invariably have a decided enlargement of the abdomen, which is usually persistent until they have become quite accustomed to a vegetable diet; but neither this condition nor the craving appetitite lasts more than one or two years. In that space of time the body becomes fully accustomed to the new *régime*. The craving for acids appears to be very general, but the insipidity of the ordinary food will easily explain a taste among the Trappists for condiments of this nature. The frequency of slight gastric acidity and of pyrosis is not surprising among men whose nourishment is derived principally from farinaceous food. While gout is common in the neighbourhood of the monastery, although it is never within it, rheumatism seems to have chosen the community as its home; and this is an important fact, as showing how little foundation there is in the theory of some Physicians, amongst whom may be mentioned Chomel and Requin, that they are not two separate diseases, but merely modifications of the same principle.

Consumption does not disappear under the influence of the Pythagorean system practised at La Trappe, but it is proved by many examples to be much less rapid in its progress. To take only one example, there was at the time of Dr. Fonssagrives's visit to the Abbey a monk, the last member of a consumptive family. On his entrance he was evidently so ill that he was desired not to take the vows. He was, however, not to be dissuaded, and though twenty-five years had elapsed since he took the dress his illness had not increased. If he had remained in the world, would this have been the case? Another monk, equally affected with confirmed phthisis at the time of his noviciate, was then much stronger than could have been hoped for. The cures by vegetable diet mentioned by ancient writers appear to Dr. Fonssagrives much less improbable since his visit to La Trappe.

The Trappists are rarely visited by epidemics, with the exception of typhoid fever, which in 1831 raged among them, when twenty of the monks were attacked and three died. It is remarked in their country that these scourges stop at the Abbey door. This fact has been established in the case of the cholera at the Trappist establishment at Bricquebec, and also at La Grande Trappe. The regular life that the monks lead, their extreme moderation, and also the serenity of mind which frees them from all anxiety, may explain in a degree their immunity.

As every one is aware, a vegetable diet is used in many countries as a cure for asthma, or at least to lessen the violence of the attacks. This means of treatment, though severe, is little less than infallible. The abbot who presided when Dr. Fonssagrives paid his visit in 1858, entered the community in 1827. He was at that time much troubled with asthma, its attacks being both very numerous and painful; but, under his new *régime*, the disease soon yielded.

Longevity is the proof to a certain degree as to the value of the hygienic influences which are brought to bear on the Trappist communities, and the monks in this point of view exhibit no inferiority to the world at large. The prior, when the visit was made in 1858, was 75, and was then enjoying a robust old age. The late superior died at the age of 80 from disease of the bladder and prostate, and a number of the monks were between 50 and 60.

We do not regard the Trappist life as an exact type of the best possible hygiene. There can be no doubt that the interruption of sleep, the long devotional exercises, solitude, absolute silence, and the persistent use of food from which is excluded that class of aliments which on good grounds we consider necessary—namely, animal food and the fatty matters—must be prejudicial to health. But, on the other hand, the conditions conducive to longevity in our easy and sensual forms of life do not overbalance those which are prejudicial in the life of the Trappist; and how much our passions, intemperance, and all their evil consequences may tend to the shortening our term of life, who can tell?

A MAGISTERIAL inquiry is to be held in the case of the Welsh fasting girl. It is complained that only one Medical man was called at the inquest. They are now summoned to give evidence before the magistrates.

THE WEEK.

TOPICS OF THE DAY.

In our Legal Intelligence to-day we publish an account of the proceedings in a case—Williams *v.* the Duke and Duchess of Somerset—in which the interests and honour of the Profession of Medicine are indirectly but greatly interested. As the case is postponed for three weeks, it would be premature to discuss it at length. It is reported that the occasion of the libel was the death of the Duke and Duchess's son, Lord St. Maur, from laryngitis, for which the operation of tracheotomy was performed. The unfortunate termination of the case, it is alleged, led the defendants to circulate a printed statement of a defamatory character against Dr. C. J. B. Williams, the highly esteemed Consulting Physician to the Brompton Hospital, in which the Solicitor-General has stated that gentleman is designated "a hypocritical murderer." Dr. Williams has brought the action to vindicate his Professional character and to enforce damages for the injury which he has sustained.

A full meeting of the members of the Pathological Society on Tuesday last was rewarded for attendance by an unusually good discussion on the origin and production of tubercle. The subject was introduced by Dr. Hermann Weber, who exhibited a specimen of a caseous gland taken from a patient who had previously suffered from typhoid fever, and had died from tubercular meningitis. After sketching the views of certain German pathologists on the relations which they have supposed to subsist between the absorption of effete organic matter, such as caseous deposits in glands and the deposit of tubercle in various organs of the body, Dr. Weber said that he himself had examined eleven cases in which tubercle was deposited in a serous membrane—the cerebral meninges or the peritoneum—and in each case he had found caseous deposits in certain of the lymphatic glands. He seemed to be of opinion that a caseous deposit in a lymphatic gland the result of a previous illness—*e.g.*, typhoid fever in the case of the abdominal glands, or scarlatina in the glands of the neck—would, by absorption of the ill-organised material into the circulation, give rise to a deposit of tubercle in other organs—for instance, the lungs or the serous membranes—and he thought this view was illustrated and confirmed by the experiments of Villemin on the inoculation of tubercle and by those performed by Wilson Fox and Sanderson in our own country. Dr. Wilson Fox, however, who was present, said that whilst the frequent co-existence of caseous deposit in the lymphatic glands and of tubercles in the internal organs was an admitted fact, he thought that clinically we were only justified in regarding them both as expressions of the tubercular diathesis rather than as standing in the relation of cause and effect. A person in whom the tubercular diathesis existed, whether inherited or acquired, would at one time present caseous deposits in lymphatic glands from local or constitutional exciting causes, and at another tubercles in special organs. He regarded tubercle as a curable disease, from successive attacks of which persons might recover. With regard to the analogy traced by Dr. Weber between the results of the experiments performed by himself and others on the Rodentia and the conditions in the human subject which Dr. Weber had noticed, he showed that it was defective in important particulars. In cases of inoculated tubercle in the lower animals, the marks of local irritation were always present, and an actual concatenation or chain of pathological changes could be traced between the original point of inoculation and the secondary deposits which were found in the organs. This was not so in the human subject. There were no marks of irritation around the caseous gland or deposits extending from it. In the inoculated animals also the tubercular deposits took place in the course of the circulation. Thus, when there was tubercle deposited in the arachnoid, it was also found in the lung. This rule did not seem to be followed in the cases observed by Dr. Weber. Dr. Sanderson then brought before the Society some exceedingly interesting experiments made by Chauveau, of Lyons, on the possibility of producing tubercle in certain of the lower animals by introducing it into the alimentary canal as food. Bovine animals were the subjects of the experiments. To a number of young bullocks a quantity of tubercle from human and bovine lungs was administered pounded up and mixed with water. The animals had from one to four doses given them, and were killed at periods varying from one to six months after the administration. Tubercular granulations were found in the adenoid tissue under the epithelium lining the air-passages, in the alimentary canal, and even in the villi of the small intestines, and in various of the internal organs. Our readers must await the full report which we shall publish of the meeting for a fuller account of these important experiments. But we think we need offer no apology for singling out this suggestive discussion for notice in our weekly column of Professional chitchat. We presume that bullocks suffering from tubercular lungs swallow expectorated matters instead of discharging them from the mouth. Does this process lead to fresh inoculation and the production of tubercle in the alimentary canal?

That part of the Poor-law inquiry in St. Pancras which relates to the charges originally brought by the guardians against their Medical officer, Dr. Ellis, has been concluded as far as the production of evidence on both sides is concerned. The charges made by the guardians are, that Dr. Ellis ordered windows and ventilators to be closed in order to render the air of the wards foul; that he retained patients in the Infirmary, in order to produce overcrowding, who ought to have been discharged; that he caused unnecessary inquests to be held; and that he retained cases of contagious fever in the Infirmary with a view of spreading the disease. The commissioners, Mr. Montagu Bere, Q.C., and Dr. Seaton, will have to decide whether any or all of these allegations have been supported by evidence. Without prejudging the case, we may state that we cannot find, on a review of the whole matter, one tittle of evidence which would support, much less prove, the last and most grave of the charges. But a new and more serious accusation has been brought against Dr. Ellis by the guardians, and, to investigate it, the Poor-law Board have directed a fresh inquiry. As this charge is not one in which any Medical question is involved, we need not refer to it further than to say that it relates to one of the nurses of the Infirmary. The nurse herself, a necessary witness in the matter, however, is not forthcoming. She is a person who has lately figured in the police reports as having attempted suicide, and part of the charge refers to the line of conduct adopted by Dr. Ellis and his lawyer on that occasion. In Dr. Ellis's interests, as well as in the interests of justice, we hope that the principal witness in the matter will soon reappear, as the delay allows a Professional man to remain with this serious charge hanging over him—a charge which, even if successfully rebutted, leaves Dr. Ellis a terribly injured man.

It is announced that a magisterial inquiry into the circumstances attending the death of the Welsh fasting girl is about to be held, and that the Medical men who sanctioned the watching will be examined. Meanwhile the father of the girl awaits his trial for manslaughter, and is reported firmly to maintain that, during the last two years of her life, his child took no food. As we have before said, the only view which at all satisfactorily explains the fact that the child was allowed to sink from inanition is that every one about her shared, at least to some extent, in the father's delusion.

In the case of the children of Mr. Foster, the Surgeon of Newport, who died under circumstances which led to a suspicion of poisoning, Dr. Taylor's investigation has led him to the conclusion that no poison had been taken, but that two of the children had died from inflammation of the stomach, and the

third child from intussusception. The local Medical men who attended the children and made the post-mortem examination accept the results of Dr. Taylor's analysis as proving the absence of poison, but they maintain that they have never seen any natural diseases exhibiting the symptoms apparent in these cases. The coroner's jury have found a verdict to the effect that the children did not die from poison, but that the disease from which they did die was not conclusively shown by evidence.

A paragraph has appeared in some of the daily papers headed "False Medical Certificates," which we think is calculated to leave a very wrong impression on the public mind. It is stated that a gentleman named Smith, a Doctor of Laws of Trinity College, Dublin, was found dead on the floor of his bedroom on a morning in the latter part of last month. A Medical man had been attending him, and had seen him three days previously. He gave a certificate that the deceased had died from effusion into the left pleura and rheumatic gout. The suddenness of the death, we presume, brought the case to the ears of the coroner's officer, and an inquest was held contrary to the wishes of the people of the house where Mr. Smith had lived. The inquest showed that, instead of there having been effusion in the left pleura, there was effusion in the pericardium. The Medical man in attendance had undoubtedly made an error in diagnosis, but to call the certificate he gave a false one seems to be a sheer injustice. Dr. Lankester, the coroner, however, is reported to have said that the peculiar features of this case were that a doctor who had attended deceased had given a certificate stating that he had seen deceased on January 22, and he died on the 25th of rheumatic gout and effusion of serum into the left pleural cavity. The jury would hear that that was not the cause of death, so that a Medical man had given a certificate when he knew nothing of the cause of death, and had guessed the cause of death. Such a proceeding was most irregular and improper, and ought not to be permitted by law. Now we shall be very glad to hear from Dr. Lankester a statement of his view of the case, but we cannot help thinking, as it stands reported, it leaves a very unjust stigma on a Medical Practitioner. The diagnosis of effusion into the pericardium from effusion into the left pleura is not always an easy matter, and if every certificate of death in which an error of diagnosis was committed was branded as "false" we think that few even of the most accomplished Physicians could be acquitted of falsification.

The financial condition of St. Luke's Hospital is attracting attention. The expenditure exceeds the income by £1000 per annum, and since 1851 £21,512 of capital stock has been sold out.

PROFESSOR ERASMUS WILSON'S COURSE OF DERMATOLOGY.

We are sorry that we are unable this week, as we hoped, to give Professor Wilson's first lecture on Dermatology, which was delivered on Monday at the Royal College of Surgeons. That lecture was listened to with entire satisfaction by a numerous and critical auditory. It was perfectly clear and pellucid, without the slightest ambiguity, and it was delivered with a quiet enthusiasm, without turgidity or affectation of "fine" language. The scholarly tone, showing the unbroken *entente* from the times of Æsculapius to our own, was much relished, but what won the suffrages of the Practitioner was the entire simplicity, the absence of "specialism," mysticism, and obscurity. Skin diseases were shown to have the same nature (taking the structure of the part into account) as diseases of the stomach or of the lungs; they belong in their pathology to the range of ordinary diseases understood by every Physician and Surgeon, and so with respect to their treatment. Many persons are under the impression that this consists in the "exhibition" of mysterious "specifics," whose nature and properties are known to the few and fortune-favoured specialists. They have a notion that brimstone, arsenic, and iodine, with perhaps corrosive sublimate by way of variety, are shuffled together and dealt out by these adepts to their patients after some rules unknown to the rest of the Profession. But Professor Wilson disclaims all this legerdemain. He denies the existence of specifics, affirms that skin diseases are treated on the general principles of Medicine and Surgery, and says that the above-named medicines act as tonics, stimulants, and alteratives on the skin, no more and no less than on any other organ that may be diseased. We confidently believe that these lectures will give comfort and confidence to many a Practitioner, and enable him to see his way clearly through what now to some is a thorough labyrinth. One remark we cannot help making; it is odd that no artificial light was prepared for a lecture given in the London atmosphere on a January afternoon, so that the lecturer could not read his notes nor exhibit the very admirable models on the table.

BARRACKS IN INDIA.

We would call attention to a review of Dr. Bryden's work on Cholera in Bengal that will be found in another part of our present issue. In it the present system of housing soldiers in India, in large barracks where numbers of men sleep in the same room is shown to cause a serious loss of life from cholera. Financially we believe the Palatial barracks now being erected in India are a severe strain on the resources of the country, and that the ten millions required for them have a good deal to do with the present financial difficulty. Since, therefore, in this age of epidemics, they are proved to be a source of evil, the sooner further outlay on their construction is stopped the better.

DR. GUY'S INTRODUCTORY LECTURE.

We have already noted the fact of the establishment of a chair of hygiene at King's College in connexion with the Medical School. In this the authorities have followed the lead of the older institution in Gower-street. They have, however, improved upon the example set them by appointing to the chair a gentleman who has been in the thick of the sanitary strife that has been going on for the last five-and-twenty years, who is known to the Profession and the public as an earnest worker and investigator in sanitary science, and in whom, therefore, the highest confidence can be placed as a teacher. To fill such a chair usefully, a man must not only possess a good acquaintance with the branches of physical science applicable to the questions which come under the notice of the sanitarian, with the results of etiological inquiry, and with the history of disease as it has affected large communities, but he must possess such a knowledge of practical sanitary engineering as can only be obtained by positive work in a large field of experience. Such a man is Dr. Guy; he has a right to speak, and his right will be acknowledged. We cannot regard the course commenced on Monday in any other light than as introductory to a more extended course of systematic instruction; but for this it will be admirably adapted. It professes to give an account of "the prevalent and fatal diseases of the English population from the earliest times to the close of the eighteenth century." It will be, in fact, a history of hygiene in England, and will furnish abundant opportunities of illustrating the more important laws of public health, the nature of epidemics, and the preventive operation of a rational system of dietetics, and of attention to cleanliness, ventilation, and dispersion in the arrest and even the extinction of some of the most fatal maladies with which the English have at various times been scourged. The course will, judging from the programme forwarded to us, be such as is calculated to enlighten all classes of the public, and we should hope that Dr. Guy's auditory will be drawn, not from the ranks of our own Profession only, but that it will embrace men of all professions who look upon public health as public wealth.

NATIONAL RETURNS OF SICKNESS.

Mr. James Lewis, of the General Register Office, Somerset House, has issued a scheme for the weekly publication of returns of sickness, suggested partly by his own practical experience of the working of an elaborate machinery for the collection and publication of facts, and partly by the returns of sickness which were issued ten years ago by the Metropolitan Medical Officers of Health. He reckons, with Dr. Rogers, that the 3200 Poor-law Medical officers treat on an average 3,500,000 cases of sickness per annum, and that the various Medical charities treat about 1,500,000, so that about 5,000,000 cases of public sickness occur in England and Wales, without reckoning those belonging to clubs, which institutions, under a wise economy, would take care also to publish careful returns of sickness. The aim of the London sickness returns of 1857-8, and we add that also of the returns of sickness which are regularly published by Dr. Whitmore, Dr. Aldis, Mr. Liddle, Dr. Philipson, and Drs. Morgan and Ransome, was to enumerate specially the new cases of acute disease which come under treatment by the several public institutions of the metropolis.

"It will be observed," says Mr. Lewis, "that in the returns of the London health officers, nothing was attempted beyond the record of the simple fact, that so many cases of certain forms of acute disease had occurred during the week in the practice of the Poor-law Medical officers and of the Medical charities. Neither the ages of the patients, their occupations, the duration of their maladies, nor the results of treatment, had any place in the return."

Mr. Lewis then describes the construction of the simple forms he would employ, their distribution, and the manner in which they should be returned weekly to the General Register Office in London, where they would be tabulated and issued weekly in the form of a report analogous to the present weekly return of deaths. That this ought to be done weekly cannot be doubted, and it would be much to the interest of the public were the task committed to the office in which Mr. Lewis is a functionary. It would be especially good for "health resorts"—for instance, at the present moment it is said that scarlet fever is rife at Eastbourne, and people are afraid to go there. If this be true, and were made patent by the proposed return, the Eastbournians would be no worse off than at present; whereas, if not true, all fear might be dissipated at once.

THE ARMY MEDICAL SYSTEM IN FRANCE, ENGLAND, AND AMERICA.

In an elaborate article in the *Revue des deux Mondes*, M. Edouard Laboulaye treats on the above subject. He shows, notwithstanding all the criticisms that have been made upon it, the Army Medical Department of Great Britain is far more effective and better managed than that of France. "The French is not so well treated in peace or in war as the English or American soldier." M. Laboulaye proves, by elaborate statistics of the Crimean war, that the loss by sickness was vastly greater in the French than the English army. "During the winter of 1856-57," he says, "at a time when regular hostilities had ceased, there occurred in the French army 12,872 cases of scurvy, out of which 964 died, and 19,303 cases of typhus, out of which 10,278 were fatal. During the same period the English army—estimated at the third of ours—had 209 cases of scurvy and 31 of typhus, of which 17 died." He asks—Whence arises this enormous difference? "Our countrymen," says he, "are sober, hardened, accustomed to privation, and more able to withstand hardships than the English soldier. The reason is that scurvy is a deterioration, an impoverishing of the blood, which results from bad nourishment and want, while typhus, if not engendered, is at least supported and propagated by the infection which is produced by overcrowding. With proper precaution and care, these terrible epidemics might be prevented or arrested at the outset, and a great number of her best sons might be preserved to France." The author attributes much of this mortality to the very insufficient number of the French Surgeons, who were overworked. In fact, each Surgeon had to attend to three times as many patients as would have been placed under his care had he been in the English or American service. He further shows that the want of power on the part of army Surgeons is a sad grievance, and does more harm than even the insufficiency of their numbers. In France a non-Medical officer, the "Intendant," has full power over the "administration" of the army. The author then refers to the obstructiveness that prevails in the army administration in France, and shows that, whilst the letters of Dr. Russell were so effective in producing reform in the English army in the Crimea, they would either have been suppressed or unheeded in France. He dwells at length and eloquently on the admirable condition of the army of America in the late war in regard to its Medical administration. He urges on the French Government an increase in the number of the army Surgeons and the conferring upon them full power to carry out all the details connected with the health of the soldier.

FEES TO MEDICAL WITNESSES.

The proceedings in our law courts of late have afforded abundant evidence of the evils and difficulties to which Medical witnesses are subjected. We are not, of course, alluding to those cases in which certain Medical Practitioners have done no credit to their Profession. But there are others in which the cross-examinations have not been warranted by the circumstances of the cases. It now appears, from a report of proceedings in the Bail Court of Tuesday last, that the Master of the Queen's Bench, in cases of writs of inquiry, allows the Medical witness but one guinea for attending and giving his evidence. It appears that, no matter what may be his rank, no matter how many hours he may be in attendance, he is entitled by law only to one guinea! But surely it is not contended that a Medical gentleman is to be subpœnaed to attend at court under a penalty on such terms. But we believe that if he does attend on his subpœna and is sworn, he is bound to give his evidence for the paltry fee allowed by law. To skilled witnesses generally large fees are given, and such is most frequently the case with Medical gentlemen who are called upon to give their opinion upon the facts adduced at the trial, and many poor plaintiffs are unable to meet the cost. If they succeed in establishing their case, the taxing master allows only a guinea.

PROPOSED SEWERAGE OF GLASGOW.

Dr. Gray and Mr. Baldie, architect, have propounded a plan for intercepting the sewage of Glasgow, filtering it, passing the purified (?) water into the sea, and selling the filtrate as manure.

"Our scheme," they say, "divides itself into two parts, 'sewage transportation' and 'sewage utilisation.' These parts are in theory independent of each other—they do not involve each other as to method; nor need they be held as financially responsible for each other. . . . . 'Sewage transportation' should be spontaneous, or self-acting, and that it should comprehend together sewage proper and rainfall. This compound flood has been computed at a maximum of 74 million gallons per day, and, allowing for the growth of the city, of 106 million gallons twenty years hence. Our present sewage, independently of rainfall, is daily about 35 million gallons; while the rainfall, taken over the area of the city, may, on occasions, more than double that amount. Of course, where conduits are concerned, the maximum rate of flow sets the scale of size for such artificial water-ways. This stream is really larger than the flow of the Clyde in dry weather. This in drought does not discharge more than 50 million gallons daily, with probably 300 or 400 times that amount when in flood. . . . The plan we propose is the forming two large intercepting sewers, which run one on each side of the Clyde, and receive in their course the total sewage of the city, including its rainfall. One commanding principle of this plan is to interfere as little as possible with the existing sewerage of the

city, and *not at all, in any way*, with the domestic facilities of the citizens. The water-closet system we regard as fixed and irremovable, and we incorporate it in this scheme, as an essential of it, when the fertilising properties of the resulting sewage manure are kept in view. The sewers run as nearly as possible parallel to the river. . . . . This north-side intercepting sewer is about nine miles long, and varies in diameter, increasing as it proceeds from four feet to seven feet six inches, depending on the incursion of increasing quantities of sewage, and of possible sudden enlargement of the volume of the liquid from rainfall. . . . About two-thirds of the sewage of Glasgow would be taken up by this north intercepting sewer; and when the flood of sewage has reached its terminus, opposite Newshot Island, it would come under special treatment for the extracting of its manurial properties. The spot selected is where the Forth and Clyde canal approaches within 400 yards of the Clyde, and within 100 yards of the canal bank. . . Here the sewer at its terminus is to expand into a large tank, into which for the instant the arriving flood is to be poured, and from which tank, or pond, we propose by some mechanical means to lift the sewage a height of about sixteen feet for filtration. The filtering vessels are to be two or more tanks, and to be used alternately, or while one filtering tank is being discharged of its solid residuum, another is being charged with the sewage to be filtered. The filtrate will pass through and flow into the Clyde nearly pure; the solid filtrant will be retained as a manure for further manipulation. . . . The most economical power is water; and water operating on an overshot wheel, should be employed to propel the lifting wheels to be used in the work. . . . . Water power has many advantages. It will prove vastly cheaper in all ways, and as effective as steam. It can be made as good as self-acting, and can go on day and night. . . . To return for a second or two to the main conduit. Along the entire course of the intercepting sewers, on both sides of the Clyde, overflows to meet any sudden and excessive rainfall will be constructed at parts where the main sewers are accessible, by the smaller feeders leading from the city. This excess will pass at once to the river, and being only surface water, it will be innocuous. . . . The south-side intercepting sewer will be about eight and a half miles long, with an enlarging diameter of three feet at its commencement to five and a half feet. . . We have not the faintest hope that a purely local sale of the sewage as a fertiliser by irrigation will pay. If a good fertiliser can be procured from this source—and of this we have not the slightest doubt—making that fertiliser a portable article of commerce, a very wide market will be secured for it, and a ready and constant sale. . . . . In regard to the gases generated in the sewer, we propose to put at the necessary distances tubes carried to a certain height, with argand gas burners by which the gases will be burned, and the sulphur which is deposited can be preserved; and to prevent smell at the works, and retain any ammonia that may be evolved, tubes are passed from the roofs of the various houses, and made to pass into hydrochloric acid. The filter is composed of cinders, peat moss, powdered bricks, and gypsum, which is charged once a fortnight or so, but we do not restrict ourselves to this filter; other materials may be used."

We wonder whether the authors have "got up" all that is known already about the solid filtrate of sewers, and the qualities of filtered sewage.

FROM ABROAD.—THE FEUILLETON PUT UP TO CONCOURS—THE LACHRYMAL GLAND IN RESPIRATION—INTELLIGENCE OF ANIMALS IN RELATION TO THEIR NERVOUS CENTRES.

M. Amédée Latour, the editor and celebrated *feuilletonist* of the *Union Médicale*, announces his intention of retiring from this latter office. Although the *feuilleton* had long formed a characteristic portion of the French political journals, M. Latour was, we believe, the first who introduced it into those belonging to Medicine, first in the *Gazette des Hôpitaux*, and since in the *Union Médicale*. He calculates that during the thirty-three years which he has conducted this department, he has supplied 1716 *feuilletons*, and thinks that he has well earned his retirement. He finds, however, great difficulty in obtaining a successor, his offers of the post to some of the rising young men of talent having everywhere been refused. He therefore now proposes to avail himself of the *concours*, of which he has always been a powerful advocate, in disposing of it, and invites aspirants to send anonymously specimen *feuilletons*, which are to be submitted to and impartially considered by the editorial committee of the journal. It is not often that an editorial post of any kind has to go begging in this way; but this is one of real difficulty and some responsibility. It would not be easy to convey to an English reader the exact meaning of the *feuilleton*, but an approach to this is made by terming it a gossiping leading article treating of the topics of the day as they successively arise. It is eminently critical in its appreciations, and admits of a lightness of touch and sometimes of a jocularity of style which would be misplaced in the more serious articles. In M. Latour's hands it has extended over a large range of subjects relating to Professional interests, and has always seemed to us to be written in an honourable spirit, and, although frequently witty and even sarcastic, it has never degenerated into vulgarity or ill-nature. Its influence has been great, and, as the articles are signed by their author, its responsibilities are often very serious when personal interests are under consideration.

M. Bergeon recently read a paper at the Académie des Sciences of which the following is an abstract:—

The lachrymal organs, the secretions from which always pass through the nares, are met with even in the ophidians, although their ocular globe, hidden behind the tegumentary system, is entirely protected from evaporation. On the other hand, animals which respire air saturated with moisture, as the cetacea, are the only ones devoid of lachrymal glands. Nor are the lachrymal organs proportioned to the development of the eye, for in the zemni and spalax they reach a size a hundred times greater than that of the eye.

Not only do the tears serve to lubricate the respiratory passages, but it is the passage of the air into the nostrils which explains the progress of the tears through the flexuous and frequently narrowed nasal duct. By reason of the formation of the lower orifice of the duct — always narrow and usually capillary — the tears become "stored up" in the duct, the lachrymal sac, the lachrymal canals, and the oculo-palpebral space, which is closed in by the unctuous edge of the eyelids. The tears in this way represent a small liquid column, certainly a very thin one, but still continuous and extending from the secretory canals of the gland to the lower orifice of the nasal duct. Passing rapidly in front of this orifice, the respiratory current carries with it in a state of vapour the liquid which issues from the mucous surface, and induces, by a mechanism analogous to that employed in certain pulverisers, a true aspiration of the tears, which extends to the gland itself and stimulates its secretion. It is because such stimulus can no longer be produced when the lachrymal sac is obliterated, that the secretion of tears diminishes, and that epiphora does not ensue upon the operation for the obliteration of the sac. But these patients deprived of the lubricating action of the tears upon the mucous membrane of the nasal fossæ complain of dryness and irritation of the nose. It is to be noted also that the tears incessantly sucked into the nasal fossæ by the very act of respiration not only act by opposing the drying action of a constant current of air, but by the vapour which they furnish to the inspired air they assist in maintaining, even in the lung itself, that humidity which is essential to the interchange of gases. By this double action the lachrymal gland becomes a powerful auxiliary to respiration, and may be regarded as a supplementary organ for this function. It is also the principal source of the moisture of the nasal fossæ.

At the same meeting of the Académie, M. Colin read a memoir on the question, "Does Intelligence bear relation to the Development of the Nervous Centres?" In order to determine the question, he first weighed in succession the entire animal, the brain, cerebellum, the medulla oblongata, and the spinal cord, and then established the proportions of these parts

to each other and to the weight of the body. The results, as regards the domestic animals, are as follows:—1. The relation between the weight of the nervous centres taken altogether and that of the body varies within very wide limits, not only in different species, but also in the same species, and especially according to the age of the subjects, the degree of the development of the muscular system, and the condition of the adipose system. 2. The encephalic mass is, proportionally to the height, much more considerable in small than in large animals. Thus man, as far as the volume of the brain is concerned, is inferior to several apes, to various carnivora—*e. g.*, the weasel—to the small rodents, and even to a great many birds. 3. In the same species the volume of the nervous centres is relatively to the mass of the body in a proportion inverse to the age, the young subjects having two, three, four, six, and even eight times as much brain as the adults. 4. The domestic animals may be classed, as regards the weight of the encephalon, in the following order, which is not that of their intelligence, the cat, dog, rabbit, sheep, ass, pig, horse, and ox, the first having about six times as much brain as the two last. 6. In the species of which the races are of very different statures, the smaller have proportionally the largest brain, whatever may be their relative degree of intelligence. 6. The mass of the spinal cord does not bear a constant relation either to the weight of the encephalon or that of the body, nor yet to the muscular power of the animals. It may be very small in animals with a large brain, or enormous in the contrary case. It is often two or three times more considerable in the small than in the large species. 7. In fact, there is no exact relation in animals between the volume of the encephalon and the degree of intelligence ascertained by observation. Consequently animals would be badly classified in a psychological point of view if this were done according to the weight of their nervous centres.

DR. BRYDEN'S REPORT ON THE CHOLERA OF 1866-68.

We have just received a copy of a report by Surgeon James Bryden, Bengal Army, "On the Cholera of 1866-68," which passed over the Northern Provinces of India, "and its Relations to Previous Epidemics in the Bengal Presidency." The appointment Dr. Bryden holds, as statistical officer attached to the Sanitary Commissioner with the Government of India, has given him access to all the Government records on the subject of cholera which he has chosen to consult. He has not been slow to use his opportunities, for we have here a mass of tables and information unequalled anywhere in other publications. The report itself extends over 245 Blue-book pages, with 89 original tables illustrating the letterpress; also 161 pages of appendices containing statistics of cholera in the European and native armies in Bengal from the year 1826 to 1868, and among the gaol population from 1833 to 1868. The work is printed by order of the Government of India, and is illustrated by fifteen maps showing the distribution of cholera over Northern India during the epidemics of the last fifteen years.

Like most other writers on cholera, Dr. Bryden is troubled with a theory, of the truth of which he strives with a determined honesty of purpose to convince his fellow-men. He dwells almost exclusively on the mode in which the disease is generated and spread, illustrating this by what, he says, has occurred over a tract of country about 1400 miles square in Northern India. This tract he divides into two grand portions of unequal size—one, the smaller, though numerically, in regard to inhabitants, not much inferior to all the rest put together, constitutes the densely populated province of Bengal Proper. This he terms the *endemic area* of cholera, while the rest of the Presidency he calls the *epidemic area*. He believes that at certain intervals of time the disease, having gathered strength in its "endemic" area, "invades the 'epidemic' districts, and, after a term of remittent life extending over three years, dies out like a plant in a strange soil." At times the cholera germ is described as air-borne, at others as earth-born, according as it flies forward on the monsoon winds, or is reproduced in the invaded localities during the second or third years of its vital activity. The difficulty he has in fully proving his peculiar theory to the satisfaction of other minds arises from several considerations. One is that his only trustworthy statistics are derived from the occurrence of cholera among a body of only 160,000 men scattered over the Bengal Presidency in groups of from a few hundreds to 6000 at different stations, among a population of over one hundred millions. His information as to the movements of the disease in the country generally is scanty and not trustworthy, and the European soldier, native soldier, and prisoners (his data) are so separated by race differences, location in cantonments or inside gaol walls, that their history must necessarily be peculiar and exceptional. He takes no account also of the great endemic areas of Bombay and Madras, where the disease has existed for ages, nor of their influence on the movements of cholera.

The report labours hard, however, to bend all the phenomena of the development and progress of cholera to this one theory; but, fortunately for us, Dr. Bryden sees cause to acknowledge the dependence of cholera for its spread on the intercourse of human beings also, though in a secondary manner. It is with evident difficulty, however, that this or any other mode of propagation is spoken of, so anxious does the writer appear to call the attention of the world to his theories of invasion and reproduction. Had he compelled us by facts or reasoning to believe exclusively in the one theory of cholera as sweeping over continents and seas like a dark cloud charged with death, we could only think, when the epidemic came, of lying down to die helplessly poisoned. Seeing, however, that evidence accumulates year by year showing that this and other forms of epidemics, when vitalised by some unknown conditions, spread so frequently along the common paths of man's travel, we take courage, and do our endeavour to avoid the danger and root out the predisposing elements.

Many interesting facts are noticed in the report on the peculiar seasons at which cholera is developed in different portions of the Presidency. We thus find that in the neighbourhood of Calcutta cholera begins to be virulent about February, and continues to increase in power during the dry season till the rain comes down in torrents in June. Those who believe in water as a vehicle of contagion have here an argument in favour of their theory. While the tanks, fouled by the dipping and cleansing of vessels or the bathing of the people in them, are gradually being dried up, cholera increases and multiplies. Immediately again that the tanks fill, and the water is therefore less strongly tainted with pollution, cholera ceases and does not reappear while the rains last. In the upper provinces, where wells have to be dug often very deeply for water-supply, the same amount of fouling is less liable to occur. The rains, therefore, do not check the occurrence of cholera; indeed, in the monsoon it often spreads most virulently, being dependent on other means of propagation.

The most practically interesting facts recorded in Dr. Bryden's paper are, we think, the statistics of an experiment on a grand scale made by the Government of India on the mode of housing and caring for large bodies of men in a tropical climate subject to epidemic influences.

Taking first the two armies—the European and native—we find that the European soldier is placed in buildings called barracks, the conditions of which are as follows:—

1. From 50 to 25 men sleep in one room.
2. The men cook and eat in messes.
3. They all use large common latrines near their barracks.

The native soldiers, on the other hand—

1. Live in separate huts each, or from two to four men together. (Barracks are now being built.)
2. They have no latrines, but go out to the plain.
3. They cook and eat separately.

The statistics of cholera in the two sets of men we find to be as follows:—

European soldiers are attacked at the rate of	1 in	11	of strength.
„ „ die at „	1 in	19	„
Native soldiers are attacked at the rate of	1 in	105	„
„ „ die at „	1 in	243	„

Some may be inclined to think differences in race may account for this selection of the European for attacks of cholera. It is not so, for when numbers of native soldiers are brought together in boats or tents, they suffer as severely as Europeans when exposed to epidemic influences. Goorkhas also and Madras soldiers, who have numerous latrines in their lines because they have their families with them in cantonments, suffer as severely, and sometimes worse from cholera than

Europeans do. English officers, on the other hand, we learn from other sources, who live in separate houses or rooms, are, equally with the Bengal sepoy, comparatively safe from cholera.

A third class of men is cared for by the State—viz., prisoners, and among them we have occasionally severe outbursts of cholera. They are housed on the English plan of large barrack-rooms, public privies, large messes. Their death-rate for some six or eight years back was, in comparison with the others, as follows:—

Prisoners	11 per 1000 of strength
European soldiers	8 per 1000 ,,
Native soldiers	2 per 1000 ,,

These are strange facts. They warn us of the danger of our large institutions on the occurrence of cholera epidemics; and, while we commend them to the attention of those interested in Indian sanitation, their value as accurate data is great to all interested in the laws of health in England or elsewhere.

FIFTH ANNUAL REPORT OF THE SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA, 1868.

In noticing in our number of October 31, 1868, the reconstruction of the Sanitary Commissions in each of the Indian Presidencies, as described in a memorandum on measures adopted for sanitary improvements in India up to the end of 1867, we remarked that the new plan seemed to develope itself into two branches, the military and the civil sanitary service. These form separate departments in this country, and the intention seemed to us, from the perusal of the memorandum above mentioned, to be that they should be similarly distinct in India, and that the head of the Medical department of British troops in India should occupy the important position of the immediately responsible adviser of Government on all sanitary questions affecting the troops under his supervision, subject, of course, to the Director-General and the newly organised sanitary department of the India Office at home—that he was, in fact, to be the Sanitary Commissioner for British troops, and that, in like manner, the head of the Indian Medical Department was to be Sanitary Commissioner for native troops. The Indian Civil Sanitary Service was to be represented by some central Government authority, who should be responsible for the health of the general population of the country being attended to, just as any other matter of police.

The Annual Sanitary Report for 1867, submitted to Government by Dr. J. M. Cunningham, officiating Sanitary Commissioner with the Government of India, was to such an extent devoted to the description of the Hurdwar cholera epidemic that but little space was left for the other subjects. We gave a full abstract of this report shortly after its publication, and did not withhold the praise which we considered due to Drs. Cunningham and Cutcliffe for the ability with which they had, from the enormous mass of reports on the subject, traced out and compiled an exceedingly valuable history of that epidemic.

Dr. Cunningham has since been permanently nominated to the post which he at that time only held as a *locum tenens*, and we were glad to see that a Medical officer, rather than a civilian or military man, had been selected for it. We were not prepared, however, to see that Dr. Cunningham, in his new position, should have concentrated in his own person—as his predecessor had done—the functions of the Sanitary Commissioner for British Troops, the Sanitary Commissioner for Native Troops, and the Executive Officer of the Indian Civil Sanitary Service. The report now before us consists of 175 pages of letterpress, including the various tables of figures. Eighty-six pages are occupied by details not only of the sickness and mortality of British troops, the importance of which subject clearly entitles it to some space in a report upon the public health of India, but contains besides minute references to the internal economy and sanitary management of many of her Majesty's regiments, on which subjects the informant and adviser of the Indian Government ought clearly to be the principal Medical officer of British troops.

Twenty-six pages and a half contain similar information as to the native troops in Bengal, and a similar usurpation of the functions of the head of the Indian Military Medical Service. The gaols of Bengal, already fully reported on by the several Inspectors-General of Gaols, are noticed in fifteen pages and a half; while to the general population of India, the subject on which the least amount of information presents itself from other sources ready to the hand of the compiler, only ten pages are assigned.

Now it appears to us that in this matter Dr. Cunningham and the Government under whose orders he acts have committed a serious mistake. What would be thought of the annual reports of the Registrar-General of England if they were more than half taken up by the statistics and sanitary affairs of the army in the United Kingdom, on which he must necessarily be only partially informed, and even that at second hand? The presentation to the Government of India of reports on the health and sanitary administration of the British and native armies and of the gaols by any other officers than the heads of the respective departments is, to our mind, not only a work of supererogation, but implies a want of confidence in those officials on the part of Government.

In the few pages which Dr. Cunningham has spared for the general population of India, and in which, by the way, he figures under the cognomen of the "imperial Sanitary Commissioner," he has forcibly shown how large a field of labour lies before him and his subordinate officers in collecting information regarding the sanitary condition of the general population of the country. And it is to this work that we maintain the local and "imperial sanitary commissioners" should confine themselves, and that in a population of between two and three hundred millions they will find quite sufficient scope for their energies, without turning aside to notice subjects on which fuller and more correct information is already available.

That we are not mistaken in the latter part of this opinion one or two instances from the report now before us will be sufficient to prove. The basis of all statistical calculation is, to have a fixed standard on which to compare results. To convey accurate information—for instance, as to the sickness and mortality at military stations—it will not do to contrast or compare the returns of one body of men of whom the actual annual mean strength is given, with those of others whose strength is merely given for a period less than a year. On this point Dr. Parkes gives some valuable hints, and an instructive note contributed by Dr. Balfour, in the last edition of his work on "Hygiene," p. 518. But we have observed in this respect that many of the tables contributed by Dr. Bryden, where periods less than a year are under consideration, are calculated without reduction to the mean annual strength. The results consequently are valueless for the purposes of comparison with annual results. Nay more, in some cases, as in Table XVI. for European troops, we observe a column headed, "Average strength during 1868," in which are contained the numbers on which all the calculations of admissions, deaths, and invaliding are made, and we find that in several instances a strength is given which is manifestly incorrect, and which invalidates all the calculations based on it, and to a less degree the calculations of the total ratios. A single instance will suffice to show what we mean. The 26th Regiment arrived at Dum Dum from England(a) on June 28, 1868; in Dr. Bryden's tables "the average strength during 1868" is given as 895, the number of admissions 785, deaths 8, and invalided 23, the respective proportions per cent. on the six months being 87·7, ·89, and 2·57, equivalent to an *annual* ratio, on the same strength, exactly twice the above, which, however, are the proportions for the year as given by Dr. Bryden. It is evident from the regiment having been only six months in India, if the above numbers be correct, that the actual strength on arrival must have been 1790 men, and it is well known that no British Regiment nowadays bears such a number on its muster-roll. In the same table, in every instance in which portions of a year are concerned, it is either at once manifest, or there are sufficient grounds for suspecting that a similar inaccuracy exists. We further observe in this table that in parallel columns the admissions are calculated at the rate per cent. and the deaths and invaliding at the rate per mille—an unnecessary and confusing arrangement, to say the least of it.

That such errors should have been admitted is hardly, perhaps, matter for surprise, when we consider the numerous and voluminous reports on which Drs. Cunningham and Bryden have lately been engaged. They are tokens of haste and overwork, and should convince these gentlemen that accuracy in detail is incompatible with rapidity of production in intellectual as well as in manual labour. Just as we write, another still

(a) Not from England, but, as we believe, on return to India from Abyssinia.

larger report by Dr. Bryden comes into our hands. The subject is cholera. We have only for so far noticed that it contains the same cholera map which forms the frontispiece of the report under notice, that it is very voluminous, contains many very hard names of places quite unknown to us, and altogether presents a toughness and dryness of aspect which at first glance render it far from inviting. If, on further acquaintance, we find it more digestible than it looks, we shall be happy to say so.

HOSPITAL CONSTRUCTION.

The Edinburgh people are in a great quandary. They have resolved on the construction of a new Hospital, they have collected a very large sum of money for that purpose, and they have fixed upon the site for the new building; still they have not settled who is to build it nor how it is to be built. The question turns up opportunely as regards the appearance of Mr. Douglas Galton's work on the subject of Hospital construction.(a)

The modern policy in the treatment of the sick and wounded may be summed up in one word—segregation, in opposition to that of aggregation, formerly in vogue. Segregation is not only compatible with cheap construction, but is, perhaps, more facilitated by that than anything else. Aggregation, on the other hand, is associated with palatial edifices which cannot be lightly destroyed or abandoned. Unfortunately, however, the expenses of management are notably lessened by accumulating into one building the mass of sick and injured people who have to be looked after.

Experience during the Austro-Prussian war and more recent experiments in Paris have conclusively proved that wounded men can be treated with greater advantage under canvas or in wooden huts than in large Hospital buildings. Such a system, it must, however, be conceded, is altogether inapplicable in our climate; the question is, therefore, how to obtain the most efficient substitute. Sir James Simpson is all for a village of small Hospitals where extensive accommodation for the sick is necessary, and where the necessary space can be obtained; but putting this proposition for the moment on one side, the pavilion system has been universally adopted as the most appropriate. We were, therefore, rather taken aback when we found such a man as Mr. Syme speaking against the system, not individually, as in certain given instances only, but collectively. We were still more surprised when we read what he proposed to substitute. The ground to be built on at Edinburgh is in the form of a parallelogram, and he proposed to surround this with a two-story building, which would enclose an inner court-yard, almost entirely shut out from air and light, and from which practically ventilation would be next to impossible. We think it may be safely said that the pavilion system, properly carried out, is superior to Mr. Syme's scheme. This proposition he further abetted by a furious attack on Mr. Bryce, the architect selected for the building of the new Hospital, and in an especial manner vituperated the Surgical wards that gentleman had built in the old Infirmary, although Dr. Gillespie, President of the Royal College of Surgeons, affirmed that Sir George Ballingall and Mr. Syme were the persons really responsible for the system adopted. Such squabbles are, to say the least of them, unseemly, and do not tend to elevate our Profession in the eyes of the public, who are only interested in obtaining the best system which can be adopted for the welfare of the unfortunates to be treated within the Hospital walls.

We might perhaps say a little more of Mr. Galton's address had it not been already fully discussed. His principles are sound, his deductions natural, but there is one to which we must really take exception: he hints at, if he does not enforce the feasibility of treating infectious diseases, not, so to speak, in a concentrated form, but with the patients scattered about among the others. Perfectly agreeing with the propriety of segregating patients suffering from infectious diseases, we must demur to the second part of the proposal. We have no right knowingly to expose a man with a broken leg to the risk of catching small-pox or typhus fever, and that such things have occurred is within the knowledge of some. Those, further, who have had the anxiety consequent on treating a patient seized with fever after admission and surrounded by other patients, would be little likely voluntarily to accept a similar position.

As Mr. Galton remarks, the ward is the Hospital unit; it should be of convenient size, neither too large nor too small, and, if possible, the building should be one-storied. When this is not possible, no more than two stories should be piled the one upon the other, and each pavilion should be at a considerable distance from its neighbour. When they are too close together, the good of the system is gone, and we may as well revert to the block system at once. But withal it must be confessed that we are not yet in a position to dogmatise as to what makes a Hospital healthy or the reverse: witness what is elsewhere said in these columns of the oldest lying-in Hospital in London.

(a) An Address on the Construction of Hospitals, delivered to the British Medical Association at Leeds, July 29, 1869, by Douglas Galton, C.B., F.R.S., late Captain R.E., &c. London: Macmillan and Co. Pp. 95.

REVIEWS.

St. George's Hospital Reports. Edited by J. W. Ogle, M.D., F.R.C.P., and Timothy Holmes, F.R.C.S. Vol. IV. 1869. London: John Churchill and Sons. Pp. 354.

It is not easy to review a volume of *Hospital Reports* so as to give due prominence to the work of each individual writer and yet keep the review within due bounds. With this disclaimer, we shall try to give our readers some notion of the valuable contents of this volume, for it is rather, as a rule, in the way of *résumé* than in any other fashion that such books are to be reviewed.

The volume begins with a paper by that veteran inquirer, Dr. Bence Jones, on the "Variations of the Acidity of the Urine induced by Vegetable and Mineral Acids." This paper is, of course, after Dr. Bence Jones's well-known style of investigation, an attempt to formulate therapeutic knowledge in terms of physiological inquiry. His researches were conducted with citric acid (lemon-juice), tartaric acid, and sulphuric acid. With regard to these, he shows that both the former acidulate the urine, but do not influence it to such an extent as does the process of digestion. So also, though to a greater degree, does sulphuric acid, but the ingestion of food invariably causes a speedy and marked decrease in the acidity of urine.

Dr. Lockhart Clarke contributes a most interesting account of a case of angina pectoris. The subject was a gentleman, aged 47, who, notwithstanding the use of a great variety of remedies, gradually grew worse, and ultimately succumbed to his terrible enemy. The post-mortem was late, but it was seen that the heart was dilated and fatty. The remarks which follow are really the most valuable part of the paper; they deal with the causation of this horrid disease as advanced by various authors. The disease is generally admitted to be nervous, but whether the heart is affected through the vagus or through the sympathetic is unknown.

A highly practical paper by Dr. Wilson on the subcutaneous use of morphia follows. We cannot do better than give his ultimate conclusions:—

1. That the solvent for the morphia should be distilled water, without any admixture of acid.
2. That the initial dose should be much smaller than that usually given.
3. That the injection should be performed slowly.

"With these precautions," says he, "morphia may be introduced into the system safely, and for indefinite periods, with but little disturbance of the bodily functions."

Dr. Reginald Thompson writes on rheumatic pericarditis, and deals with the statistics of 171 cases. The whole inquiry is most instructive, but we can only deal with one or two points. During the time venesection was in vogue, more patients died of rheumatic pericarditis than now, and its bad effects were otherwise visible. There is no evidence of the good effects of mercury. As to the alkaline treatment, patients do not die under it with an enormously distended pericardium, and, on the whole, this treatment, Dr. Thompson thinks, if not antidotal, at all events the best yet suggested.

Dr. Clifford Allbutt contributes his quota in the shape of "Cases of Syphilitic Disease of the Nervous System." Such a paper it is not easy to analyse; but, briefly, Dr. Allbutt's conclusions are that intense pain in the head with sickness and dizziness is very suggestive of syphilis, and this suspicion becomes a very high probability when we see a local palsy of the face or orbit. Pain is not, however, constant. We are glad to find Dr. Allbutt confirms a view we ourselves entertain—that with iodide of potassium tertiary syphilis is on the whole a manageable disease.

Dr. Long Fox, of Clifton, brings an article on acute tubercle clinically considered. The beautiful temperature diagrams, similar to those now publishing in our columns by the same gentleman, are one of the prime features of the article and of the volume.

Mr. Prescott Hewett continues in this volume his contributions to the surgery of the head, and on this occasion deals with sebaceous tumours of the cranial region. To name its author is quite as much as to say that the article is both able and careful—indeed, it implies extensive research as well as intimate acquaintance with the subject. Few who are only acquainted with the apparently harmless, if unsightly, wens commonly seen could suppose they were capable of producing such destructive results as those here recorded. All interested will do well to consult this paper.

Mr. George Cowell next contributes some interesting details as to cases of retinitis, and gives a table of twenty-six classified cases. Mr. Warrington Haward analyses 134 cases of chronic bone- and joint-disease, chiefly with a view to the separation of tuberculous from scrofulous infection, a distinction which he adopts. Dr. Theodore Williams sends his thesis for the Oxford Doctorate, in which he deals with the causes of pulmonary consumption. In this his father the well-known Dr. C. J. B. Williams's enormous experience is well utilised, so as to show the great variety of causes which may induce the fatal disease.

Dr. Cheadle, of St. Mary's, writes on exophthalmic goître, and gives particulars of even well-marked cases of this extraordinary disease coming under his own notice, besides certain others. Dr. Cheadle assigns to the disease a nervous origin, but cannot distinctly affirm of the neurosis that it is cerebro-spinal or sympathetic. The frequency of the disease in women points, as he indicates, to some connexion between it and the uterine functions. Finally, as to treatment, Dr. Cheadle says he has found iodine of much service. We are glad his experience contradicts our own, for iodine in our hands has unfortunately proved the reverse of beneficial.

Mr. Henry Lee has next some clinical notes on unusual Surgical cases—among others, ossific union of a fractured thigh at the age of 98, and one of those extraordinary cases of long-continued pain in one limb without any apparent cause, necessitating removal of the limb for its relief.

Dr. Nicholls, of Chelmsford, sends some interesting reminiscences of cases from private practice, wherein he shows plainly how much the country Medical Practitioner may do for the benefit of his brethren, should he feel so inclined. Dr. Nicholls's cases are good and well reported, and his example is worthy of general imitation.

Mr. George Pollock communicates two cases of excision of the scapula. This operation has not been very long introduced, and the cases are even on that account interesting. In both instances the patients recovered from the effects of the operation; but both died—one from a return of the disease, the other from bronchitis. Certain remarks made by Mr. Pollock on these cases may be reproduced here with advantage. In making incisions for the removal of any large tumour, says he, the incisions should be no longer than requisite for the dissection of each flap in turn. This saves blood. No more skin should be saved than is necessary. Thus time is saved, the central portion not requiring to be dissected off. Lastly, *the tumour itself should not be cut into*. The incisions should be only skin-deep; otherwise most formidable hæmorrhage may be the result.

Mr. Timothy Holmes contributes some notes on a case of excision of the ankle-joint, an operation introduced by Mr. Hancock, and repeatedly performed by him. Mr. Holmes holds it in many instances vastly superior to Syme's or Pirogoff's operations, and strongly recommends the removal of the whole astragalus when the disease in it is extensive. Why should not the astragalus *alone* be excised in many of these cases, for it often happens that the joint disease originates in, and is confined to it?

Dr. Wadham gives a case of aphasia ending in death. The post-mortem appearances contradicted Broca's theory; but really this nowadays is almost like slaying the slain.

Mr. Rouse writes on the treatment of acute orchitis. He recommends a purge, to be followed by a dose of opium, night and morning, and by-and-by a dose of iron thrice daily. His results are very good. But, curiously enough, in another part he says the testicle should be kept enveloped with a hot fomentation of goulard and laudanum. Has Mr. Rouse ever tried this alone, with rest and elevation? We have seen some curious results produced by it, without any opium internally.

Dr. Clifford Allbutt contributes a note on locomotor ataxy, with the joint symptoms described in these columns by Dr. Ball, of Paris, and an excellent volume ends with the usual *domestic* summary—so to speak—of the matters relating exclusively to the Hospital and school.

Het Voorstel tot den aanleg eener drinkwaterleiding te Rotterdam, uit een hygienisch oogpunt beschouwd door Dr. A. M. Ballot. Rotterdam: H. Nijgh. 1869.

We have received this pamphlet, the Dutch title of which means, "The Projected Waterworks at Rotterdam considered from a Hygienic Point of View." Notwithstanding the very large quantity of water met with in the kingdom of the Netherlands, really good potable and wholesome water for domestic purposes is a rare commodity in that country. This apparent paradox cannot be wondered at if we take into consideration the situation and nature of the soil of the greater part of that kingdom, of the surface of which 59·14 per cent. belongs to modern formation, 40·76 per cent. to diluvium. 0·04 per cent. to tertiary, and 0·05 per cent. to secondary formation. The entire surface is 3,283,927 hectares, or rather more than 13,000 square English miles. The author of this pamphlet devotes twenty out of thirty-four pages to a comparison between what has been done in the United Kingdom as regards improvements in water supply and the effects thereof upon the public health in general, and especially also the cholera epidemics. The immunity from cholera of that portion of Holland called Zeeland is ascribed to the water. The author does not mention the well-known fact that Zeeland's bottom is so impregnated with salt (chloride of sodium) as to have served in former ages for the manufacture of salt, and, in connexion with the fact that the steppes of Russia, once covered by salt water, have never been visited by cholera, some philosophers hold that the air in these localities always contains chlorine or hydrochloric acid (as proved for the air of Amsterdam half a century ago by Dr. G. J. Mulder), these gases being due to the decomposition of chloride of magnesium by the action of the sun's heat as soon as, at low tides, the shallow places of rivers and estuaries containing salt water are exposed to the direct action of the sun. For our own parts we should prefer trusting to pure water than to chlorine exhalations. Anyhow, all who are acquainted with Rotterdam will agree that there is a high necessity for supplying to every part of it good, cheap, and really wholesome water.

From the published report made to his Majesty the King of the Netherlands by a committee appointed some three and a half years ago, to which was confided the investigation of everything relating to the potable waters in the kingdom, we learn that a plan was proposed to establish waterworks at some distance east of Rotterdam, higher up the river Maas. The water of that river, however, causes, at least along the lower portion of its seaward course, to those who are not accustomed to use it daily, diarrhœa. According to a statement of our author in his paper, the same is the case with the water of the Neva at St. Petersburg. Chemico-microscopic research has failed to detect the precise cause of that action upon the human system; curiously enough, the river water contains neither nitrates, nitrites, nor ammonia. The author recommends the use, on the large scale, of perchloride of iron and carbonate of soda, as first suggested by Dr. Gunning at Amsterdam. This process, it appears from experiments which have been made with the water of the river Maas and with a great many other varieties of waters taken from canals and rivers, renders potable and perfectly wholesome even such as are otherwise quite unfit for use, provided that unfitness is not due to what is termed brackishness. It is a well-known fact that alum is a salt often used to render turbid water clear and potable, but there are serious objections to its use on the large scale. The process with chloride of iron may be briefly defined as follows:—To every cubic metre of water (rather more than 35 cubic feet) are added 32 grammes of perchloride of iron in a solid state (it is best, however, to dissolve the weighed-off quantity in pure water), and immediately after 84·5 grammes of common carbonate of soda are also added; the liquid is thoroughly stirred, and then left to deposit the sediment. After having been standing for some twenty-four hours the water thus purified is (in the case of waterworks) to be filtered through clean sand and gravel-beds. The author states that the expense of this application for a quantity of 5000 cubic metres daily would amount to £2000 a year, not a large sum, considering that experience on a pretty large scale has already fully proved that the Maas water thus treated becomes quite wholesome, and has entirely lost its property of bringing on

diarrhœa. The action of these reagents is mechanical, the precipitated ferric oxide carrying down other impurities.

The arrangements for carrying off the sewage and other foul waters at Rotterdam, as well as elsewhere in Holland, are by no means satisfactory. Generally the house-drains are carried straightways into canals and other watercourses, and the water of these is run off at ebb tide into the river; the latter, however, is for several miles above Rotterdam a large stream, and though its current is not at all times very rapid, the bulk of water carried down to the sea is very large. The analysis of the water taken at different stations up as well as down the river, and taken at various periods of the year, does not indicate what is sometimes termed sewage contamination, but the canals and even the tidal basins of Rotterdam do not afford a proper water fit for domestic purposes; for, leaving even out of the question the sewage and house-drains, there passes through these canals and tidal basins a large amount of what is termed "polder-water"—that is to say, water pumped up from low-lying marshy districts—and this water is so largely contaminated with organic matter, especially peaty matter, as to exhibit a brownish-black colour.

The author deserves praise for having called attention to some very essential points as regards the use of the water of the river Maas for the supply of drinking water of good quality to Rotterdam, where it is much needed.

Popular Science Review. No. 34, January, 1870. R. Hardwicke, Piccadilly.

This excellent periodical has now an established reputation of a high character. Our contemporary begins the year well. Amongst other papers of much interest is one on "The Heat of the Moon," by Mr. J. Carpenter; an article by Dr. Richardson, entitled "Under Chloroform;" "On Deposits of the Atlantic in Deep Water," etc., by Professor Ansted; "What is Wine?" by Dr. Dupré. This number also contains some very good reviews and a scientific summary of a most elaborate and interesting character.

GENERAL CORRESPONDENCE.

SPINA BIFIDA.

Letter from Mr. William Campbell.

[To the Editor of the Medical Times and Gazette.]

Sir,—Thinking the following notes of a case of spina bifida, which lately occurred in my practice, might be of interest to some of your readers, I request you will favour me with a corner in your valuable journal.

The tumour was not noticed by me till the day after the child's birth—indeed, the labour was completed some time before my arrival, and finding the cord was properly secured, I made no further examination of the child. On my visit the following day, my attention was drawn to a swelling on the child's back, which presented the following characters:—Its general form was oblong, its colour purple; it was soft and elastic, and was situated over the spine, occupying the whole of the lumbar and part of the dorsal region. Its sides were formed by columns of bone, to which the four lower ribs were attached, the intervening space being a cavity. These columns ended above in the vertebral column, and below in the sacrum.

The diagnosis in such circumstances was quite evident. I gave, of course, an unfavourable opinion, and directed that a compress and bandage should be used. At a subsequent visit, I observed that the left lower limb was powerless, and lay in a half-bent position on its outer side. On inquiry, I ascertained that the child never moved the limb. The right limb was moved freely. In other respects, the child, a male, was large, well formed, and vigorous. I gave up attending on the mother and child at the usual time, during which the child continued to thrive. Some weeks afterwards I called to see how the child was getting on, and found him in a thriving state and free from pain. I examined the tumour, which was much the same. On the 3rd instant (exactly three months after birth) I was asked to see the child, whom I found very ill, and evidently near death. It was now much wasted, pale and anxious-looking, and crying piteously as if in great pain. There were very evident signs, too, of hydrocephalus, and inspiration was accompanied by a crowing sound, but with no other signs of impeded respiration. The tumour was now very much larger, and of a pale colour, and the skin over it was so thin by stretching as to be translucent, easily allowing the watery contents to be seen. Thinking much of the child's suffering arose from tension of the skin, I made a small puncture with a lancet to relieve this condition. A large quantity of watery-looking fluid came away. After this was done, the child became much paler, but after a few minutes he seemed to suffer much less pain. I applied a compress and bandage, and left a weak mixture of laudanum, with directions for use. The next day I found the child quiet, and was told it had slept a good deal in the night. The child died exhausted on the 8th inst., and I was allowed to make a slight post-mortem examination of the tumour. I found the arches of the lumbar and dorsal vertebræ as far as the four lower ribs wanting. The spinal cord seemed to consist of two unequal parts at the point of arrested development of the vertebræ; the left-hand part, about the thickness of whipcord, soon ended subcutaneously, and the other part, which was large, entered the sacrum. Such a condition of the cord seems to me to account for the paralysis of the left lower extremity, its nerve supply being apparently cut off, while that to the other limb was complete.

I presume the crowing inspiration was dependent on the chronic accumulation of fluid in the head.

Hoping this imperfect account of the case may prove interesting to some of your readers, I am, &c.

William Campbell, L.R.C.S. Edin.

Ore, near Hastings, January 20.

THE COMPOSITION OF STEDMAN'S POWDERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Stevenson says he has found nitrogen in Stedman's powders, but he does not say how he found it, and does not indicate whether he merely claims to have detected that minute trace which some chemists believe to exist in almost everything, or whether he claims to have found a measurable quantity of it—a quantity commensurate with the amount of morphia which he supposes to be present.

In order that it may be understood how remarkably free Stedman's powders happen to be from nitrogenous substances of all kinds, I will give an account of my own experiment referred to in the former letter.

Two packets of Stedman's powders were bought by me of a respectable druggist. Both packets were intact when I got them, and one of them still remains intact in my possession. The other packet was opened, and five of the nine powders (which make up one packet) taken for the following experiment. The weight of these five powders was 0·515 gramme. This was mixed with some pure oxide of copper and then submitted to the operation known to chemists as "Dumas' process for nitrogen." This process may be described thus:—A tube of hard glass of about half an inch in diameter and about thirty inches in length is closed up at one end by means of the blowpipe flame. Next to the closed end there is put a quantity of some substance which will disengage carbonic acid when it is heated. I used a mixture of carbonate of soda and bichromate of potash. Next to this substance comes some oxide of copper; next to that, a layer containing the mixture of oxide of copper with the substance to be operated upon; next to this comes a layer of pure oxide of copper, then some metallic copper, and the free end of the tube is closed with a perforated cork, through which a narrow gas-delivery-tube is inserted. This delivery-tube dips under metallic mercury in the mercurial trough. Having expelled all atmospheric air from the apparatus by means of carbonic acid, the mixture of oxide of copper and Stedman's powder was gradually heated to redness, and maintained red hot as long as any gas was evolved. Ultimately the apparatus was swept out with carbonic acid, and all the gaseous products passed into a graduated tube in the mercurial trough. On submitting these gaseous products to the action of solution of potash, they were absorbed, there remaining only a bubble of gas measuring 0·2 cubic centimetre. This residue falls within the limits of experimental error, and the getting of it does not in reality prove that there was even an infinitesimal trace of nitrogen in the powder. Inasmuch as the effect of any want of skill or of care would be in the direction of making the bubble larger than it ought to be, I am quite justified in claiming that this experiment proves that the 0·515 gramme of Stedman's powder does not contain more than 0·2 cubic centimetre of nitrogen gas (equal to 0·00026 gramme of nitrogen). The percentage of nitrogen in the powder does not, therefore, exceed 0·05. From this it follows that a whole packet of

Stedman's powders cannot contain more than two-tenths of a grain of morphia, and that a powder cannot contain more than one-fiftieth of a grain of morphia.

As will be understood, I do not consider that there is any evidence to show that even this minute proportion of morphia is present in the powders, but that there is absolute proof that not more than this small quantity exists in the powders.

In conclusion I have to reiterate that a mixture of calomel and cane-sugar alone, and a mixture of these things with a little morphia, give rise to the same colour-phenomena, when sulphuric acid and molybdate are used. Whether the morphia be present or absent, there comes on the same beautiful blue-purple tint; and if the production of this tint is to hang suspected persons, toxicology in England is at the lowest ebb.

I am, &c.

The Author of the Report on Stedman's Powders.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 11, 1870.

Dr. Burrows, F.R.S., President, in the chair.

Mr. Alfred Poland brought forward

A CASE OF COMPOUND FRACTURE OF THE PATELLA; WITH AN ANALYSIS OF FIFTY-SIX CASES OF THAT INJURY.

In presenting the following case to the notice of the Society, the author drew attention to the prominent facts connected with it. 1. The peculiar and unusual nature of the accident. 2. The attempt to save the limb under circumstances most disadvantageous, owing to physical and moral defects. 3. The unfortunate relapse and threatening symptoms of pyæmia, after the primary danger of an inflamed and suppurating joint had passed over. 4. The chest complication and exhaustion of the patient after subsidence of the pyæmic symptoms. 5. The saving of life by amputation of the limb. George M., aged 28, a boiler maker, was admitted into Guy's Hospital on January 19, 1869. About eight weeks previously he received a transverse lacerated wound over the anterior surface of the right knee, which was produced by a fall on the knee, and for which he was treated as an out-patient at the Hospital. The wound was about 3½ in. in extent, and the patella exposed; but the joint was not injured. The edges of the wound were brought together by strapping, and a back-splint was placed behind the knee-joint. The case progressed favourably; union of the edges took place, and cicatrisation was almost completed, when, about three days ago, he removed the splint, and went about his employment. Early on the morning of his admission (eight weeks after the first accident) he caught his foot in a grating, and was thrown down on his side, in his fall using great muscular exertion to save himself. The newly cicatrised wound was torn open, and he suffered great pain. He was immediately brought to the Hospital. There was found a large gaping wound in the site of the original injury, as also a transverse fracture of the patella. There was hæmorrhage, and escape of synovial fluid from the joint. The dresser on duty introduced his finger into the wound, through the fracture and into the joint. The wound was closed by sutures, a compress of lint with strapping applied, and a back splint adjusted behind the knee. In this condition he came under Mr. Poland's notice. The man appeared to be in exceedingly bad health, suffering from a chronic cough and general debility, which gave rise to the suspicion of phthisis, although no evidence could be elicited by the stethoscope. In the course of three or four days inflammation and swelling of the joint ensued, with the usual concomitant symptoms. The dressings and sutures were removed, and carbolic-acid lotion applied to the wound, which was looking unhealthy, and had a sanious discharge. On the tenth day suppuration of the joint had fully set in, and the discharge was profuse. This, however, suddenly lessened, and symptoms of pyæmia became manifest; but, fortunately, suppurative action in and about the joint reappeared, necessitating the use of free incisions into the joint and of such depots of pus which formed above and below the joint. During a lingering and tedious suppuration, with ulcerative action going on in the joint for a period of six weeks, the man's health fairly began to give way. In consultation, it was agreed that amputation should be performed at the first favourable opportunity; and this was done on March 5. The patient made a most rapid recovery, and gained flesh although he did not lose his cough entirely. The author next made some comments on the peculiar nature of the injury, and related a case of the kind as occurring to M. Pelletan, and detailed in his Surgical works. He also referred to some other cases of compound fracture of the patella, arising under very peculiar circumstances.

Mr. Poland then alluded to the treatment adopted, and considered it to have been the only alternative left to the Surgeon. The only question which suggested itself was the propriety of excision; but the patient's extremely exhausted condition and general state of health negatived its performance, and the more so as the integuments and soft parts above and below the joint were much implicated in the suppurative action. The specimen, showing the condition of the injury and state of the joint, accompanied the communication, and was exhibited for the inspection of the Fellows. The author next adverted to the statistics of fifty-six cases of compound fracture of the patella without any complication of the neighbouring bones of the joint, and of which the following is a summary:—

6 cases of compound fracture associated with incised wounds.
34 „ „ „ „ lacerated „
16 „ „ „ „ gunshot „

to which are appended fifteen other cases of compound fracture of the patella, but complicated with fracture of the neighbouring bones of the joint, and are not included in the general deductions. Mr. Poland concluded by offering the following point for consideration:—Can there be a compound fracture of the patella without a wound or lesion of the knee-joint?

Mr. Solly spoke of the treatment of fractured patella. He still adhered to the old plan of elevating the leg, so as to relax the rectus femoris muscle, and placing a splint behind.

Mr. Holmes doubted whether a compound fracture into the knee-joint was now held to be an absolute indication for amputation; such cases were, however, dangerous, and would very probably demand it. The paper would, no doubt, call attention to the feasibility of preserving the limb. He wished that more had been said about excision of the patella in compound fracture, an operation which, he believed, had been performed by Dr. Humphry, of Cambridge. He was very sceptical as to the possibility of a compound fracture of the patella occurring without the joint being opened. Resection ought to be avoided in compound fracture of the patella: the injury was almost always, after childhood, one which required amputation.

Mr. Brooke said that the deficient supply of blood to the lower part of the patella must cause repair to be very slow. It often happened that, when a patient was sent out six or eight weeks after fracture of the patella, the ligamentous matter forming the union became stretched. This was to be obviated by causing a splint to be worn behind the joint for some time.

Mr. Birkett had seen only one case of compound fracture of the patella in Guy's Hospital, under the care of the late Mr. Aston Key. A man fell from a wharf into a barge containing iron, striking the centre of the patella on a piece of iron. This was his only injury, and the case did well. That the joint was opened was proved by some gentlemen who introduced their fingers into it through the wound. There was scarcely any constitutional irritation. The treatment consisted of the application of many leeches, with rest and extension. The man afterwards worked long at the same wharf, having perfect power of motion in the limb. In a case under his own (Mr. Birkett's) care, a man had received a wound a little below the patella; the capsule became distended with blood, some of which could be squeezed out. This patient also did well. He therefore hesitated to decide on amputation, especially when the unfortunate results of secondary amputation were remembered. He thought elevation of the limb not essential in cases of ordinary fracture of the patella.

Mr. Moore said that a splint behind the limb was even more necessary when the patient was allowed to walk about than when he was confined to bed. The idea of producing relaxation of the rectus by elevating the limb was erroneous. His knowledge of compound fracture of the patella was very limited. He had seen a case in which a man fractured both patellæ, and recovered. A second fracture of both bones was also followed by recovery. After a third fracture of one of the bones, suppuration and death followed.

Mr. W. Adams said that the interest of fracture of the patella lay in the amount of injury done to the joint. Incised wounds of the knee-joint had done well; but with lacerated and contused wounds there must be danger. The choice between

excision and amputation must depend on the amount of injury of the soft parts. If there were not much injury, excision might be done.

Mr. Cooper Forster said that Mr. Poland was prevented from being present, having been called to a patient. He did not think that compound fracture of the patella could occur without laying open the knee-joint.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, January 5.

Dr. Graily Hewitt, President, in the Chair.

ANNUAL MEETING.

The following gentlemen were elected Fellows of the Society :—Dr. Gross, New Brunswick; Dr. Ligertwood, Newbury; Dr. Scott, Sandwich; Dr. Wilkin, Folkestone; Dr. Dorabjee Burzojee, Bombay.

Dr. Murray exhibited a fibroid tumour of the ovary, which had occurred in the practice of Mr. D. L. Propert, and gave the details of the case.

A cephalotribe which had been presented to the Society by Dr. George Kidd, of Dublin, was exhibited, and four casts of fœtal heads which had been crushed and delivered by it.

The President said the best thanks of the Society were due to Dr. Kidd for this valuable addition to the museum.

Dr. Ballard exhibited the ovary of a patient of Dr. Gibbon's, in which death had occurred from pneumonia after an attempt at producing abortion. In the ovary was what Dr. Ballard believed to be a true corpus luteum, though the uterus exhibited no signs of pregnancy. Several Fellows having stated their belief that the specimen was only a ruptured Graafian follicle after menstruation, the ovary was referred to a committee, consisting of Dr. Braxton Hicks and Dr. Madge, in conjunction with Dr. Ballard.

Dr. F. H. Daly read a paper on "The Early Use of the Long Forceps." Dr. Daly related two cases in which he had applied the instrument. In the first of these the forceps were used at a very late period, and the result was fatal to the mother, but the child lived; in the second the forceps were applied much earlier, and both mother and child were saved. Dr. Daly expressed his opinion that Practitioners, as a rule, delay much too long before applying the forceps, and that an earlier use of the instrument would be the means of saving many valuable lives, both of mothers and children.

Dr. Sansom read a paper on the Sulpho-carbolates in the treatment of certain diseases of children. Dr. Sansom commenced by describing the chemical properties of sulpho-carbolic acid, and of its compounds with sodium, potassium, ammonium, calcium, zinc, and copper. The active agent in these salts is carbolic acid, which enters largely into their composition. The salts themselves are much inferior as direct antiseptics to the less stable carbolates, and when administered internally they are apparently absorbed from the stomach without decomposition, and give off their carbolic acid by chemical change in the tissues. They are exceedingly soluble, by no means unpleasant to the taste, and never seem to produce toxic effects. Dr. Sansom then proceeded to describe the various cases in which he had used the salts, giving abstracts of a considerable number. Those in which he had found them most serviceable were zymotic diseases, especially scarlatina, measles, and diphtheritic sore-throat. In all of them he had met with strikingly beneficial results. In these he had chiefly employed the sulpho-carbolate of sodium in doses of from five to ten grains every four hours. In rachitis, mal-nutrition, and diarrhœa he recommended the sulpho-carbolate of calcium.

The report of the scrutineers of the ballot (Dr. Easton and Dr. Jones) was then read, from which it appeared that the following list of office-bearers recommended by the Council had been unanimously adopted :—

Honorary President : Sir Charles Locock, Bart, M.D. *President :* Graily Hewitt, M.D. *Vice-Presidents :* *Constantine Holman, M.D., Reigate; J. Charles Langmore, M.B., F.R.C.S.; William Leishman, M.D., Glasgow; *Gustavus C. P. Murray, M.D.; Edward John Tilt, M.D.; Thomas Spencer Wells, F.R.C.S. *Treasurer :* *John Braxton Hicks, M.D., F.R.S. *Honorary Secretaries :* Henry Gervis, M.D.; *W. S. Playfair, M.D. *Honorary Librarian :* *John Jones Phillips, M.D. *Honorary Members of Council :* William Tyler Smith, M.D.; Henry Oldham, M.D.; Robert Barnes, M.D.; John Hall Davis, M.D. *Other Members of Council :* William Braithwaite, M.D., Leeds; Edward Copeman, M.D., Norwich; Lawrence Trent Cumberbatch, M.D.; *J. Brendon Curgenven, M.R.C.S.; Robert Ellis, M.R.C.S.; *George Gaskoin, M.R.C.S.; *Thomas Taylor Griffith, F.R.C.S., Wrexham; Francis Seymour Haden, F.R.C.S.; *Edward Head, M.B.; Jonathan Hutchinson, F.R.C.S.; *William Edmund Image, F.R.C.S., Bury St. Edmunds; David Lloyd Roberts, M.D., Manchester; *William Richard Rogers, M.D.; John Scott, F.R.C.S.; William Johnson Smith, M.D., Weymouth; Charles Taylor, M.D.; *Arthur Wynn Williams, M.D.; *Alfred Wiltshire, M.D. (Those gentlemen to whose name an asterisk is prefixed were not on the Council, or did not fill the same office, last year.)

The report of the auditors of the balance-sheet for 1869 (Dr. Selby Norton and Dr. Wiltshire) was then read, which stated that the income of the Society for 1869 was £748 19s. 6d., and its expenditure £633 10s. 4d., leaving in the hands of the treasurer a balance of £115 9s. 2d. It further appeared that the Society had invested in 3 per cent. Annuities the sum of £1199 6s. 8d., of which £75 had been invested during the past year. The adoption of the report was moved by Dr. Brunton, seconded by Dr. Heywood Smith, and carried unanimously.

A vote of thanks to the officers of the Society, mentioning especially the retiring officers, Dr. Meadows, Dr. Murray, and Dr. W. S. Playfair, was proposed by Dr. Hicks, seconded by Dr. Madge, and carried by acclamation.

Dr. Meadows, Dr. Murray, and Dr. Playfair returned thanks.

The President (Dr. Graily Hewitt) then delivered the annual address. He congratulated the Society, now terminating the eleventh year of its existence, on its continued success and prosperity, and on the fact that its hold on the goodwill of the Profession was firm and appeared likely to remain so. The Society now numbers 600. During the past year forty-three new Fellows had been elected. An obituary notice relative to the Fellows deceased during the past year followed, including the names of Dr. Eastlake, Mr. Ewen, Mr. Crossland Richards, Mr. Somerville, Dr. Johnson, Mr. Mills, Mr. Russell, Dr. Locking, Dr. Dyer, and an Honorary Fellow of the Society, Dr. Charles Meigs, of Philadelphia. The President remarked on the very high character of Dr. Meigs's work and Professional labours. The financial position of the Society was an extremely satisfactory one, as would be gathered from the Treasurer's report. The attendance at the meetings during the year had exceeded the average. The Library, Reading-room, and Museum, which had now been open for two years, had been largely used by the Fellows during the past year, and, as all the new and standard works were carefully added to the Library, it would shortly become an obstetric library worthy of the name. The services of Dr. W. S. Playfair, who had organised and arranged the Reading-room, were referred to, and warmly acknowledged. The papers read at the meetings during the past year were of great interest, and many of them had been the means of introducing to the Profession innovations and improvements in obstetrics. Cephalotripsy, uterine hæmorrhage, puerperal fever, the complication of ovarian disease and pregnancy, and many other subjects (which the President briefly summarised) had been discussed. The diseases of infants had received attention. The report of a committee appointed at Dr. Farre's suggestion to consider the causes of infantile mortality in England had been received, and information of a valuable kind elicited. The report, drawn up by Dr. Gervis, would shortly appear in the *Transactions*. Further work in the same direction would probably be done by the committee. The President then referred to a remarkable discussion on puerperal fever in the Dublin Obstetrical Society during the past year, which he considered destined to exercise great influence in the future. The discussion was a most important contribution to the history of puerperal fever in Dublin, with the opinions and criticisms of the many eminent obstetric Practitioners in that city, and was characterised by an exhibition of brilliancy, pungency, profundity, and wit such as could be witnessed nowhere but in the Irish metropolis. Ovariotomy had penetrated successfully to Stockholm, where Dr. Sköldberg now had seventeen successful cases out of twenty. The general position of obstetrics had improved during the past year, the President remarking with satisfaction on the resolution of the College of Surgeons to examine all its Members in obstetrics. This was a matter on which the Society memorialised the Medical Council as long ago as 1857. A further and necessary step would be to procure a representation of obstetrics in the General Medical Council; with this view a deputation from the Obstetrical Society waited on the Home Secretary in May last, and it is hoped that this glaring defect in the constitution

of the Medical Council may soon be remedied. The subject of the proposed amalgamation of the principal Medical Societies in London was next referred to, and the President stated that the delegates appointed by the Obstetrical and other Societies had met, but the discussion had as yet reached no definitive stage. In the present position of the Obstetrical Society, hardly earned and fought for as it had been, care must be taken that future interests be not imperilled, but no unreasonable opposition should be offered to well-considered projects for the elevation of the Profession as a whole. So far for the past. The success of the Society had been admitted on all hands. Indeed, some critics and friends of the Society appeared to have come to the conclusion that because the mine had been so diligently worked it must be nearly exhausted. It would be infinite pity if this idea became prevalent outside the Society; those inside would at once see the incorrectness and irrelevancy of the statement. It might be true that certain of the great principles already grasped appeared little likely to undergo change, but the mode of application admitted of infinite improvement, each step being the saving, probably, of many lives. The unceasing advances in physiology, dietetics, and epidemiology find appropriate adaptations in obstetric practice, which we shall constantly have to make available. The diseases of infants have, until quite recently, occupied comparatively little attention. But the Society has another function besides that of discovery: the discoveries already made have to be disseminated, and the rising generation of Practitioners educated. This Society is eminently an educating society, offering an opportunity for the correction and verification of individual experience, upholding what is right, and exercising a wholesome influence on the whole body of Obstetric Practitioners. The dispelling of ignorance is the saving of life; having that end in view they could hardly fail to do what is best and right. Finally the President expressed his thanks to the Honorary Secretaries, Drs. Murray and Gervis, for the able manner in which they had aided him in carrying out his duties.

A vote of thanks to the President for his admirable address was proposed by Dr. Tilt, and seconded by Dr. Ballard.

LEGAL INTELLIGENCE.

COURT OF EXCHEQUER—February 1.

(*Sittings at Nisi Prius, before Mr. Baron* Bramwell *and a Special Jury.*)

This was the first day of the sittings after Term. The list contains 70 causes, of which 37 are marked for special juries.

WILLIAMS *v.* THE DUKE AND DUCHESS OF SOMERSET.

Mr. Hawkins, Q.C., applied in this case, which was an action by Dr. C. J. B. Williams against the defendants for libel, for a postponement of the trial until the sittings after Easter Term, on affidavits stating that the Duchess of Somerset, who might be a necessary witness, was suffering from neuralgia and an affection of the leg, and might not be able to attend the court for three weeks or a month.

The Solicitor-General, who appeared for the plaintiff, objected to the postponement on the ground of the serious nature of the libel. The Duchess of Somerset had called Dr. Williams a "hypocritical murderer," and one of the charges was that he had deliberately allowed the only son of the duke and duchess to die, because he would not meet another Medical man, and that he mismanaged the case from Professional spite.

Mr. Hawkins: No, no.

The Solicitor General: The Duchess of Somerset has chosen to circulate the libel for months.

Mr. Hawkins: You must not state that; it is not set out in your affidavits.

The Solicitor-General: The libel has been in general circulation for months, and the Professional character of Dr. Williams has seriously suffered by it. The defendants have not pleaded any justification, and they have almost admitted the authorship. Dr. Williams is most anxious to have the case tried, but now your Lordship is asked to postpone it until July, on the ground that there is something the matter with the veins of the duchess's leg.

Mr. Hawkins, in reply to the Judge, said he believed it would be necessary to call the duchess at the trial.

The Solicitor-General: Then let the duchess be examined by commission, and her evidence read to the jury. Do not let Dr. Williams continue to suffer from a libel, of which in the whole course of my professional experience I have never seen the like, and which has been in unbroken circulation for months. I trust your lordship will not postpone the trial.

Mr. Hawkins: The evidence of the duchess is required in answer to statements made by Dr. Williams himself, and that makes it impossible to have her examined by commission. The learned counsel added that, there being no plea of justification, the truth of the libel as regarded the serious charges referred to was not intended to be set up.

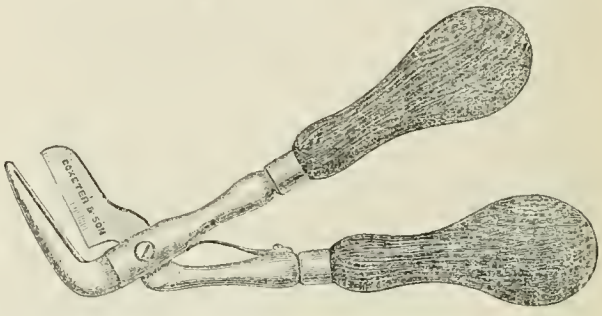
The Solicitor-General: But a great deal of mischief may be done without standing up for the exact truth of the libel.

Mr. Baron Bramwell decided that the case should not be tried before the eighth day of the next sittings in London, with liberty to examine the duchess by commission if necessary.

NEW INVENTIONS.

MR. HANCOCK WATHEN'S FORCEPS FOR CUTTING STARCH BANDAGES.

A forceps for cutting starch and glue bandages has long been a desideratum. An instrument, of which the subjoined is a figure,



has been invented by Mr. Hancock Wathen, of Fishguard, and is found to answer admirably. It is made by Coxeter and Sons, of Grafton-street.

MEDICAL NEWS.

The Royal College of Physicians, London.—At the ordinary quarterly meeting of the College on the 27th ult., the following gentlemen, having duly passed the required examinations, were admitted Members of the College:—

Poore, George Vivian, M.B. Lond., University College Hospital.
Sutherland, Henry, M.B. Oxon., 6, Richmond-terrace, Whitehall.
Woodman, William Bathurst, M.D. St. And., 10, Finsbury-pavement.

Royal Colleges of Physicians and Surgeons, Edinburgh.—Double Qualification.—The following gentlemen passed their first Professional examination during the January sittings of the examiners:—

Barry, Francis, Co. Wexford.
Wray, C. J. Hill, Co. Antrim.

And the following gentlemen passed their final examination, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Browne, John Martin, Dublin.
Conway, James Synam, Limerick.
Deely, William Burke, Galway.
Donovan, Denis Dempsey, Co. Cork.
Dunlop, William, Co. Derry.
Dwyer, Michael Christopher, Tuam.
Finlay, George, Trinidad.
Hutchison, John, Beattock.
Lindsay, Francis Woodley, Cork.
Massy, Eyre Henry Chas., Co. Clare.
M'Donald, Alexander, Kinross.
O'Brien, Joseph, Dungarvan.
Paterson, John Dalgleish, Glasgow.
Robinson, Andrew Rose, Claude, Canada.
Skinner, David, Kingskettle.
Stone, George, Lancashire.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 27th ult.:—

Atkinson, Arthur, Hull, of the Hull School.
Briggs, Henry Myddleton, Tipton, of the Birmingham School.
Connolly, Benjamin Bloomfield, L.S.A., Woolwich, of Guy's Hospital.
Frost, Richard Russell, Launceston, Cornwall, of Guy's Hospital.
Gillingham, Alfred, L.S.A., Peckham-rye, of Guy's Hospital.
Goude, Herbert, Finsbury-square, of St. Bartholomew's Hospital.
Gray, Clement Frederick, Newmarket, of St. Bartholomew's Hospital.
Jelly, William, Edinburgh, of St. Mary's Hospital.
Low, Walter George, Burton-on-Trent, of St. Bartholomew's Hospital.

Nettle, William, L.S.A., Liskeard, Cornwall, of St. Bartholomew's Hospital.
Pearce, William Henry, L.S.A., Holsworthy, North Devon, of the Charing-cross Hospital.
Rees, William Carey, M.B. Melbourne, of Melbourne.
Rope, Henry John, Blaxhall, Suffolk, of King's College.
Rowell, George, Dilston-park, Northumberland, of the Newcastle School.
Skinner, James Charles, Tunstall, Norfolk, of St. Mary's Hospital.
Symes, Edmond West, Berkeley-square, of University College.
Temple, Thomas Cameron, Nottingham, of the Middlesex Hospital.
Thorn, George, Tooting-common, of King's College.
Thorp, Brook, Holmfirth, of the Liverpool School.
Vickers, William, Doncaster, of University College.
Walker, Archibald Dunbar, M.B. Edin., Edinburgh, of the Edinburgh School.

The following gentlemen were admitted Members on the 28th ult.:—

Buller, Frank, M.D. Toronto, Campbellford, Canada, of Toronto.
Burdett, David Earl, M.B. Toronto, Belleville, Ontario, Canada, of Toronto.
Daphtary, Girdharlal Ratanlal, L.S.A., Bombay, of the Bombay School.
Grover, John Pollington, L.R.C.P. Edin. and L.S.A. Lewes, Sussex, of Guy's Hospital.
Leake, George D'Alton Nugent, L.S.A., Twickenham, of St. George's Hospital.
Lovell, William Day, L.R.C.P. Edin. and L.S.A., Croydon, of Guy's Hospital.
Perigal, Arthur, M.B. Edin., Edinburgh, of the Edinburgh School.
Russell, Logan Dillon Hooper, M.D. New York, Wilmington, Carolina, United States, of the New York and University College Hospitals.
Vines, Henry Jeckell Kendrick, L.R.C.P. Edin. and L.S.A., Reading, of St. Mary's Hospital.
Wade, William, M.D. Toronto and New York, Cobourg, Canada, of Toronto.
Widdifield, J. Henry, M.D. Toronto, Ontario, Canada, of Toronto.

It is stated that only fourteen candidates out of the large number examined failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their Hospital studies for six months.

Arts Examinations.—At the last preliminary examination for the Fellowship and Membership of the Royal College of Surgeons, conducted by the College of Preceptors, the following gentlemen were reported to have passed for the Fellowship:—

Allen, D. M.	Fitt, S. W.	Mooac, J.
Alderton, F. F.	Frost, W. A.	Morley, J. L.
Booth, J. B.	Garstang, E. M.	Morris, J.
Brodribb, C. A.	Hall, G. C.	Odell, W.
Bunting, J.	Hartley, R.	Odling, J. F.
Burton, J. R.	Hawthorne, A.	Parker, R. W.
Cartwright, H. G.	Hawkins, W.	Phillips, G. A.
Carruthers, W. H.	Hughes, J. R.	Robertson, G. S.
Chicken, R. C.	Jackson, R.A.	Serjeant, E.
Chilcot, J.	Jepson, E.	Stephens, A. E. R.
Cuddiford, T.	Lang, H. C.	Turnour, C. C.
Darker, F. W.	Lilley, G. H.	Vincent, H. B.
Davis, E. H.	Lloyd, J. H.	Wall, W. B.
Duke, D.	Mahon, C. E.	White, B. S.
Duke, D. W.	Manby, A. R.	Whitmore, W. T.
Ferrier, J. C.	Milligan, W.	Williams, H.
Fielding, G. F. M.	Milward, W. C.	

The following gentlemen, who entered for the Membership examination, reached the standard required for the Fellowship examinations:—

Adkins, E. | Bond, G. W.

The following 175 gentlemen passed for Membership:—

Acton, W. J.	Ellerton, J. F. H.	Johnston, W. K.
Adcock, H.	Fenton, H. A.	Jones, B.
Aldrich, A. W.	Fortner, J. B.	Jones, J. W.
Anderson, C. M.	Fox, J. C. K.	Jones, R. J. W.
Barker, F. R.	Frankish, W. J.	Kemp, G. C.
Barker, H. M.	Freer, A. H.	Kirby, S. J. J.
Barrs, A. G.	Gairdner, J.	Leighton, A. W.
Bingham, S.	Gawith, J. J.	Lewis, G. L.
Blanch, H.	Goodchild, F.	Lewis, J. M.
Bradley, R.	Graham, J. T.	Lewis, T. P.
Brenuidge, J.	Grimbly, R. H.	Lockwood, J. P.
Brown, E.	Gwatkin, O.	Lord, R. P.
Brown, G.	Hales, R. T.	Loughnan, H. A.
Bubb, B.	Hamilton, A.	Lucas, C.
Buckell, L. M.	Hancock, E.	McLoghlin, E. P. P.
Buckley, A. G. H.	Harsant, W. H.	Macpherson, J.
Bull, W. H.	Hart, G. H.	Manby, H. L.
Bullock, C.	Hart, M. J.	Merry, H. H.
Burgess, J. G.	Harvey, H. F.	Monks, J. B.
Burns, J. P.	Harwood, H. S.	Morgan, L.
Bury, G. S.	Hawkin, G. L. L.	Morrish, W.
Cambridge, T.	Hawkins, A. F.	Morton, C. J.
Clift, M. L.	Herbert, E. A. H.	Nadin, J.
Cogan, L. M.	Herdman, W. L.	Nevill, R
Cook, R. J.	Hick, H.	Newman, J. J.
Crawshaw, B.	Hodson, R. D.	Noad, H. G.
Cross, H. R. O.	Hooper, A.	Ockenden, A. J.
Crowther, W. H.	Holt, J.	O'Connor, F.
Cumming, R. F.	Hoskins, E. J. H.	Palmer, J. H.
Cuttfield, A.	Hovel, T. M.	Parkinson, J. R.
Dartnell, W. A.	Howard, E. G.	Parsons, J.
Dawson, G. A.	Howchin, E. K.	Pearce, H. D.
Dixon, H. A.	Hubbard, T. C.	Perry, E. V.
Dowlen, E.	Hyde, H.	Phelps, P.
Drinkwater, T. W.	Iddon, J. E.	Phillips, A. O. H.
Drysdale, A.	James, J. R.	Phillips, J. A.
Edwards, R.	Jameson, G. H.	Piper, E. F.
Power, F. E.	Shaw, O. C.	Walford, R.
Pulford, R. H.	Skardon, C. G.	Ward, W.
Quartley, F. C.	Slatter, O. T.	Webb, H. L.
Rees, J.	Smith, C. E.	Weller, J.
Reid, W. G.	Smith, W.	Wells, W. H.
Reynolds, E. O.	Sparrow, G. G.	Westwood, H. O.
Richardson, J. B.	Spokes, P. S.	Whaley, W. J.
Richardson, J. H. H.	Startin, J.	White, A.
Richardson, W. B.	Stedman, H. B.	White, H.
Rimell, G.	Stevens, A. H.	White, W. H.
Roberts, A. R.	Sykes, W.	Whitworth, E.
Roberts, F. E.	Talbot, J. B.	Williams, D. C.
Robinson, A. H.	Taylor, A. N.	Williams, F. M.
Roe, F. L.	Tester, R. C.	Williams, P. H.
Rowlands, O. J.	Thomas, G. H. W.	Williams, W. B.
Rudd, L.	Thomas, R. T.	Wilson, G.
Saberton, F. W.	Thring, A. W.	Wilson, J. H.
Sandiford, R. T.	Tomlin, R. F.	Wright, N. W.
Scott, W.	Travers, O. R.	York, T. H.
Seed, W. H.	Tunstall, A. C.	Young, E. W.
Shannon, J. H.	Vipan, C.	
Sharples, T.	Vivian, R. T.	

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their final examinations, and were admitted Licentiates of the College during the recent sittings of the examiners:—

Alloway, Thomas Johnson, Queen's County.	Macfee, James, Buteshire.
Bonthron, Christopher Campbell, Buckhaven, Fife.	Moorhead, William Robert, Co. Monaghan.
Gillies, John, Skye.	Struthers, Jas., Douglas, Fifeshire.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, January 27, 1870:—

Button, Horace Gooch, Abbey-street, Bermondsey.
Law, William Thomas, Great Dover-street, Borough.
Walker, Hugh Eccles, Chesterfield.

At the Preliminary Examination in Arts, held at the Hall of the Society on January 28 and 29, 1870, 41 candidates presented themselves, of whom 17 were rejected, and the following 24 passed, and received Certificates of proficiency in General Education—viz., in the first class in the order of merit:—

1. Clarke, Henry.
2. Sheehy, William Henry Patmore.
3. Beevor, Charles Edward.

In the second class in alphabetical order—

Barnes, Raglan Wykeham.	Hutchinson, Joseph.
Bass, Charles William.	Johnson, Chadd Moore.
Beames, John.	Keane, Howard.
Bedolfe, Peyton.	Lindsay, William Vickress.
Bell, Charles Edward.	Matthews, Charles Edwin.
Brennand, Frederick James.	Moir, Gerald C. A.
Brett, J. A.	Moore, Walter.
Brunt, John.	Perrin, Alfred Charles.
Crooke, George Frederick.	Phillips, Alfred.
Deck, Arthur Edward.	Watkiss, Thomas William.
Howard, Adderly.	

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BELLAMY, Eo., F.R.C.S.—Assistant-Surgeon to the St. George's Rifle Volunteers, *vice* Mr. Little, F.R.C.S., resigned.

ELLIS, HERBERT D.—One of the Honorary Surgeons to the Bournemouth Dispensary.

FARR, Dr. S. B.—Medical Officer to the Workhouse and Infirmary and No. 1 District of the Andover Union, *vice* J. M. Goodinge, deceased; Medical Officer to the South-Western Railway Friendly Society in the Andover District.

MILITARY APPOINTMENTS.

WAR OFFICE.—The following appointments have been made:—5th Lancers: Assistant-Surgeon William Cherry, from 14th Foot, to be Assistant-Surgeon, *vice* Alexander Neill, appointed to the Staff. 11th Foot: Staff Assistant-Surgeon Ulick Albert Jennings, M.D., to be Assistant-Surgeon, *vice* George William Barroll, appointed to the Staff. 14th Foot: Staff Assistant-Surgeon James Scanlan, M.B., to be Assistant-Surgeon, *vice* William Cherry, appointed to the 5th Lancers. 66th Foot: Staff Assistant-Surgeon William Charles Casteen, M.B., to be Assistant-Surgeon. 89th Foot: Staff Assistant-Surgeon William Geoghegan, M.B., to be Assistant-Surgeon.

MEDICAL DEPARTMENT.—Assistant-Surgeon Alexander Neill, from the 5th Lancers, to be Staff Assistant-Surgeon, *vice* James Scanlan, M.D., appointed to 14th Foot. Assistant-Surgeon George William Barroll, from 11th Foot, to be Staff Assistant-Surgeon, *vice* Ulick Albert Jennings, M.D., appointed to the 11th Foot.

BENGAL ARMY.—To be Surgeon-Major: Surgeon William Pesket. To be Surgeons: Assistant-Surgeons Hugh Clark, M.D.; William Elward Caird; Emanuel Bonsoia, M.D.; Lindsay Frederic Dickson, M.D.; Adam Taylor; and George Sackville, M.D.

MADRAS ARMY.—To be Surgeons: Assistant-Surgeons William Pierce Kelly and William Richards Grylls, M.D.

BIRTHS.

DUNCAN.—On January 29, at 139, Buckingham Palace-road, S.W., the wife of Dr. Duncan, of a daughter.

HEARNDEN.—On January 24, at Sutton, Surrey, the wife of Wm. Alex. Hearnden, M.D., of a daughter.

HOOPER.—On January 27, at 67, High-Street, Wandsworth, the wife of J. Harward Cooper, F.R.C.S., of a daughter.

LONGTON.—On January 30, at the Priory, Southport, the wife of E. J. Longton, M.D. Edin., of a son.

RUDALL.—On November 14, at 147, Collins-street, East Melbourne, Australia, the wife of James T. Rudall, F.R.C.S., of a son.

MARRIAGES.

HARRISON—BARRY.—On January 23, at Hammersmith, Alfred Harrison, Esq., of Finsbury, to Elizabeth Barry, youngest daughter of the late Thomas Barry, M.D., of Lismore, county of Waterford.

HOWSIN—BELL.—On January 25, at Little Eaton, Derby, E. Arthur Howsin, M.D., Newton-le-Willows, Lancashire, to Louisa Sarah, elder daughter of the late Robt. John Bell, Surgeon, Rudness, Yorkshire.

MILNE—GOODDAY.—On December 31, 1869, at the Cathedral, Calcutta, Brigadier-General Henry Milne, commanding at Dinapore, to Charlotte, eldest daughter of Horatio Goodday, M.D., Bayswater, London.

DEATHS.

ANDERSON, ANDREW, M.D., President of the Faculty of Physicians and Surgeons of Glasgow, at 2, Woodside-crescent, Glasgow, on January 28, aged 52.

BRIGHT, EMILY, widow of the late George Augustus Campbell Bright, formerly garrison Surgeon, Bangalore, India, at Cheltenham, on the 1st inst.

BROWN, ARTHUR BOYER, eldest surviving son of Baker Brown, F.R.C.S., at Muswellbrook, New South Wales, on November 13.

COLEMAN, W. T., M.D., at his son's residence, Henley-on-Thames, on January 25, in his 71st year.

DICKINSON, WILLIAM BINLEY, M.R.C.S., Mem. Num. Soc., etc., formerly of Macclesfield, at Leamington, on January 27, aged 80.

MOTT, SOPHIA, wife of Charles G. Mott, M.D., 3, Chester-terrace, Regent's-park, and daughter of the late Dr. Peter Breton, H.E.I.C.S., at Highfold, Painswick, Gloucestershire, on January 29.

UNWIN, CATHERINE, the beloved wife of John R. Unwin, F.R.C.S., late of North Brixton, at St. Laurence House, Surbiton-hill, on January 26, aged 55.

WEST, JANE ROSE, relict of George West, M.D., of Sydney, at Toowoomba, Queensland, on November 21, aged 64.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRISTOL ROYAL INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to W. Trenerry, Esq., Secretary, on or before February 10.

GLOUCESTER COUNTY LUNATIC ASYLUM.—Junior Medical Assistant. Applications and testimonials to the Superintendent.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, KING'S-CROSS, N.—Junior Surgeon. Applications and testimonials to the Secretary, G. Reid, Esq., 46, Great Coram-street, on or before February 9.

HOLBEACH UNION.—Medical Officer for the Sutton-bridge District. Candidates must be legally qualified and registered. Applications and testimonials to Mr. E. G. Ayliff, Clerk, Holbeach, on or before February 5. Election on the 7th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to P. Rose, Esq., Hon. Sec., at the Institution, Brompton, S.W., and before March 5. Candidates to attend the Medical Committee on March 7, at 4 p.m.

LAMBETH WORKHOUSE.—Resident Medical Officer and Dispenser. Must have the qualifications prescribed by the orders of the Poor-law Board. Applications and testimonials to W. B. Wilmot, Esq., at the Workhouse, Princes-road, Lambeth, on or before February 7; election on the 9th.

LEEDS PUBLIC DISPENSARY.—Assistant Resident Medical Officer; must have one qualification. Applications and testimonials to Mr. C. Wright, 2, Park-square, Leeds, on or before the 14th instant.

LITTLEMORE PAUPER LUNATIC ASYLUM.—Resident Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to John M. Davenport, Esq., County Hall, Oxford, on or before the 19th inst. The duties will commence early in March.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary on or before February 26.

LIVERPOOL NORTHERN HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before February 7. Election on Feb. 11.

NOTTINGHAM DISPENSARY.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

ROSS UNION.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Board of Management on or before February 19.

SHEFFIELD GENERAL INFIRMARY.—House-Surgeon; must be a Member of one of the Royal Colleges of Surgeons of the United Kingdom, or a Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and also L.S.A. or L.R.C.P.L. Applications and testimonials to the Secretary on or before February 5. Election on the 9th.

SOUTH LAMBETH, STOCKWELL, AND NORTH BRIGHTON DISPENSARY.—Visiting Medical Officer; must be duly qualified and registered. Applications and testimonials to E. G. Syms, Esq., 250, South Lambeth, S.W., on or before February 9.

UNIVERSITY COLLEGE.—Professorship of Medical Jurisprudence. Applications will be received till February 5. Further particulars may be obtained from the Secretary, John Robson, Esq.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Belper Union.—Dr. Brietzcke has resigned the Markeaton District; area 5880; population 1702; salary £11 per annum.

Penistone Union.—Mr. Ward has resigned the Penistone District; area 17,380; population 4887; salary £21 per annum. Also the Workhouse; salary £30 per annum.

APPOINTMENTS.

Alderbury Union.—Samuel Swabey, M.R.C.S.E., F.R.C.S. Edin., to the Sixth District.

Billericay Union.—Arthur W. Mercer, M.R.C.S.E., L.S.A., to the Little Warley District.

Dorking Union.—Horace Chaldecott, M.R.C.S.E., L.S.A., to the Upper District.

Isle of Wight Union.—Edward R. Woodford, M.C. Aber., M.B. Aber., M.R.C.S.E., L.S.A., to the Godshill District.

Potterspury Union.—William C. Daniell, M.R.C.S.E., L.S.A., to the Second District and the Workhouse.

Tiverton Union.—Edward Nason, M.R.C.S.E., L.S.A., to the Bampton East and Bampton West Districts.

Wigton Union.—Henry Miller, M.B. Edin., M.C. Edin., to the Allonby District.

THE post of President of the Faculty of Physicians and Surgeons of Glasgow has become vacant by the death of Dr. Andrew Anderson, who long has had a leading practice in that city.

UNIVERSITY OF OXFORD.—The following announcement has been made:—"Regius Professor of Medicine, Henry W. Acland, D.M. Subject: Clinical and General Medicine. Text-book: Niemeyer's 'Text-book of Practical Medicine' (New York, ed. 1869). Time and place: Infirmary. Monday at 9, Saturday at 11; Museum, Monday at 11. Commencement: Museum, Monday, February 14. The Professor will attend in the Medical Department of the Museum at 11 o'clock on every Monday, from February 14 to March 17 inclusive, to confer with members of the University on any subject connected with Medical studies or education. Instruction will be given at the Medical Laboratory in certain departments of pathology and State Medicine, by Charles C. Pode, M.B. Application to be made to the Professor on any Monday, as above."

MEDICAL CLUB.—The monthly house dinner held by the members of this club took place on Wednesday last, when Mr. Erasmus Wilson was in the chair. Besides other members and guests, there were present—Dr. B. W. Richardson, F.R.S., Dr. Jenkins, of New York, Sir Charles McGrigor, Bart., Mr. Samuel Solly, Dr. B. Miller, Mr. Heather Bigg, Mr. W. Adams, Mr. B. E. Mosely, Dr. Allen, Dr. Swettenham, and Mr. Dunlop.

MORTALITY OF GLASGOW IN 1869.—The Medical officers report to the Sanitary Committee that in 1869 the population of Glasgow was 403,395. The total number of deaths was 16,168; of these 930 were from typhus fever, 209 from enteric, etc., 91 from other continued fevers, 1 small-pox, 916 from scarlet fever, 673 measles, 739 hooping-cough, 3634 acute diseases of the lungs, 1852 from consumption, 337 from diarrhœal diseases.

A HINDOO CONVERT.—By the *Indian News* we learn that Dr. Atmaram Sadashiva Jayakar, of Bombay, a Hindoo, who, we believe, studied at University College, London, and was admitted a Member of the Royal College of Surgeons of England in 1867, and who belongs to the Covenanted Medical Service, has publicly abjured the religion of his fathers, and been baptised as a Christian at Ahmedabad.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—At the quarterly Court, held January 12, the directors voted the sum of £1380 to fifty-eight widows and fifty-three children for the half-year commencing January 1. Two widows and twelve children were added to the list of recipients. The directors most earnestly invite the attention of the members of the Profession to the increasing number of applicants, and the large sums necessary every half-year to pay the grants, and trust by an increase of the numbers of subscribers and donors to be enabled to continue the amounts given to each case. The receipts of 1869 fell short by £147 of the sums distributed. The directors appeal to the generosity

of their richer brethren, to be saved the painful necessity of reducing the grants to the widows and children of deceased members.

Académie des Sciences.—Professor Kirchoff, of Heidelberg, has just been elected a corresponding member in the Section of Physics to supply the place of the late Professor Forbes. The other members of that Section are Hausteen of Christiania, Wheatstone of London, Plateau of Ghent, Magnus of Berlin, Weber of Göttingen, Hirn of Engelbach, Helmholtz of Heidelberg, and Mayer of Heilbronn.

Professor Flower, F.R.S. — This gentleman, as Hunterian Professor of Comparative Anatomy and Physiology in the Royal College of Surgeons, to the museum of which institution he is the indefatigable conservator, will, on the conclusion of Professor Wilson's lectures, commence a course of eighteen lectures, introductory to the study of the anatomy of the class Mammalia. The following is the programme of the Professor :—Methods and aims in the study of morphology.—Classification of the Mammalia.—Osseous system of the Mammalia. *Axial skeleton :* Vertebral column ; modifications of the characters of the vertebræ in the cervical, thoracic, lumbar, sacral, and caudal regions in different mammals. Sternum. Cranium. Hyoid arch. *Appendicular skeleton :* Essential structure and modifications of the bones composing the shoulder-girdle and anterior extremity ; structure and modifications of the pelvic girdle and posterior extremity ; comparison between the structure and the functions of the anterior and the posterior extremities.—Tegumentary system and its appendages : The dermis ; modifications of the integument mainly due to peculiar conditions of the dermis ; ossifications in the integument ; the epidermis and its modifications ; callosities, scales, nails, claws, hoofs, horns, hairs, spines ; antlers ; glandular organs connected with the integument or opening on the external surface of the body, scent glands, mammary glands.—Dental system : Structure and essential characters of teeth ; classification and nomenclature of teeth ; development and succession of teeth ; modifications of the characters of the teeth in the different groups of the Mammalia ; horny structures taking the place of teeth in certain mammals ; baleen, etc. (If time permits, the consideration of the digestive system will follow.) By a curious coincidence, these lectures will be commenced on Monday, February 14, the anniversary of the birth of John Hunter, and be continued on Mondays, Wednesdays, and Fridays until their close.

The Quarterly Return of the Marriages, Births, and Deaths issued by the Registrar-General states that in the last ninety-two days of the year 1869 as many as 128,146 deaths were registered. This number is 8050 more than in the same period of 1868, and 11,949 more than in the last quarter of 1867. The mortality was at the annual rate of 23·16 per 1000 living, whereas the rate in the same season during the ten previous years was 21·90 per 1000. It is noticeable in the present return that while the excess in the death-rate of the previous three months, ending September 30, was caused by the high mortality in large towns, in the last quarter of the year the excess is shared by the small towns and country parishes. The chief towns, inhabited by more than eleven millions of persons, experienced a death-rate during the quarter of 25·75 per 1000 annually, the average of the season being 24·31 per 1000 ; the inhabitants of the small towns and rural parishes died during the same period at the annual rate of 19·67, the average being 18·88. The 14 greatest cities and towns amongst them, peopled by more than six and a half millions of inhabitants, suffered a mortality at the annual rate of 27·56 per 1000 living. Of the English towns in this group, Sheffield shows the highest rate, 30·79 per 1000 ; Manchester follows with a rate of 30·59 ; Salford, 29·12 ; Liverpool, 28·88 ; Leeds, 27·86. Birmingham had the lowest mortality, 25·73 ; Hull, 25·95 ; Bradford, 26·02 ; while it is gratifying to notice that the rate of 26·36 per 1000 in Newcastle-on-Tyne indicates a considerable improvement in the health of that town. In the 16 towns next in importance, having an aggregate population of 2,819,555, the death-rate during the quarter was at the rate of 24·43 per 1000 annually. Among these the following show the highest rates of mortality :—Blackburn, 38·04 per 1000 ; Swansea, 31·62 ; Gateshead, 30·87 ; Exeter, 30·00 ; Derby, 29·87 ; Nottingham, 29·80 ; and Bolton, 29·47. Comparing favourably with these are Gosport, 16·79 per 1000 ; Yarmouth, 19·14 ; Norwich, 19·15 ; Merthyr Tydfil, 19·18 ; Plymouth, 19·82 ; Devonport, 20·53 ; and Ashton-under-Lyne, 20·60. In London 21,063 deaths were registered in the last three months of the year, compared with 18,943 in 1868, and the mortality was at the annual rate of 26·66 per 1000. Small-pox caused 87 deaths, measles 473, diphtheria 113, hooping-cough 823, typhus 552, diarrhœa 368, and scarlet fever 2710. This epidemic has prevailed with remarkable intensity, increasing from 75 deaths in the third week of July to 245 early in December. From this maximum number it subsided gradually, and the deaths amounted to 159 in the last week of the year. It was most fatal in the east districts, where the mortality from the disease was at the annual rate of 51 per 10,000 living ; in the north districts it was 30·1 ; in the south districts 39·1 ; in the central districts 29·4 ; and in the west districts 14·7 per 10,000 living.

Anthropological Society of London.—At the evening meeting held on February 1, Captain Bedford Pim, R.N., V.P., in the chair, Major Frederick Millingen, F.R.G.S., read a paper on "The Negro Slaves in Turkey." The author exposed first the particulars connected with the sale of negro slaves in Mussulman countries, then he described the lot which awaits the negroes in Turkey, and concluded by some general observations on the question. With regard to the slave trade carried on in Turkey, the Major said that the negroes imported into the Sultan's dominions come from the countries situated on the higher basin of the Nile ; and that though that valley is the route followed by the cargoes of slaves on their way to the markets, numbers of secondary channels exist, through which slave dealers convey their merchandise. So long as that supply and demand exist, it is useless to hope that slavery will be done away with. The causes of the supply are the feuds of the negro races, which will never end ; the causes of the demand are that slavery is inherent in the religious system, inherent in the social system, and congenial to the ideas and manners of Mussulman nations. With regard to Sir Samuel Baker's expedition to put a stop to the slave trade, the author stated that the undertaking was impossible, as Sir Samuel, placed between two fires, supply and demand, must end by being defeated by both. The Major quoted the speech lately pronounced at the Geographical Society's meeting by Lord Houghton, who plainly avowed the disappointment felt by his friend Sir Samuel Baker on seeing the Mussulmans hostile to his scheme. In conclusion, the author said that, if the Sultan and the Khedive really intend doing away with slavery, the thing is easily realised ; they have nothing else to do but to open wide the gates of their harems.

A Courageous Mother.—In his recent *éloge* on Trousseau, M. Béclard, while referring to his re-establishment of tracheotomy in croup as likely to form his most durable claim to the gratitude of posterity—a position which many will not be likely to agree to—relates the following anecdote which the Professor was very fond of narrating :—"I was sent for," he says, "together with MM. Blache, Guersant, and two other Physicians, to the house of a renowned Parisian sculptor, whose child was dying of croup. This child was in such a condition that not one of us, even those who were the most daring, was willing to venture on an operation, feeling almost certain that the child must die whatever was done. I was deputed by my *confrères* to communicate this sad conclusion to the mother, informing her of the extreme peril in which her child was, which, indeed, she only too well knew. I added, in answer to her demands, that I did not believe that Medical aid could usefully intervene, for although there was an operation, yet in this particular case it presented at the very utmost a chance in a thousand. At these words the unfortunate mother rushed to the door, closed it, and, placing her back against it, turned towards us, and, with accents of '*sublime colère*,' exclaimed, 'You shall not leave this room until the operation has been performed.' M. Trousseau executed it, and the child is now a man."

A practice generally prevalent on the third day after birth is the following :—The child, surrounded by the friends and relations who have come to witness the auspicious event, is washed in, or rather wiped with, water in which artemisia, acacia chips, pepper, and soap have been boiled. The object is to take off, as it is termed, the outer coating of the skin. There is afterwards clean water used, in order that the child in after years may recognise this as principal. The midwife furnishes herself with variously coloured boiled eggs. These are given to quicken the pains of delivery and cause to conceive, and are freely distributed among such of the spectators as appear to stand in need. The child is also washed in water into which chestnuts, dates, copper, cash, or silver, according to the circumstances of the parents or relatives, are thrown. The cash falls to the midwife, over and above her monthly pay, who pronounces parturient blessing on the female donors, and indicates the Crœsus-like character of the child in future years. To cure or prevent pains to the

child, a large plaister of artemisia and resin is applied to the abdomen. The albumen of an egg is next taken, and, to produce a good complexion, the child is rubbed over with it. A lock is then taken, and with suitable words and attitudes it is placed upon the mouth, a prophylactic against much bad or false speaking; in the hands, against stealing; on the feet, against running into evil courses; and on the heart, against dishonesty and injustice. This is followed by beating the child over the buttocks with an onion, that it may be intelligent, there being in Chinese a play upon the word. Then a pomegranate paper-flower is riddled over the body to guard against small-pox. The gums are rubbed with a piece of blue cloth dipped into one of the above waters, to prevent the formation of ulcers and gumboils. It is placed horizontally on and at right angles to the k'ang or bed, to prevent the child from falling to the ground. The child's head is beat thrice against the mother's abdomen, that the latter may have no pain. Married ladies, without families are required to empty the water in which the child has been washed in order that they may conceive. The water must be poured not outwards from, but inwards towards the bearer, and two eggs, one red and one white, to be eaten in bed with similar objects. The money thus presented will sometimes reach as much as 30 dollars. The common working people give about one dollar. A small spot on the crown of the head is burnt with the moxa against convulsions.—*The Fifth Annual Report of the Peking Hospital, by Dr. Dudgeon.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

P. C.—As soon as possible.

Mr. J. Henry, Charleston, N. Z.—Your letter (with enclosure) has come to hand.

Surgical Aid.—Address the Secretary, Ludgate-hill, E.C.

Dr. Mercer's paper shall appear as soon as possible, but, we are afraid, not till after next week.

Mr. C. J. Evans, Northampton.—The treatment of diabetes, Bright's disease, etc., by milk diet has been advocated by Dr. Scott Donkin, of Newcastle, in the columns of our contemporary, the *Lancet*, and has been adopted by Dr. George Balfour in the Royal Infirmary, Edinburgh. These gentlemen do not, however, seem to be aware that this very treatment was long ago suggested and adopted by Dr. Headland, even in the first edition of his work on Therapeutics.

Not a Member.—On making application to the President, you will no doubt obtain admission to the lectures of Professor Wilson.

Donations to the British Medical Benevolent Fund.

The Treasurer and the Honorary Secretaries of the British Medical Benevolent Fund beg to acknowledge, with thanks, the receipt of the following additional donations as the result of the appeal published in the Medical journals:—

Bull, Dr., Hereford	...	£2	2 0
Herbert, B. Heywood, Esq., Uttoxeter ...	...	1	1 0
L., Leominster	...	1	0 0
Savory, Dr. Chas., Mildmay-park, N. ...	...	1	1 0
Sylvester, G., Esq., Trowbridge	...	2	2 0
Turtle, Fred., Esq., Woodford	...	2	0 0

Further amounts will be thankfully received and acknowledged by Dr. Thorne Thorne, 42, Seymour-street, Portman-square, W., Honorary Financial Secretary.

Sanitary Rates.—The *Liverpool Mail*, in an article under the above heading, has the following remarks. What can the poor think when improvements undertaken for their well-being are characterised as "questionable and disputed objects?"—

"We earnestly hope that, following the abandonment of fanciful and diversified town improvements so called, the sanitary rates will not be approved unless reduced to the very lowest maximum in the parish of Liverpool and each surrounding township. At any rate, that the questionable improvements, such as water-closets in small tenements, may not be pressed forward with undue haste. The present depressed times, however slowly reviving, are not the times for continuing intolerable local rates on any portion of the real property of Liverpool for questionable and disputed objects."

The Treatment of Lunatics.—Nobody doubts that the treatment of lunatics both in our public and private asylums is not, as a rule, satisfactory. There are many reforms required. But to write in the style of one of our contemporaries on the subject is simply unjust and exaggerated. It may do very well for novelists and playwrights to get up sensational scenes, but it is the duty of a Medical journalist to write dispassionately and accurately on subjects of grave importance. The letter of "Medico-Psychologicus" should, in justice to him and his brethren, have been admitted into the journal which attacked them; its quiet argumentative style offers a singular contrast to the noisy and hyperbolic language of the journalist.

Proposed Dermatological Association.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Having been requested to act as Honorary Secretary (*pro tem.*) to the proposed Dermatological Association of Great Britain, I would feel obliged by your allowing me to draw the attention of the Profession, and especially of those gentlemen who take an interest in Cutaneous Medicine, to the fact that the above-mentioned Association is now in course of formation, chiefly for the purpose of continuing the publication of a journal devoted to that branch of Medicine. The annual subscription will be fixed at 10s. 6d. Several well-known Physicians and Surgeons have already signified their intention of becoming members of the Association. I shall be happy to enter the name of any gentleman wishing to join. As soon as a sufficient number of names have been received, the office-bearers, etc., will be appointed.

I am, &c.

5, College-square East, Belfast. H. S. Purdon, M.D.

Dr. Kermot, of Chrisp-street, Poplar, wishes us to state that his name has been on the Medical Register since the year 1861. He never styles himself "M.R.C.S." His titles are "M.D., L.S.A. Lond., L.D.S.R.C.S. Eng."

Sheffield.—Mr. John Taylor has been dismissed from his office of House-Surgeon to the Sheffield Dispensary. It will be recollected that he came into collision with the committee of the institution in consequence of having ordered wine, etc., for a poor girl, named Wragg, who was dying of typhoid fever. This wine and beef, he considered, would be supplied by the Dispensary; but it was not so, although it appeared that, under an old law of the institution, such articles were supplied. The girl died, an inquest was held, and a verdict, in accordance with the evidence, that death had been accelerated by privation, returned. The committee of the Dispensary think Mr. Taylor's conduct has been intolerable, chiefly, we suppose, from his bringing the case of the poor girl Wragg before the public. We shall take occasion next week to go at length into the subject.

Verax, H. de M., and other Correspondents on the Arts examination at the College of Surgeons will find, in another column, the names of the successful candidates for the Fellowship and Membership. For the former there were sixty-four candidates, of whom five failed, and were also unable to reach the standard for Membership. Four failed in one or more compulsory subjects for Fellowship, but obtained sufficient numbers for Membership. Five candidates, having previously passed examinations for the Membership, failed in one or more additional subjects for the Fellowship, and will have to be re-examined in those subjects. The remaining fifty passed. *Verax* is informed that those who failed last year will come under the regulations of *this* year, the subjects for which, however, are the same as last, with the exceptions that algebra is now included amongst the compulsory subjects, and that the second book of Euclid will be required in addition to the first. The fee for examination a second time will not be demanded.

Professor Tyndall's Lecture.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Will you allow me to protest against some most unfair criticism on Professor Tyndall's lecture on dust? Professor Tyndall exhibited the effect of convection currents on the path of a beam of light passing through the air of the room. The air, from increase of temperature becoming specifically lighter, was no longer able to float the particles of dust, which, being left behind in its ascent, showed a break in the hazy beam of light. In another experiment showing the effect of a high temperature in destroying the particles of dust, the air, after passing through redhot platinum, ascended a few inches in a tube to reach the experimental tube. This is a point the critic thinks may safely be attacked, and therefore says, "May not the particles of dust be left behind in this ascent of a few inches?" Here is an interesting addition to our knowledge concerning the conditions attending a gas in its motion through confined spaces, which are assumed to be the same as in the rise of a convection current in an open room. Had the writer burned a piece of paper over his study fire, and, seeing it ascend, asked himself the question, Would it so rise were there no chimney to confine the heated current of air? he would not have made such an error.

Professor Tyndall further illustrated how a current of air, if made to pass through platinum not so highly heated, gave a blue cloud in the experimental tube, which reflected a light perfectly polarised. This he affirmed to be smoke from the combustion of organic matter. Here the critic comes to the attack again. May not the blue cloud be nothing more than the finest of the dust particles, which alone could find their way into the experimental tube? The fact of Professor Tyndall having stated the light reflected from this blue cloud to be polarised was lost on the acute observer of the "ascent of a few inches." All that the learned Professor had taught last year, and subsequent teachings from the Continent, as to the state of matter in the experimental tube which returned to the eye this beautiful blue polarised light, were forgotten by the writer of the article, who is, however, troubled at the ignorance of the public press and people in matters of science. The article is one of many. If we turn from the general press to the scientific, we find almost universal discontent with Prof. Tyndall's lecture. There are so many scientific periodicals at present committed to preach "spontaneous generation," "evolution," and a species of Darwinism Mr. Darwin never contemplated, that to demonstrate a large amount of organic matter in the atmosphere is positively to give offence, since it tells strongly on the side of the germ origin of life and disease. It is distressing to those who have sometimes imagined scientific men to be remarkable for their single eye in pursuit of the truth to find men high in the world of science whose names are always mentioned with respect, who, having propounded a certain theory or gone over to some side, immediately close their eyes to all evidence against their hobby, and are highly imaginative in raising pyramids with their bases in the air on any tittle that seems to favour them. There is no disguising the fact that the scientific world at the present time is divided by an unseemly bigotry on certain subjects which must destroy the judgment in pursuit of truth.

I am, &c. W. Smyth.

Maidstone, January 31.

COMMUNICATIONS have been received from—

Dr. Day; Dr. A. B. Shepherd; Mr. J. T. Rudall; Dr. John Day, of Australia; Dr. Sankey; Dr. E. Long Fox; Dr. P. Campbell; Mr. J. B. Blackett; Dr. Purdon; Dr. Charles Kidd; Mr. E. Bellamy; Mr. T. Stokes; Dr. G. C. Kernot; Dr. W. Smyth; Dr. S. B. Farr; Dr. James Russell; Colonel Lane Fox; Dr. J. C. L. Carson; Surgical Aid; Mr. F. Greatheed; Mr. G. Gregson; Mr. W. W. Humby; Dr. R. Martin; Dr. W. H. Day; Dr. Thorne Thorne; Dr. Lory Marsh; Mr. R. T. Atkins; Mr. Bunaougns; Dr. Meacer; Dr. Phillips; A Convalescent; Dr. Lawson; Mr. J. F. Clarke; Dr. A. Ernest Sansom; Professor Erasmus Wilson; Mr. J. Chatto; Mr. T. Bayant.

BOOKS RECEIVED—

Philadelphia Medical and Surgical Reporter—Phrenological Journal—Syphilis, its Nature and Diffusion popularly considered, by J. G. Beaney, F.R.C.S.—Mapother on the Body and its Health—Tenth Annual Report of the Board of Directors and Officers of the Longview Asylum, Ohio—British Journal of Dental Science, February—Lyell's Handbook of Ferns—Pharmaceutical Journal, February—Revelations about Tobacco, a Prize Essay by Dr. H. Brewer—The Treatment of Lunatics: a Reply to the *Lancet* Annotation of January 22 by Medico-Psychologicus—Edinburgh Medical Journal, February—Dr. C. Handfield Jones on Functional Nervous Disorders.

NEWSPAPERS RECEIVED—

Leicester Journal—Nature—Edinburgh Evening Courant—Indian Medical Gazette—Australian Medical Gazette—New York Medical Gazette—L'Opinion Médicale—Sheffield Daily Telegraph—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

February 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Scott, "Meteorology."

7. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 2.

Medical Society of London, 8½ p.m. Lettsomian Lectures—The Pathology and Treatment of Eczema, and, incidentally, the Influence of Constitutional Conditions in Skin Diseases, by Dr. Tilbury Fox. Lecture 3: The Therapeutics of Eczema.

Odontological Society, 8 p.m. Mr. Oakley Coles, "On the Mechanical Treatment of Deformities of the Palate produced by Syphilis."

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 4.

Royal Institution, 2 p.m. General Monthly Meeting.

8. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Mr. W. Boyd Dawkins, M.A., F.R.S., "On the Discovery of Flint Flakes under a Submerged Forest in West Somerset." Rev. R. J. Mapleton, "On Remains of Prehistoric Man in the Neighbourhood of the Crinan Canal, Argyllshire."

Royal Institution, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

Royal Medical and Chirurgical Society. 8 p.m.: Ballot. 8½ p.m.: Dr. F. B. Nunneley, "On the Action of Citrate and Acetate of Potash and of Spiritus Etheris Nitrosi on the Urine in Health." Mr. L. S. Little, "Case of Gold Plate with Artificial Teeth swallowed, detected in Stomach and removed."

9. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society. 7 p.m.: Annual Meeting for Election of Officers. 8 p.m.: Oration by Mr. Thomas Bryant.

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 5.

Royal Microscopical Society (King's College), 8 p.m. Anniversary. President's Address; Election of Officers.

Society of Arts, 8 p.m. Meeting.

10. Thursday.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

11. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. Erasmus Wilson's Lectures on "Dermatology." Lecture 6.

Royal Institution, 8 p.m. Dr. Carpenter, "Temperature and Life in Deep Sea."

VITAL STATISTICS OF LONDON.

Week ending Saturday, January 29, 1870.

BIRTHS.

Births of Boys, 1200; Girls, 1159; Total, 2359.
Average of 10 corresponding weeks, 1860-69, 2090·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	808	805	1613
Average of the ten years 1860-69	807·9	795·6	1603·5
Average corrected to increased population	...	...	1764
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	12	3	9	...	3	1	1
North ...	618210	3	7	31	1	11	5	2	1	2
Central ...	383321	...	1	13	...	7	1	1	2	1
East	571158	2	5	23	2	15	1	2	4	2
South	773175	...	13	39	1	25	...	9	3	2
Total	2803989	5	28	118	7	67	7	17	11	8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·142 in.
Mean temperature	31·6
Highest point of thermometer	40·8
Lowest point of thermometer	19·6
Mean dew-point temperature	26·9
General direction of wind	N.N.E. & S.E.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 29, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending Jan. 29.	Deaths Registered during the week ending Jan. 29.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2359	1613	40·8	19·6	31·6	-0·22	0·00	0·00
Portsmouth ...	122084	12·8	65	46	46·0	24·2	34·9	0·61	0·00	0·00
Norwich	81087	10·9	77	47	41·9	24·0	33·3	1·73	0·05	0·13
Bristol	171382	36·6	139	118	41·8	19·4	31·6	-0·22	0·02	0·05
Wolverhampton ...	72990	21·5	53	28	37·2	22·7	31·3	-0·39	0·01	0·03
Birmingham ...	369604	47·2	281	176	39·4	22·3	32·5	0·28	0·03	0·08
Leicester	97427	30·4	71	53	41·5	20·2	30·9	-0·61	0·01	0·03
Nottingham ...	88888	44·5	45	47	40·7	20·7	31·9	-0·06	0·02	0·05
Liverpool	517567	101·3	393	272	...	...	...	...	...	...
Manchester ...	374993	83·6	259	250	40·0	22·0	31·6	0·22	0·03	0·08
Salford	121580	23·5	94	83	40·5	23·0	32·7	0·39	0·02	0·05
Bradford	143197	21·7	74	73	40·5	23·5	32·4	0·22	0·00	0·00
Leeds	259527	12·0	187	150	48·0	22·0	34·3	1·28	0·02	0·05
Sheffield	247378	10·8	211	149	43·0	22·0	33·1	0·62	0·06	0·15
Hull	130869	36·7	107	57	44·0	17·0	30·7	-0·72	0·04	0·10
Sunderland ...	94257	19·6	67	38	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	109	71	39·0	22·0	29·5	-1·39	0·00	0·00
Edinburgh	178970	40·4	145	161	41·7	25·0	32·7	0·39	0·00	0·00
Glasgow	468189	92·5	375	343	39·6	25·4	33·2	0·67	0·04	0·10
Dublin (City, etc.*)	321540	33·0	188	184	46·5	23·5	37·9	3·28	0·00	0·00
Total of 20 Towns in United Kingd'm	7209603	33·6	5299	3959	48·0	17·0	32·6	0·34	0·02	0·05
Week ending Jan. 29. Paris	1889842	...	...	1044	...	...	...	...	...	...
Week ending Jan. 22. Vienna	605200	...	...	346	...	...	30·9	0·62	...	...
Week ending Jan. 27. Berlin	702437	...	628	405	...	...	28·2	2·12	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·142 in. The barometrical reading decreased from 30·33 in. on Tuesday, Jan. 25, to 29·97 in. on Saturday, Jan. 29.

The general direction of the wind was N.N.E. and S.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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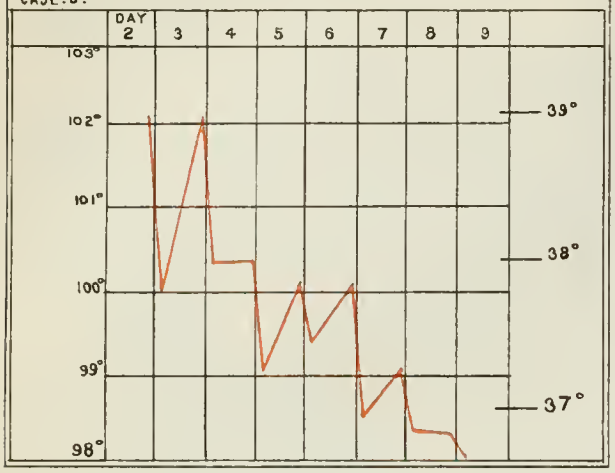
CASE. 8.

FEBRICULA.



CASE. 9

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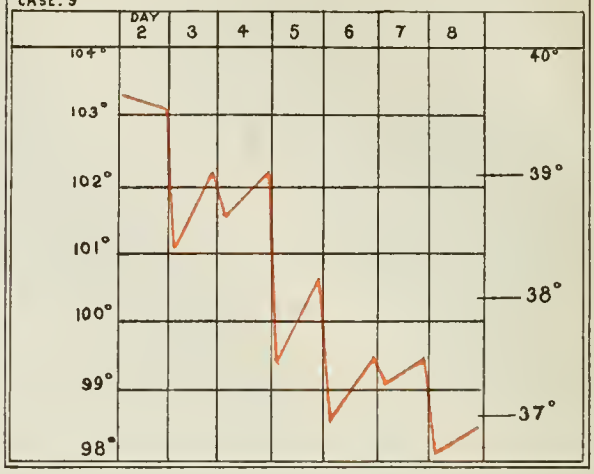

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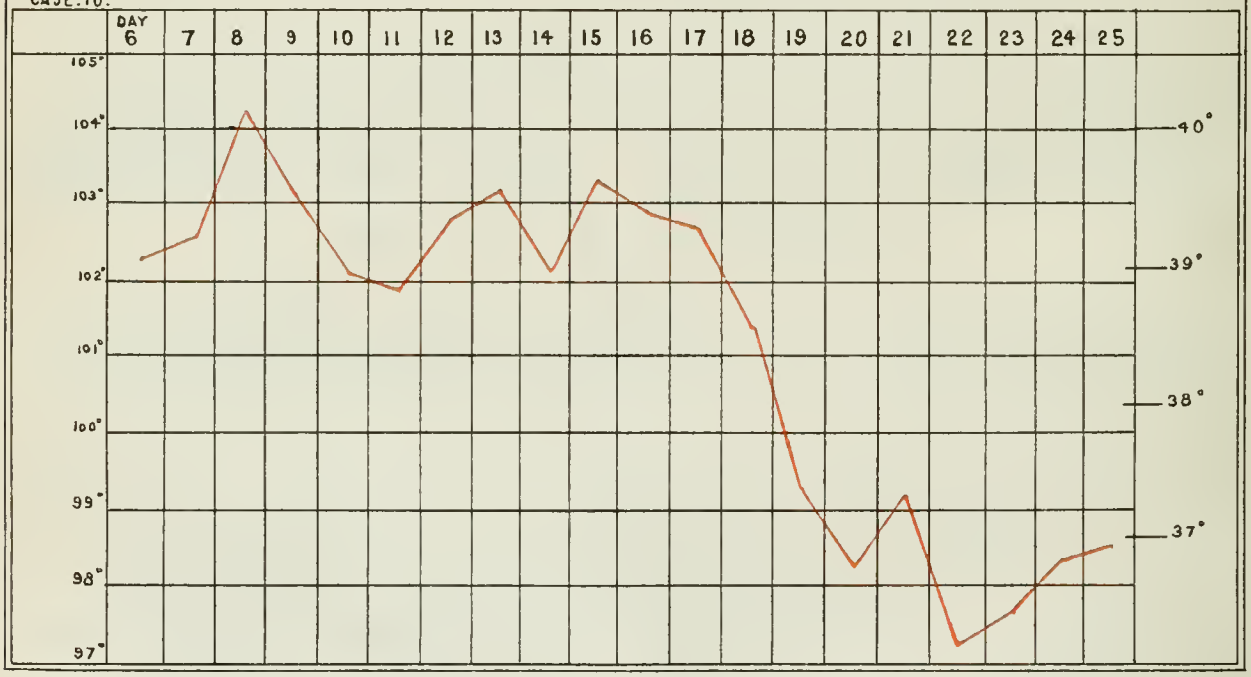
TYPHUS.



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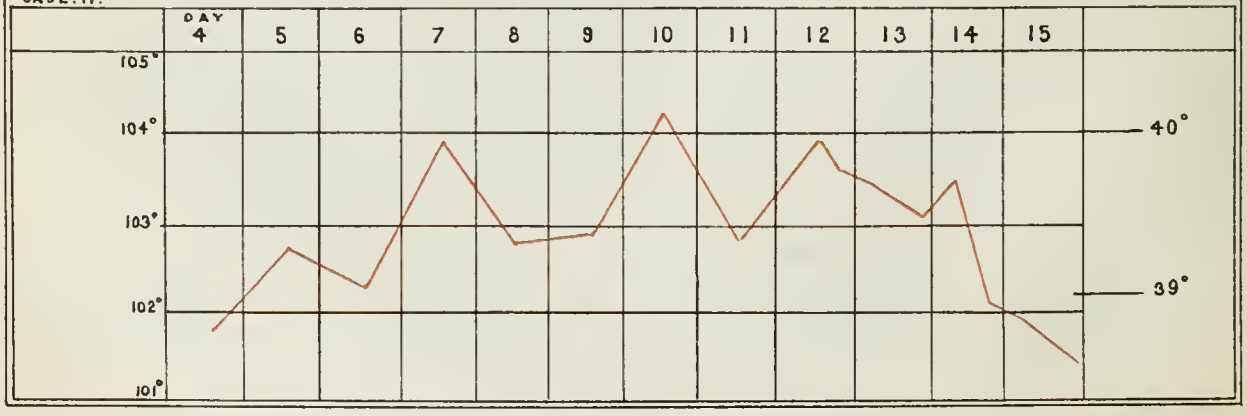

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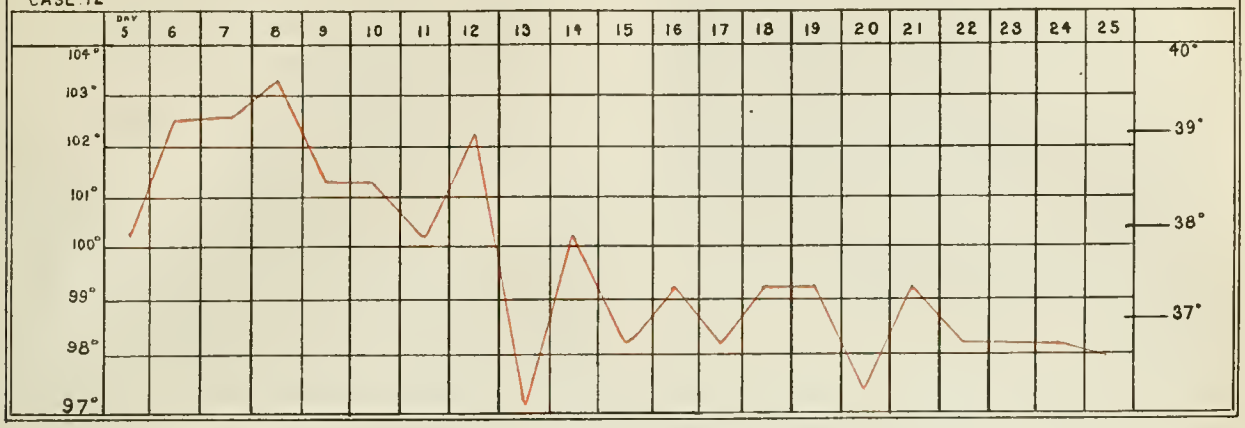

ENTERIC FEVER.

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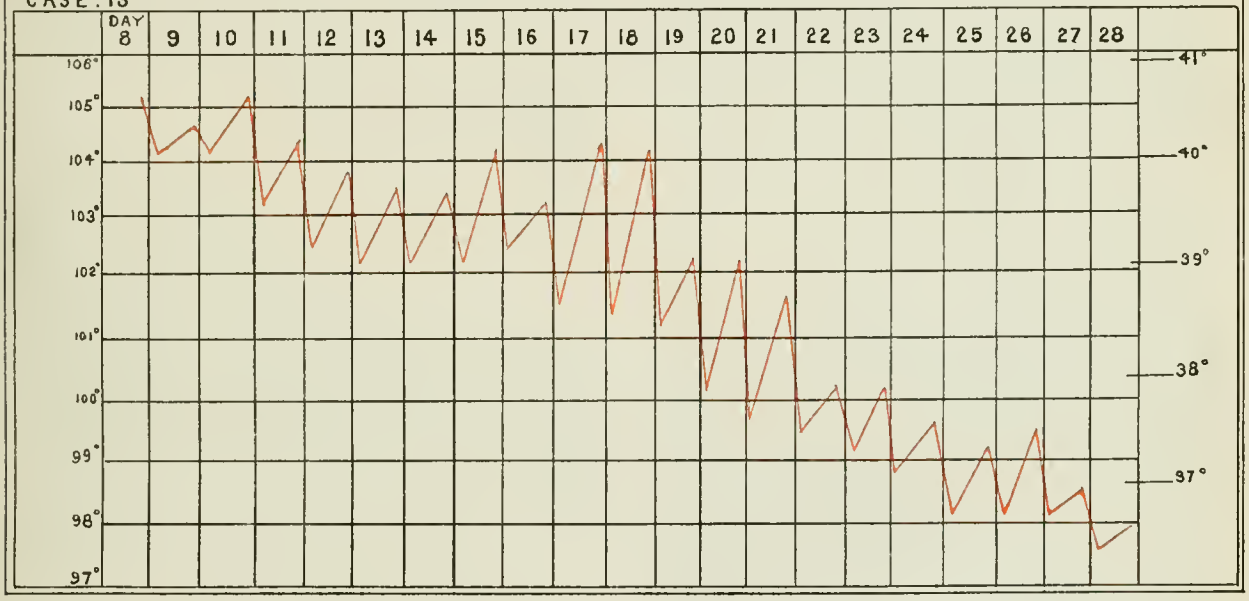

ENTERIC FEVER.

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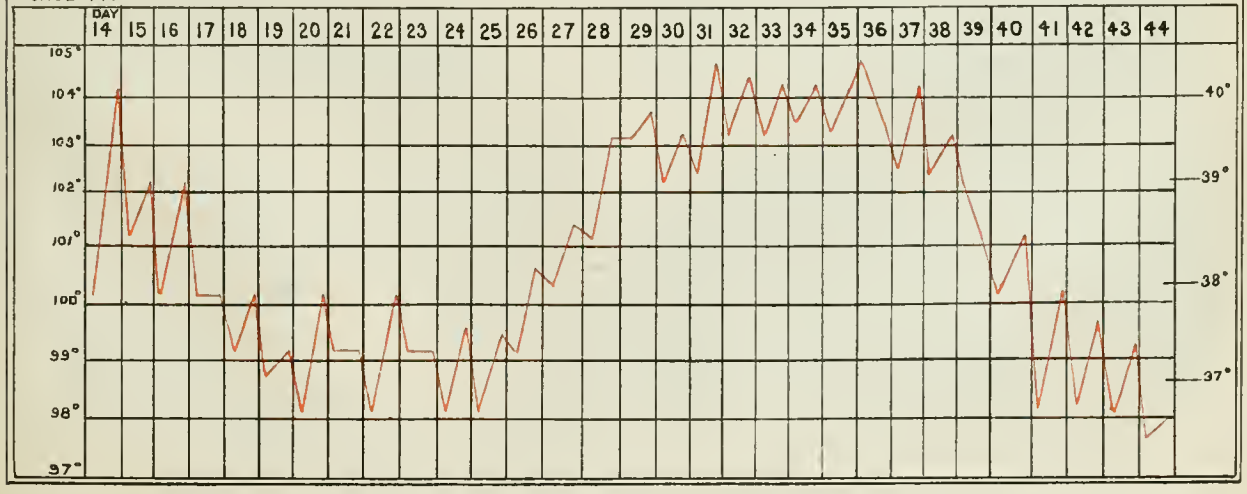

ORIGINAL LECTURES.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture I.

Mr. President and Gentlemen,—Dermatology has a history and an ancestry. The language of dermatology is that of the ancient Greeks—of Æsculapius and his school—of Hippokrates and his disciples. In those early days the diagnosis of disease was very commonly determined by the examination of the exterior of the body, and especially of the skin; and, at the present day, the skin, when properly understood and carefully interrogated, will be found to be a valuable means of ascertaining the state of the general health of the individual and of the health of many of the organs of his body. It is obvious how, by its aid, we may discover a defect of the heart's conformation, test the vigour of the heart's action, and put to the proof the healthy or the unhealthy condition of the blood. The skin also furnishes us with a key to the knowledge of the normal or the abnormal sensibilities of its structure, and to the manifestations of its healthy or unhealthy nutrition. Kyanosis teaches us that the heart is imperfect in structure, and that a rudimentary communication subsists between the two auricles. A less marked and more partial lividity of the skin indicates torpor or obstruction of the circulation. Jaundice informs us of an aberration in the distribution of the bile, and possibly of the existence of disease of the liver. Chlorosis points out to us a state of leukæmia associated with languid nutrition; and melasma a state of exhaustion of a part of the organic system of nerves, in one instance referable to the uterine plexuses, in another to those of the capsulæ suprarenales. These must be regarded as coarse and prominent examples only of the significance of the appearances of the skin; but it will be obvious, from the consideration of them, that there must be many more besides.

To the genius and foresight of Æsculapius Medicine owes its deepest gratitude; it was he who first saw the importance of clinical annotation, and to an imitation of the records of those early days we are indebted for the scientific status of our art at the present time. In the temples or dispensaries founded by Æsculapius, and afterwards dedicated to his memory, it was the office of the Priest-Physicians to draw up and to preserve a careful report of all the cases that came before them. These reports were treasured with the most jealous care; and they were used as the foundation of the description of diseases which has been handed down to ourselves.

The importance of those clinical records is shown by the fact that many of the terms which we use in dermatology at the present day were employed by the ancients, and very possibly fell from the lips of the great master Æsculapius himself.

Ancient Greek Terms (*Objective*).

Colour.

Alphos—ἀλφός, white; ἄλφιτον, barley meal.
Leuke—λευκός, white, shining.
Phalakros—φαλός, white, bright.
Melas—μέλας, black.
Anthrax—ἄνθραξ, a coal.
Erythema—ἐρυθαίνειν, to blush, to become red.
Erysipelas—ἐρυθρός, red; πέλλα, the skin.

Figure.

Pityriasis—τὰ πίτυρα, bran.
Krithe—κριθή, barley.
Kenchrias—κέγχρος, millet.
Sykosis—σῦκον, a fig.
Terminthos—τερέβινθος, pistacia terebinthus.
Kerion—κηρός, wax.
Melikeris—μέλι, honey; κηρός, wax.
Choirades—χοῖρος, a young swine; χοιράς, a rock.
Akrochordon—ἄκρον, a point or end; χορδή, a cord.

Quality.

Idroa—ἱδρώς, sweat.
Lepra—λέπος, rind; λεπρός, rough, scaly.
Spargosis—σπάργωσις, swelling.

(*Subjective.*)

Development.

Exanthema—ἐξ, out; ἄνθος, a flower.
Exanthesis— ,, ,, a flowering out.
Ekzema—ἐκζεῖν, to boil out.
Ekthyma—ἐκθύειν, to break out.
Phlyktaina—φλύειν, to bubble or boil up.
Phyma—φύειν, to grow up.
Herpes—ἕρπειν, to creep.
Leichen—λείχειν, lingere, to lick.
Epinyktis—ἐπί, upon; νύξ, night.
Madarotes—μαδάειν, to flow away.

Symptoms.

Phlyzakion—φλύζειν, to be hot.
Phygethlon—φρύγειν, to roast.
Psora—ψώειν, to rub.
Knidosis—κνίδη, a nettle; κναίειν, to scratch.

Cause.

Ephelis—ἐπί, upon; ἥλιος, the sun.
Cheimetlon—χεῖμα, winter.

Seat.

Ionthos—ἰονθος, root of a hair.

Period of Life.

Akne—ἀκμή, ἀκμαί, flos ætatis.
Dothien—δοθιήν, boil, small abscess.

On the table before us I have assembled a considerable number of terms of dermatology (about thirty-six), which I have collected from the writings of Hippokrates, and I have by no means exhausted the store. With the view of better comprehending their signification, I have arranged them in two groups, according to their *objective* or to their *subjective* character. In the objective group we discover three leading ideas—namely, *colour*, *figure*, and *quality*; and in the subjective group, development, symptoms, cause, situation, and period of life.

Thus, in the objective class, and in the sub-group represented by colour, we find *white* in the instance of alphos, leuke, and phalakros; *black* in melas and anthrax; and *red* in erythema and erysipelas. In the sub-group designated by the *figure* of the objects, we have pityriasis, resembling bran; krithe, resembling a grain of barley; kenchrias, resembling a millet-seed; sykosis, resembling a fig; terminthos, the cone of the turpentine fir; kerion, the honeycomb; melikeris, clear honey as it flows from the honeycomb; choirades, a hog's back; and akrochordon, a rope's end. While in the sub-group which takes cognisance of the *quality* of the object, we meet with idroa, or a resemblance to the watery perspiration; lepra, or roughness and scaliness; and spargosis, a state of swelling.

In the subjective class the largest sub-group relates to the mode of *evolution* or *development* of the disease—for example, exanthema, a state of blossom; exanthesis, a blossoming out; ekzema, a word which we have not succeeded in finding in the writings of Hippokrates, but too important to be passed over, a boiling out; ekthyma, a breaking out; phlyktainai, bubbles produced by boiling; phyma, a growth; herpes, a growth by creeping or spreading from the circumference; leichen, a growth which licks the surface and holds on by adhesion to its base; epinyktis, a growth by night; and madarotes, a flowing away, as of the hair when it falls off. Next, as indicative of *symptoms*, we have—phlyzakion, a hot eruption; phygethlon, a consequence of a roasting heat; psora, an eruption provoking rubbing; and knidosis, an eruption provoking scratching, like that occasioned by the knide or nettle. Then we have terms having reference to *cause*; such are—ephelis, a sunburn; and cheimetlon, a winter companion; and, in addition, ionthos, an affection relating to the root of the hair; akne, an eruption corresponding with a particular period of age; and dothien, a word of doubtful meaning, signifying a small abscess or boil.

This enumeration teaches us that words, which at present we regard as scientific, were, at that early period, the popular expression of—mode of appearance and growth, figure, colour, symptoms, physical nature, cause, locality, etc. They are the common language of the people, they concealed no doctrinal mystery, and, at the present hour, they are as eloquent as in the days of our ancestors. What, for example, can alphos mean but white, and melas black; lepra rough, and herpes spreading; leichen licking or adhering to; and psora rubbing or scratching? And the same for all the rest.

The ancients were observers of too shrewd a stamp to have overlooked the *anatomy* of the skin. We have it on record that

Podalirius, the elder of the sons of Æsculapius, on his return from the siege of Troy, was wrecked at Caria, and that, on an accident happening to Syrna, the king's daughter, he bled her, and afterwards became her husband, relinquishing his Surgical practice at home for his wife's ample dower and domain, the Chersonesus. To men of their acknowledged ability, the bubbles of the phlyktai and phlyktainai must necessarily have revealed the constitution of the skin as of two layers; and we find, besides, the curious observation, hardly appreciated at the present time, of the relation of ionthos, the synonym of akne, with the root of a hair. The most important modern discovery in reference to the anatomy of the skin is that of the permanence and organisation of the rete mucosum and its nutritive operations in the elaboration of pigment and in the formation of the horny epidermis.

The *physiology* of the skin is exemplified in its growth, its colour, and its structure; in its secreting and absorbing function, and in its sensibility. And its *pathology* is manifested by its aberration from the normal standard of structure and function. Thus, it may be redder than natural, or discoloured in various degrees—for example, white, or black, or yellow, or blue, with their intermediate tints. Again, it may be raised on the surface into solid prominences of different size; or it may be, as it were, unfolded or dissected by the interposition of fluid between the rete mucosum and the horny layer of the epidermis, or by the voluntary separation of the epidermis in flakes of various thickness and of various extent. These diverse abnormal appearances of the cutaneous surface have received the name of *pathological lesions*, and are nine in number. For example, those dependent on colour are rubor and macula; those which are due to a solid outgrowth of the skin are termed papula, tuberculum, and tuber; those that result from the interposition of fluid between the layers of the epidermis are bulla, vesicula, and pustula; and that in which the epidermis is cast off in laminæ or scales is denominated squama.

Primary Pathological Lesions.

Rubor.
Macula.

Papula.	Bulla.
Tuberculum.	Vesicula.
Tuber.	Pustula.

Squama.

We commonly designate these pathological lesions as *primary*, in order to distinguish them from others which we term *secondary*, and which in reality are general rather than special, and frequently accidental. For example:—

Secondary Pathological Lesions.

Desquamation.	Fission.
Induration.	Ulceration.
Incrustation.	Cicatrisation.
Excoriation.	Discoloration.

Rubor, or redness, presents many degrees of variety, from the simple blush of emotion to the vivid hues of erythema and erysipelas. It is due to a filling of the bloodvessels of the skin with blood, a state of hyperæmia dependent on exhausted nerve force and consequent dilatation of the capillaries. It obeys the laws which govern the blood in its circulation through the rest of the body. It is vivid and bright when the circulation is active; crimson, or purple, or livid, when the circulation is languid. It is sometimes evanescent, as in urticaria; sometimes prolonged and arterial, as in ekzema; sometimes arterial-venous, as in gutta rosea; or completely venous, as in erythema a gelu or common chilblain. Moreover, in rubor of a permanent kind the capillaries are sometimes dilated to the bulk of minute arterioles, and constitute a plexus, which must be regarded as a form of angeiektasia.

Macula, or stain, is another form of coloration of the skin, which is sometimes due to an abnormal state of the bloodvessels, sometimes to the escape of blood from its vessels and its diffusion in the adjacent tissues, sometimes to a degeneration of the dermal tissues, and sometimes to an alteration of pigment. The vascular nævi, angeiomata, certain forms of angeiektasia and phlebektasia, all of them referable to a permanent dilatation of the cutaneous vessels, arteries and veins, are examples of maculæ. So also are the small purple stigmata, the petechiæ, the vibices and the ecchymomata of purpura and the ecchymosis of a bruise, spots which, unlike the blotches of rubor, remain permanent, and become more distinct under pressure with the finger. In the third series come the degenerations of the derma of xanthelasma and melanoma and the fibrous degeneration of morphœa and leuke. And then follow the pigmentary spots of melasma, of chloasma, of lentigo, and kyanopathia, all seated in the rete mucosum.

Papula, the pimple, brings to our notice the well-proven fact that the skin is not what it seems. It is not the smooth, homogeneous plane which it appears to the untrained eye, but is everywhere perforated by openings—the pores—which, over the greater part of the body, transmit a hair, and in some few situations, as the palms and soles, a watery secretion only. These openings or pores are the portals of the cutaneous follicles, and the follicles, besides serving as the sheath of the hairs, also receive, near their outlet, the ducts of the sebiparous glands. In structure, the follicles represent an inversion of the skin, and possess a similar structure; they have their epithelium or epidermis, and their capillary plexus no longer spread out in a horizontal plane, but vertical in position and disposed like a cylinder, one extremity of the cylinder surrounding the pore, and the other penetrating inwards to the fundus of the follicle. When the skin is shrunk by the cold, the pores of the follicles, as a consequence of the structure just described, stand up in strong relief, and constitute the cutis anserina. And when the follicular vascular plexus is turgid with blood, and, still more, when, in addition to turgescence of vessels, there is infiltration into the intervascular spaces, the pores become the summit of small conical prominences, which are termed papulæ. The papula, therefore, ranges in size from that of the minute conical and colourless prominence of cutis anserina to the small red papula of leichen, or the still larger and coarser pimple of akne. In the apex of every papula is the aperture of a pore; immediately around the pore is the horny cone of epidermis that descends into the follicle and is continuous with its lining membrane, and externally to this, and forming the body of the papule, the follicular vascular plexus enclosing its infiltrated intervascular tissue. Moreover, before the papule is developed, and after it has disappeared, a vascular punctum is perceptible at the circumference of the pore, marking the state of congestion of the vascular plexus.

The *tubercle* is larger than a papule, and is not limited to a single pore and follicle, but implicates several. It may begin as a pimple, may show itself first as a vascular punctum, then become prominent, constituting a papule; but very soon neighbouring follicles, taking on a similar process, become blended with the first, and so a compound or multiple papule is formed, and is distinguished from the simple papule by its greater bulk, and also by its smoothness of surface. Unless seen at an early stage, the origin of a tubercle by a punctum or by several puncta may fail to be distinguished, but it is nevertheless evident, from the mere fact of its bulk, that several follicles must be implicated. As size is a principal element of distinction between a papule and a tubercle, it may be as well to mention that a papule will range in size between one and two and even three lines in diameter, while a tubercle commences at three lines, and may sometimes measure double that number—that is to say, half an inch.

The *tuber*, or small tumour, advances in bulk and size beyond the tubercle—to a size corresponding with a furunculus or small abscess, such as the "panus" of the Latins. It is the "phyma" of the Greeks, and is well illustrated by the encysted tumours so commonly met with in the scalp.

We believe that a little consideration of the subject will be sufficient to fix on the mind the three stages of growth, to which the terms pimple, tubercle, and tumour are correctly applicable, and that nothing need be said of their structure.

The *bulla* is a bleb or blister formed by the effusion of a serous fluid on the surface of the rete mucosum, splitting up the epidermis, and raising the horny layer of the cuticle into a convex dome. It is typified by the blister caused by cantharides, or by a burn, and presents a similar appearance, an erythematous or hyperæmic base, a serous effusion, and a diameter of various extent, ranging from a few lines to several inches. The development of blisters as an idiopathic affection is termed pemphigus, an individual blister of large size is a phlyktis, while those of smaller size are the phlyktainai. The smallest kind of bullæ, which in reality are simple vesicles, are termed, from a comparison of their size with the millet seed, kenchrias, or miliaria; and others, somewhat larger, are met with in herpes—for example, in herpes zoster or shingles.

Vesicula is a bulla of small and even of minute size, but in pathological structure is identical with the rest; there is commonly the inflamed base, the hemispheroidal or conical dome, and similar contents, limpid, serous, and transparent. The essential difference between the vesicula and the bulla is the extent of surface brought under the influence of the effusive action. In bulla the surface is considerable; in vesicula it is small, often limited to the aperture of a follicle, or the pore

may be surrounded by a chaplet of minute vesicles. It may be said of the vesicle in its relation to a bulla, as I have already remarked with regard to the relation subsisting between a papula and a tubercle, that the difference of structure is merely one of bulk.

The *pustule* is a vesicle in structure, and differs from it only in the nature of its contents, and the pus, more or less diluted with serum, is sometimes formed at the expense of the cells of the rete mucosum, and sometimes of the connective tissue of the derma. In certain eruptions it is not uncommon to find the contents of the pustule to be serous at first, and subsequently purulent; while at other times vesicles and pustules are met with side by side in the same eruption.

Squama, or scale, is an excessive formation and exfoliation of the horny epidermis, for the most part abnormal both in texture and colour. It is best illustrated by the *lepra* of the Greeks, wherein the scales constitute the element of roughness, and the abnormal structure, as exhibited by whiteness, has received the name of alphos. Scaliness is met with also in other affections, and especially in ekzema, but in none are the scales so characteristic or the claim to special consideration so deserved.

I may pass quickly over the signs representing the secondary pathological lesions.

Desquamation relates to the separation of the normal cuticle over an inflamed surface of greater or less extent, as occurs in the exanthemata, and notably in that remarkable form of ekzematous eruption, dermatitis exfoliativa, the pityriasis rubra of Devergie and Hebra.

Induration is the consequence of infiltration and condensation of the tissues of the derma, such induration being always accompanied with more or less swelling or tumefaction.

Incrustation is the coating or covering over of exuding surfaces by the desiccation of moist secretions and discharges of various kinds.

Excoriation, in general, results from the use of the nails for the relief of itching, or from the operation of pressure and friction in exudative eruptions.

Fission of the skin, giving rise to chaps and rhagades, is a result of the brittleness occasioned by infiltration and consequent inflexibility of the derma; the brittleness of the skin being often so great that the simple movements of the body are sufficient to produce disruption of its tissue.

Ulceration is a consequence of degeneration of tissue, a depression of vital force, and sometimes of the substitution of a lower for a higher form of organised material, the more lowly form of organisation being incapable of maintaining its existence, and therefore falling into dissolution and decay.

Cicatrisation is the process of restoration of lost tissues, of the replacement of the highly organised structures of the skin by a substance of inferior structure, generally white fibrous and connective tissue; while

Discoloration is the stain of the skin left on the site of a foregone primary lesion attended with hyperæmia: such are the brown stains of lepra, of dermato-syphilis, and of the congestion resulting from varicose veins.

The pathological lesions have a peculiar interest for the Medical observer, since not only are they the signs of a departure of the skin from the normal standard of health, but they are also the means of distinguishing different forms of cutaneous disease from each other; they are, in fact, the basis of *diagnosis*.

By their aid we determine an eruption of redness only from one of papulation or tuberculation, of vesiculation or pustulation, or squamation. And a careful consideration of these lesions teaches us the principle of a very popular form of classification of cutaneous diseases—namely, that initiated by Plenck and modified by our countryman Willan—the so-called artificial classification.

In illustration of diagnosis, if we meet with an example of pathological *redness* of the skin or rubor, without any visible disturbance of its structure, we may conclude that the disease is an erythema or the early stage of erysipelas, an urticaria or the blossoming out of one of the exanthemata—for example, a roseola, rubeola, scarlatina, or, maybe, variola. If the case be one of prominence in the form of small *pimples*, the disorder is probably a leichen; if it occur upon the face or shoulders, an akne; or at the roots of the beard, a sykosis; or the pimples may be of glandular origin. If instead of pimples the eruption be one of *tubercles*, it may be a case of aggravated akne or sykosis, a lupus, a dermato-syphilis, an epithelioma, an elephantiasis, or a harmless growth.

In the case of cutaneous *tumours*, the diagnosis might be an encysted tumour, a furunculus, or an anthrax. An eruption of *bullæ* constitutes a pemphigus; of large vesicles, a herpes or a miliaria; and if the *vesicles* be minute, we may regard the case as an ekzema. An outbreak of *pustules* may be an impetigo, an ekthyma, a variola, or a dermato-syphilis. And an exfoliation of the skin in *scales* may be a lepra, a dermatitis exfoliativa, a chronic ekzema or psoriasis, a pityriasis or an ichthyodes.

In this way the pathological lesions become the means of a rude kind of diagnosis, to be sifted subsequently by a more precise and differential diagnosis.

Cause.—If we ask ourselves the question—What can be the *cause* of the pathological lesions, that is, of diseases of the skin?—we shall find that in some instances they are due to defect of development, sometimes to an error of nutrition, sometimes to mal-assimilation, sometimes to irritation external or internal, and sometimes to a specific poison. Defect of development is seen in ichthyodes and akne; error of nutrition in phytosis, in lepra, in lupus, in chelomа, in morphœa, in molluscum, in angeioma, and in epithelioma; defect of assimilation is manifested by ekzema, by impetigo, by ekthyma, and the anthrakoid affections; external irritation acts as a cause in erythema, ekzema, scabies, and cheimetlon or chilblain; and the operations of a specific poison in the exanthematous and continued fevers, as also in elephantiasis, in equinia, and in dermato-syphilis.

The *prognosis* of cutaneous diseases is favourable as far as the life of the individual is concerned, but unfavourable in respect of duration; they are generally chronic and obstinate, partly because they are a manifestation of a defective assimilation and nutrition difficult to renovate, and partly because they are especially exposed to the influence of external irritants, such as cold, heat, and moisture. There are some which run a regular course, and begin and end within a limited space of time—such are herpes zoster and the exanthemata; others are restricted to a given period of life, such as ringworm and akne; while some appear to identify themselves with the individual and become a part of his nature.

The *treatment* of diseases of the skin is founded upon the cause and upon the habits of the pathological phenomena. If a disease possess a known course, our business would be simply to watch it and protect it from aggravation. On this principle we dredge an erysipelas, a herpes, or a pemphigus with some unirritating absorbent powder, such as flour or starch. If an eruption be productive of an excess of moisture, we employ desiccant remedies; if the disorder be over-dry, our applications must be moistening. Where irritation is present, the treatment must be soothing; but where languor or torpidity prevails they must be stimulating. Sometimes the indication may be to arrest an existing action and substitute another, sometimes to destroy with the caustic, and sometimes to remove with the knife. In all this it will be perceived that there is nothing more than is comprehended in the general principles of Surgery adapted to an existing necessity. And I need do no more than suggest that we should reason well upon the subject before we act, and do nothing whatever without a sufficient reason. There are very few specifics for disease in general; for diseases of the skin it may be said that there are none. Arsenic might be cited as a specific; but arsenic is nothing more than a tonic—possibly a nerve tonic—and obeys the same laws as other tonics; it is only suitable after a course of preparation by other remedies, and by no means acts in all cases alike. With few exceptions, the medicines adapted to the improvement of the general health are those which are best suited to combat with cutaneous disease, and those that exert a stimulant or tonic influence have gained the highest amount of reputation. Of this kind are arsenic, and sulphur, and tar. And as a general principle, the treatment of a cutaneous disease, whatever its kind, is to regulate the functions of the body conducive to general health in the first instance, and, that being accomplished, to have recourse to more direct remedies.

From general considerations relating to the structure and functions of the skin, its pathology, and the diagnosis, cause, prognosis, and treatment of its morbid conditions, our next step is the differentiation of the varieties of the morbid affection, and their arrangement in groups corresponding in nature and resembling in general features—in other words, their *classification*. In its simplest sense, the differences of nomenclature, such as we meet with them in the writings of Hippokrates, are nothing less than a classification; thus, in the tables before us we find groups representative of colour, figure, quality, development, symptoms, cause, seat or situation, and age. That is to say, the simple examination of the Hippokratic vocabulary leads us, as by a necessity, to a classification into certain groups of which eight at least may be enumerated. May we not there-

fore conclude that dermatological classification is coeval with the earliest observations of the fathers of Medicine?

Eighteen years previously to the commencement of the Christian era, appeared the excellent work of the most accomplished Physician of the Augustan period of Rome, the admirable Celsus; Celsus gave great expansion to the classification of diseases of the skin, and was the means, at the same time, of handing down to the present age some of the Latin synonyms of the Greek tables which we have already examined. He viewed diseases in general in their *therapeutical* character, and cutaneous affections he grouped under four heads—namely: 1. Such as are to be treated by diet; 2. Such as require the use of medicines; 3. Diseases demanding local treatment; and 4. Surgical diseases. Am I wrong in stating that there is material for thought and reflection, even at the present day, in the sound and practical classification of the distinguished Roman?

Classification of Celsus (Therapeutical).

1. *Treatment by Diet—General Disease.*

Elephantiasis.

2. *Treatment by Medicines—Limited Disease.*

Erysipelas (traumatic).	Myrmekia.
Bites and stings.	Clavus.
Carbunculus.	Pustulæ.
Carcinoma.	Exanthemata.
Therioma.	Phlyktænæ.
Ignis sacer.	Phlyzakion.
Chironium.	Epinyktis.
Pernio.	Scabies.
Struma.	Impetigo.
Furunculus.	Papulæ.
Phyma.	Vitiligo.
Phygethlon.	Alphos.
Kerion.	Melas.
Akrochordon.	Leuke.
Thymion.	

3. *Treatment by Medicines—Local Diseases.*

Defluvium capillorum.	Ophiasis.
Calvities.	Varus.
Porrigo.	Lenticula.
Sykosis.	Semeion.
Area.	Ephelis.
Alopekia.	Phtheiriasis.

4. *Treatment by Surgical Means.*

Ganglion.	Steatoma.
Melikeris.	Hordeolum.
Atheroma.	

In recording the knowledge of these diseases possessed by the Greeks, Celsus adopts many, and indeed the greater number, of the terms in their original dress; to about one-third of the whole he applies the language of his own country; hence, some of the Greek terms have descended to us with a Latin synonym, and this circumstance has created a degree of confusion in modern nomenclature, to the extent, in certain instances, of bestowing the Greek term on one disease and the Latin synonym upon a disease of a totally different character—we may instance, for example, ekzema and scabies, pityriasis and porrigo.

Greek and Latin Synonyms.

Akne	Varus.
Akrochordon	Verruca pensilis.
Alphos	Vitiligo albida.
Anthrax	Carbunculus.
Cheimetlon	Pernio.
Choirades	Scrofula.
Dothien	Furunculus.
Ekzema	Scabies.
Erysipelas	Ignis Sancti Antonii.
Idroa	Sudamina.
Ionthos	Varus.
Kenchrias	Miliaria.
Kerion	Favus.
Knidosis	Urticaria.
Krithe	Hordeolum.
Lepra	Vitiligo albida.
Leuke	Vitiligo candida.
Melarotes	Calvities.
Melas	Vitiligo nigricans.
Phalakros	Calvities.
Phlyktainai	Bullulæ.
Phygethlon	Panus.
Phyma	Tuber.
Pityriasis	Porrigo.
Psora	Scabies.
Sykosis	Mentagra.

As far back as the sixteenth century, two distinguished contemporary writers, Mercurialis of Pavia, and Riolanus of Paris, arranged diseases of the skin in accordance with their physical characters, initiating, in fact, the more extended classifications of Plenck and Willan, both of which are founded on the same basis. Mercurialis divides diseases of the skin into affections of the head and affections of the body, and the latter into diseases of colour, of roughness, of smoothness, and of magnitude; while Riolanus, without any primary division, includes the whole under the three heads embraced by the terms—pustula, deformitas, aud tuberculum. Out of this simple division Plenck, in his character of a nosologist, contrived to develope a system comprehending fourteen classes and 115 genera. And Willan, adopting the chief of Plenck's classes, reduces the number to eight, which he terms orders.

Mercurialis' Classification, 1570.

Nat. 1530, *ob.* 1606.

I.—Diseases of the Head.

Defluvium capillorum.	Achor.
Alopekia.	Favus.
Ophiasis.	Tinea.
Calvities.	Psydrakia.
Canities.	Helkydria.
Morbus pedicularis.	Sykosis.
Porrigo.	Exanthemata.

II.—Diseases of the Body.

1. *Colour.*

Leukai.	Vitiligines *s.* Alphoi.

Exanthemata.

2. *Asperity and Levity.*

Pruritus.	Impetigo.
Scabies *s.* Psora.	Lepra.

3. *Magnitude.*

Papulæ.	Myrmekia.
Akrochordones.	Clavi.
Thymi.	Calli.

Riolan's Classification, 1580.

Nat. 1539, *ob.* 1605.

1. *Pustula.*

Pruritus.

Scabies. . . . { Psora. / Lepra. / Porrigo.

Leichen *s.* Impetigo.

Scabies capitis . . { Favus. / Achor. / Tinea. / Psydrakia. / Epinyktis.

Ambusta.

2. *Deformitas.*

Maculæ . . . { Lentigo. / Varus *s.* Ionthos. / Facies flammea. / Ephelis. / Gutta rosacea.

Discoloratio . . . Vitiligo *s.* Leuke.

Casus pilorum.

Alopekia { Area. / Ophiasis.

Calvities.

Canities.

Phtheiriasis.

Gibbus.

3. *Tubercula.*

Verruca.	Condyloma.
Myrmekia.	Mariscæ.
Thymi.	Callus.

Ficus in ano.

Plenck's Classification, 1776.

Maculæ.	Callositates.
Pustulæ.	Excrescentiæ cutaneæ.
Vesiculæ.	Ulcera cutanea.
Bullæ.	Vulnera cutanea.
Papulæ.	Insecta cutanea.
Crustæ.	Morbi unguium.
Squamæ.	Morbi pilorum.

The classification of Willan is an arrangement founded on the pathological lesions, with this qualification, namely, that the

period selected as the type of the affection is the moment of maturity. Thus, in the instance of variola, which passes rapidly through a series of evolutions corresponding with different lesions, the moment selected for classifying it is its pustular stage—in fact, unless a given eruption be seen at its height, the Willanean classification becomes an erroneous guide, and, as we know, an eruption may be a simple hyperæmic punctum to-day, a papula to-morrow, and a vesicula or pustula the day after. The Willanean classification is thought simple because it involves the most elementary part of the study of the pathology of the skin—because, in truth, it is founded on the alphabet of dermatopathological inquiry. It is the classification applicable to the lowest form in a school in which there are higher forms; and it addresses itself to a part only, instead of to the whole of the subject.

Willan's Classification, 1798.

Eight Orders.

Papulæ.	Pustulæ.
Squamæ.	Vesiculæ.
Exanthemata.	Tubercula.
Bullæ.	Maculæ.

But a more serious charge that may be brought against the Willanean classification is, that on the mere chance of their being papular, or squamous, or vesicular, or tubercular, or so forth, it assembles together incongruous and incompatible diseases. It has been termed artificial, and has been compared with the Linnæan classification of the vegetable kingdom; and, just as the faults of the Linnæan system created a necessity for the system of Jussieu or the natural classification of plants, so the shortcomings of the Willanean classification gave occasion to *Alibert* to inaugurate a natural classification of diseases of the skin, or, as he terms them, of dermatoses. As in the system of Jussieu, the classification of Alibert is founded on the idea of natural families, and these, according to him, are twelve in number—the twelve branches, as he was pleased to term them, of the "tree of the dermatoses."

Alibert's Classification, 1810.

(*Arbre des Dermatoses.*)

Ekzematous.	Syphilons.
Exanthematous.	Strumous.
Tineous.	Scabious.
Dartrous.	Hæmatons.
Cancerous.	Dyschromatous.
Leprous.	Heteromorphous.

Both the preceding—namely, the artificial classification of Willan and the natural classification of Alibert—are founded on the pathology of the skin, in the one instance being purely objective, and, in the other, chiefly subjective; but it is evident that another basis is presented to us in *physiology*, which was taken possession of, in the first instance, by *Rayer*, and subsequently by myself. Rayer disposes of these affections under two principal heads—namely, diseases of the skin proper, and diseases of its appendages; and, following in the footsteps of Rayer, I arranged them in four groups—namely, diseases of the derma, of the sudoriparous glands, of the sebiparous glands, and of the hair and hair follicles.

Rayer's Classification, 1826.

1. *Inflammatory Affections.*

Exanthemata.	Papulæ.
Bullæ.	Squamæ.
Vesiculæ.	Tubercula.
Pustulæ.	Syphilis.
Furunculi.	Ambustio.
Gangrænæ.	Pernio.

2. *Non-inflammatory Affections.*

Anæmiæ.	Hæmorrhagiæ.
Congestus sanguinis.	

3. *Diseases of Secreting Functions.*

Ephidrosis.	Epidermidis exfoliatio.

4. *Neuroses.*

Anæsthesia.	Hyperæsthesia.

5. *Faulty Structure.*

Pigmentary affections.	Cicatrices.
Hypertrophiæ.	Defectus congenitus.
Gangræna simplex.	Extensio *s.* relaxatio insolita.

6. *Degenerations.*

Fibrous.	Tuberculous.
Melanotic.	

Next after pathological lesions, natural affinities, and physiology, comes the classification of *Hebra*, having for its object to identify cutaneous pathology with general pathology. It may be said of the preceding classifications that they are too exclusively special, and that a language which should have the effect of exhibiting the alliance naturally subsisting between the pathological phenomena of every part of the body must necessarily be a desideratum. Hebra's classification, realising this idea of a universal pathology, is represented by twelve classes, as follows :—

Hebra's Classification, 1844.

Twelve Classes.

Hyperæmiæ.	Hypertrophiæ.
Anæmiæ.	Atrophiæ.
Anomalia secretionum et organorum secernentium	Neoplasmata (homœoplasiæ.)
	Pseudoplasmata (heteroplasiæ).
Exudationes.	Ulcerationes.
Hæmorrhagiæ.	Parasitæ.

It may seem presumptuous in me to express a dissatisfaction with the whole of these classifications, the creations of able and zealous men; but when they come to be tested in their practical application, they are all found to be more or less faulty, and the mind yearning after perfection, or at least the perfection of practical usefulness, wanders away to other ideas. We may be told that one classification is good, because it is easily retained by the memory; but of what value is easy remembrance, if the classification embrace only a part of the subject? Another classification is good because it is founded on practical considerations; but of what service are practical considerations, when it is almost impossible to carry the classification in the memory? A third classification is good because of its being founded on structure and function; but then its tendency is too specific, and it is rebellious to practical views. While a fourth classification may, in its very nature, be too general.

It was in the midst of hesitations and doubts such as these, that the key to another classification was suddenly put into my hand in the course of a numerical examination of a long catalogue of cases of cutaneous disease. The inquiry was practical, it was clinical; it related to the frequency, to the cause, and to the duration of diseases of the skin; and it showed in strong relief the overwhelming importance of one disease in comparison with all the rest—namely, ekzema. Commencing with ekzema and its allies, that is, ekzematous affections, other groups followed simply and naturally, and seemingly as a matter of course, and, to the whole, no designation appeared so applicable as "*clinical classification.*"

In its simplest shape the *clinical classification* presents us with nineteen groups, which may be assembled under nine primary heads, for example :—

I. Inflammations.
II. Blood-poisons.
III. Diathetic.
IV. Traumatic.
V. Neurotic.
VI. Nutritive.
VII. Epidermic.
VIII. Trichopathic.
IX. Adenopathic.

And the nineteen groups are shown in the following table:—

1. Ekzematous Affections.
2. Erythematous Affections.
3. Phlyktænous Affections.
4. Dothienic Affections.
5. Exanthematous Affections.
6. Syphilitic Affections.
7. Elephantous Affections.
8. Leprous Affections.
9. Strumous Affections.
10. Carcinomatous Affections.
11. Traumatic Affections.
12. Neurotic Affections.
13. Nutritive Affections.
14. Epidermic Affections.
15. Onychopathic Affections.
16. Chromatopathic Affections.
17. Trichopathic Affections.
18. Steatopathic Affections.
19. Idrotopathic Affections.

This is the plan of arrangement which I propose to follow in the present course of lectures, the details of the plan being

more fully elaborated in the tables before us. For example, I shall consider cutaneous diseases under two *primary* heads, namely :—

I. Diseases of Inflammation; and
II. Diseases affecting the Functions of the Skin and its Apparatuses.

The diseases of inflammation are :—

1. Inflammation from Common Causes.
2. Inflammation from Specific Poisons.
3. Inflammation from Specific Constitutional Causes.
4. Inflammation from Traumatic Causes.

The diseases affecting the functions of the skin and their apparatuses are :—

5. Aberrations affecting Sensation.
6. Aberrations of Nutrition.
7. Aberrations affecting the Epithelium.
8. Aberrations affecting the Hair.
9. Aberrations affecting the Secreting Organs, Sebiparous and Sudoriparous.

In the next place we find that these primary heads admit of subdivision into *groups*, and the groups into *separate diseases*. Thus, under the head of "inflammations" there occur *eleven* groups; and under the head of "Diseases of Function and Apparatuses" *eight*, making the whole number *nineteen*.

APPENDIX TO LECTURE ON METEOROLOGICAL READINGS IN RELATION TO SURGICAL PRACTICE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

Since the publication of my last lecture "On Meteorological Readings in Relation to Surgical Practice," I have become indebted to Dr. Silver for a knowledge of an essay on the same subject published by Dr. Addinell Hewson in the *Pennsylvanian Hospital Reports*, vol. ii. 1869. I was not until now aware that in any Hospital in the world a register of Surgical operations had been kept, together with a meteorological register. But from Dr. Hewson's admirable contribution I learn that, for the long period of thirty years, records of the cases of primary amputation previous to the year 1860 have been stored up at the Pennsylvanian Hospital, with a meteorological register, "most faithfully kept at the Hospital during all that period by Dr. Conrad, the Apothecary." I learn, further, that the total number of cases of operation for which the Pennsylvanian Surgeons have full meteorological records is 259; the results as analysed by Dr. Hewson stand as follows :—

"On the occasion of the 259 operations, the barometer was ascending in 102, descending in 123, and stationary in 34.

"Fifty-four of the whole number were fatal; 11 of them were operated on when the barometer was ascending, 35 when it was descending, and 8 when it was stationary.

"Of the successful cases, 91 were operated on with an ascending barometer, 88 with it descending, and 26 with it stationary.

"From which it would seem," says Dr. Hewson, "that we got a mortality, when the operation was performed with the barometer ascending, of not quite 11 (10·7) per cent.; of over 20 (20·6) per cent. with it stationary; and over 28 (28·4) per cent. with it descending."

"Of the fatal cases, the average length of time which the patient survived the operation was only seven days when the barometer was ascending, and thirteen when it was descending; and of the cases which died within three days over 75 per cent. were when the barometer was ascending."

In so far, then, as general results are concerned, Dr. Hewson is brought by his precise statistical evidence to the same point as myself. Thinking by different methods, we have converged to the same truth. He had the advantage of comparing thirty years' direct Surgical observation side by side with thirty years' meteorological observation. I was obliged to consider Surgical fever in conjunction with its allies, and to compare these together by the side of the meteorological conditions; but I had what to me was an advantage, the teaching of experiment, directing me steadily towards the light.

In one direction Dr. Hewson has arrived at a new inference which I could not arrive at from the materials at my command. He connects, as I have done, fatal pyæmia with low barometrical pressure and moisture of air. On the other hand he connects death from Surgical "shock" with the opposite atmospherical conditions; but, as deaths from shock are comparatively rare, we are at one as to the soundness of the rule of performing operations when the barometer is rising. I seize, with unusual pleasure, the earliest opportunity of recognising the labours of Dr. Hewson and those others of our Pennsylvanian brethren upon whose researches his deductions are based. I had feared that the views I ventured to set forth in my lecture would have to wait long before they received corroboration. To find that they have been independently advanced and supported in another country, and on a plan of observation so unprecedented, is, therefore, a gratification as great as it was unexpected.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

Part III.

SUPPURATION OF THE KNEE-JOINT ENDING IN NATURAL RECOVERY OR ANCHYLOSIS.

(*Continued from page* 92.)

On Suppuration of the Knee-joint terminating in Anchylosis.

Every Surgeon who has had much to do with joint disease, and more particularly joint disease complicated with suppuration, will be ready to admit that a natural recovery with anchylosis is a most desirable result, and it will always be with a very pleasurable feeling that such a termination will have been achieved. It is to be secured, there is little doubt, in a large number of joint cases under favourable circumstances; and it might be secured in many more could the disease be treated at an earlier period than is usual, and could the wants of the individual case be fairly supplied.

In a pathological point of view, it may fairly be asserted that, with patients of ordinary power, all suppurating knee-joints are capable of being repaired with anchylosis if the bones are not extensively and irreparably diseased—that is, if necrosis does not exist to interfere with recovery, or abscess of the bone, burrowing into the joint, does not take place.

In acute suppuration of a knee-joint from synovitis the result of a wound or of any other exciting cause, if Surgical fever does not run too high and the powers of the patient are good, recovery with anchylosis is by no means an improbable event under careful Surgical treatment. It is not common, it is true; still it is fairly within the bounds of a reasonable hope. In chronic suppuration of a knee-joint from the disorganisation of the pulpy disease of the synovial membrane, where no cachexia exists to interfere with nature's reparative processes, a like result may also be looked for.

But when disorganisation of the joint has taken place as a consequence of disease which has commenced in the bones and spread to the articulation, there is little hope of a natural recovery with anchylosis; for it is too probable, under such circumstances, that the disease in the bone is of an irreparable kind, and that the disease of the joint is only secondary in the course of events. It is consequently of little good to treat the effects of disease and not the cause; it is of little value to treat the suppuration of the joint when the disease which gave rise to it is in the bone.

It is true that even in such cases recovery with anchylosis may be secured, but it will only be in exceptional instances; for when suppuration of a joint has taken place as a consequence of bone disease, the cause is, as a rule, too deep and too extensive for a recovery to take place even with a stiff joint.

In a general way it should therefore be remembered that suppuration of a knee-joint the result of synovitis in any of its forms is reparable with anchylosis, whilst the same suppuration the result of the extension of mischief from the bones is rarely followed by such a result.

We will now proceed to illustrate these points by cases. The first three cases are examples of disorganisation of the knee-joint from synovitis the result of an injury; the fourth from the breaking down of the gelatiniform disease of the synovial membrane.

Case 28.—*Suppuration of the Knee-joint after Injury—Proposed Amputation—Refusal, and Recovery with Anchylosis.*

William R., aged 45, a carpenter, came to me at Guy's Hospital in November, 1860, for disease of the knee-joint. It had commenced three years previously after a blow; pain and swelling had appeared directly after the injury, and suppuration within a few months. He remained under my observation for many months, when operative interference was advised, for it appeared that the local disease was undermining the man's health. This recommendation was, however, happily rejected. Soon afterwards the sinus healed, the joint mischief began to subside, and a good recovery eventually took place with firm fibrous anchylosis. The disease was in the synovial membrane throughout.

On January 9, 1862, he was perfectly well with a stiff joint.

Case 29.—*Anchylosis of Knee-joint after Suppuration the Result of a Fall.*

James W., aged 17, came under my care on May 27, 1866, for suppuration of the right knee-joint. Disease in the part had appeared nine months previously after a fall, pain and swelling in the joint being the early symptoms. Two months after the accident an abscess formed in the articulation, and burst on the inner side of the knee. This abscess had been discharging ever since. When he came under observation a sinus existed on the inner side of the knee-joint, clearly communicating with it; the articulation was much swollen, and it appeared as if anchylosis was becoming established.

A splint was applied and tonics were given.

On September 10 the report states that the sinus had healed, and that anchylosis was progressing rapidly. By November the cure was complete.

A splint was directed to be worn for some months as a protection, but all signs of progressive disease had disappeared.

Case 30.—*Anchylosis of Knee-joint after Suppuration the Result of an Injury.*

Eliza B., aged 19, came under my care at Guy's Hospital, on April 30, 1866, for a contusion of the left knee. It appeared that this patient, when 7 years of age, received an injury to the joint, which caused suppuration of the articulation, and terminated in anchylosis. When I saw her the joint was immovably fixed in a straight line, and the cicatrices of old abscesses were clearly visible. The parts about the joint were a little tender from a fall she had recently received. Rest and fomentations gave rapid relief to her symptoms, and she soon disappeared from observation.

The girl during three years, in which her joint was stiff, had used the limb freely without more than ordinary inconvenience.

Case 31.—*Pulpy Disease of Knee-joint.—Suppuration.—Cure with Anchylosis.*

Ellen C., aged 10, came under my care at Guy's Hospital on March 19, 1866, for a disease of her right knee-joint. It had been coming on for nine months, and had followed a fall. Swelling appeared after the injury, accompanied with pain, and both had steadily continued. It was also very hot at times. When seen the knee was much enlarged, measuring 11 inches in circumference, against $8\frac{3}{4}$ inches on the sound side. The bones seemed to be of their natural size, but the enlargement seemed to be due to thickening of the synovial membrane of the gelatiniform kind. The joint was hotter than natural. The cartilages moved smoothly together. Rest was ordered, fomentations were applied, and tonics prescribed. In one month all the symptoms had improved; there was no pain or increase of heat. On May 5 the joint was strapped up, and rest was still enforced. Things went on so well that the child's parents allowed her to walk. On May 21 the symptoms were consequently much worse. The child was then admitted into Guy's under the care of a colleague, where she remained three months; an abscess appeared soon after her admission, and discharged itself above the patella and on its outer side. She left wearing a splint. She then reappeared amongst my out-patients, and steadily progressed towards recovery. The splint was kept constantly on, and tonics were given; walking was forbidden.

On January 9, 1868, or fifteen months after leaving the Hospital, anchylosis was complete. The splint was taken off, and the parts supported with a leather casing.

On January 6, 1869, the child was well, with a good and useful limb. She still wears a casing of leather for protection.

Case 32.—*Complete Anchylosis of Knee-joint, probably Synostosis, after Suppuration.*

Joseph T., aged 14, was admitted into Guy's Hospital under my care in August, 1863, for disease of the left knee-joint. It had existed for about eight years, and for two had been discharging from a sinus on the inner side of the articulation. He remained in Guy's for about three months, and left with the sinus closed, and the knee stiff. He walked upon the limb after this freely, without pain or inconvenience beyond that caused by the stiffness, for five years, when he struck the knee, and an abscess appeared on the site of the old sinus. This healed in about one month. He came to see me in August, 1869, when I found a perfectly stiff limb, and no evidence whatever of disease. The joint appeared to be most completely anchylosed.

Anchylosis after Suppuration of a Knee-joint, the Subject of Chronic Synovial Disease from a Punctured Wound, treated by Free Incision.

The next case I propose to quote is one of great interest—it is one of the pulpy disease of the synovial membrane, into which a puncture was made under the mistaken opinion that pus existed in the joint, and after which acute suppuration followed.

The case has been already published in a former paper, when the practice of freely laying open a suppurating joint was discussed, and is reintroduced here as a good example of a cure by anchylosis after suppuration of the joint from synovial inflammation, the result of a wound, treated by free incisions. The case contains many valuable lessons.

Case 33.—*Acute Suppuration of the Knee-joint following a Puncture into the Articulation, the Subject of the Gelatiniform Disease of the Synovial Membranes—Free Incisions into the Joint, and Anchylosis.*

(Reported by Dr. P. H. PYE SMITH.)

Ellen C., aged 6, a fair but healthy-looking child, was admitted into Guy's Hospital under Mr. Bryant's care on December 10, 1861, for some disease of her right knee. It appeared that the disease had commenced about twelve months previously with swelling of the joint, this swelling being accompanied by pain and heat in the part. It steadily progressed for nine months, when she applied (some three months before admission) to a Hospital, when an opening was made into the joint on its inner side to let out what was believed to be fluid, but nothing escaped; and, as a result, acute inflammation of the joint followed with suppuration. The child's parents, not wishing the child to remain longer in that institution, removed her and brought her to Guy's. When admitted the joint was much enlarged, and was suppurating profusely; the slightest movement caused intense pain. The child looked anxious, and had little power. Mr. Bryant ordered a back splint to be applied, and water dressing to the knee, quinine and wine being given internally. In a week's time, as the opening into the joint was small and suppuration profuse, Mr. Bryant made a free incision into the joint on the outside of the patella, giving exit to pus and broken-up tissue, and from this time everything went on favourably, the discharge gradually diminished, surgical fever disappeared, and the powers of the patient improved. On April 12, 1862, or four months after admission, the joint was firmly anchylosed in a straight position, all suppuration had ceased, and the child's health was re-established. A splint was kept on the back of the knee for some months subsequently as a precautionary measure, and a good leg was secured. The child left the Hospital on August 10 with a useful limb and in good health. She was heard of one year subsequently, and had free use of her limb.

Remarks.—In the case which has just been related many points of interest are illustrated. In the first place it was clearly an example of the pulpy disease of the synovial membrane, and as such it was of a reparable nature under favourable general as well as local circumstances. Had the joint not received its punctured wound, there seemed to be nothing to prevent its ultimate recovery, for the success of the case at a later period clearly proved that the patient's powers were far from feeble, and that a natural cure was not an impossible result.

The evil of a punctured wound into a diseased joint was also too well proved, for the surgical fever and severity of the local symptoms were very great, and threatened both the safety of the limb and the life of the patient.

Lastly, the good effects of a free incision into the suppurating joint was well examplified, both the pain and the constitutional symptoms rapidly disappeared after the adoption of the practice, and a steady convalescence ensued.

ANCHYLOSIS AFTER SUPPURATION FROM RHEUMATIC SYNOVITIS.

We will now pass on to consider another form of synovitis altogether, and for want of a better name it must be called the rheumatic. It is found after what has been described as rheumatic fever, the rheumatism settling in a joint, and too often in the knee-joint.

It is characterised by the severity of the local symptoms, and often by the rapidity of the disorganisation of the joint. In some cases the joint undergoes suppuration or disorganisation within a few days, and when the powers of the patient are feeble some operative proceeding is too often called for.

Under more favourable circumstances, however, anchylosis may take place and a good recovery. The following case illustrates the facts:—

Case 34.—*Suppuration of Knee-joint after Rheumatic Fever—Anchylosis.*

Julia G., aged 27, came under my care, at Guy's Hospital, on November 22, 1860, for disease in her right knee-joint. She had had what was called rheumatic fever twelve years previously, which had settled in her knee. Suppuration took place at that time in the joint, accompanied with some pain and constitutional disturbance, and continued for five years, when it ceased, the joint at that time having become perfectly fixed. For the last four years she had used the limb freely. When I saw it the knee was perfectly anchylosed, the only evidence of disease being the cicatrices of the old abscesses. It was a good leg.

Case 35.—*On a Case of Suppuration of a Knee-joint after Parturition treated by Free Incisions—Recovery, with Anchylosis.*

In this case is illustrated the important fact that acute suppuration of so large a joint as the knee may take place after parturition, and recovery take place, although with a stiff limb. Such cases are not, however, common. They generally occur within the month after delivery; are characterised by acute general as well as local symptoms; and the powers of the patient, too, often break up as rapidly as the joint that is the subject of the disease, and a fatal result takes place.

This disease is clearly closely allied to pyæmia in its origin, and the local symptoms of disease are likewise very like those met with in pyæmia associated with ordinary Surgical cases. It is characterised by the extreme rapidity of the local changes, the joint undergoing disorganisation more rapidly than under any other condition, although it closely resembles in its local features the breaking-up of a joint after a so-called rheumatic fever, such as the last case illustrated.

Case 36.—*Suppuration of the Knee-joint after Miscarriage—Free Incisions into Joint—Recovery with a Stiff Limb.*

Eliza K., aged 35, a married woman, came under my care on October 7, 1864, with a suppurating knee-joint. It had been coming on for six weeks, and had followed in three days upon a miscarriage at the second month. The symptoms of inflammation of the joint had been very acute, and the constitutional disturbance severe. When I saw the patient the joint was much swollen, hot, and painful, any attempt at movement caused great distress, and severe constitutional disturbance existed. The patient's powers were very feeble.

On October 8 a splint was applied, and free incisions made into the joint, one on either side of the patella. Pus and broken-up tissue escaped. Water dressing was applied. From this moment things began to mend; fever and other symptoms disappeared. The woman took food freely, and pain gradually subsided. Anchylosis also went on rapidly.

On December 9, on removing splints, the joint appeared to be fixed. The wounds had healed, and all constitutional symptoms had disappeared.

On January 10 the woman walked out of the Hospital, wearing a good leather splint, with a firmly anchylosed joint.

In January, 1868, she was still well, wearing the splint. She could walk about freely, without pain or inconvenience.

In November, 1869, she had discarded all splints for six months, and could use her limb freely—could walk eight miles at a stretch.

Remarks.—In the present example of what I will venture to call puerperal pyæmic inflammation of the knee-joint, which terminated in suppuration, the symptoms came on within three days of the delivery, and were attended with some severe local as well as constitutional symptoms. Within six weeks the joint became a bag of pus, and the powers of the patient were so low that it was scarcely possible to entertain a hope of a successful result. In no case that I have ever seen was the benefit of a free incision into the suppurating cavity better shown than in the present instance, for all local and general symptoms at once subsided after the adoption of the procedure, and a steady convalescence towards a stiff knee happily was observed. Within three months a complete anchylosis was established, the woman walking upon the limb without pain. A leather casing was, however, kept on subsequently for some time as a matter of precaution. At the present time the limb is a most perfect one, allowing the woman to have full use of it in walking, etc., without a pain.

Case 36.—*Disease in a Knee-joint that had been Stiff for many Years.*

I propose now to quote two examples of anchylosis of the knee-joint, in which the patient had gone about freely for eighteen years or more with impunity, and in which some symptoms of inflammatory disease were set up—in one after fever, in the other after no definite cause. In both, however, a good recovery took place after treatment, although in the latter case the possibility of gaining a good result seemed very remote.

Both are now quite well, and walk with ease on useful limbs.

Case 37.—*Disease in a Knee that had been Stiff for eighteen years—Recovery.*

Ann W., aged 39, a healthy-looking woman, came under my care on November 22, 1865, for some affection of her left knee. It appeared that thirty-one years previously, when only 7 years of age, she received an injury to the joint, and that, as a result, it became the subject of disease. It was bad at times for eleven years, and at last suppurated; she then went into the Brighton Hospital, under the care of the late Mr. Lawrence, and left with a good stiff joint. For eighteen years she remained well, moving about freely with a stiff knee. In May, 1863, she had, however, an attack of fever, and after this the knee became painful and began to swell; she has never been able to get about upon it freely since.

When I saw her, the joint was swollen, hot, and painful; pressure on any part caused pain; and it appeared as if the uniting material between the bones were about to soften down. A splint was ordered, and tonic medicine given. On January 15, 1866, very little if any improvement had taken place; there was, perhaps, less pain and swelling in the articulation, but there seemed to be more movement. On April 26, the report stated that she was improving, and on June 25 everything was going on well. On October 22, all signs of disease had disappeared, and the joint had again become fixed. On August 26, 1867, she again came under my notice with increased pain, evidently from over-walking; a permanent leather splint was consequently ordered to be fixed on; and on August 6, 1868, she was quite well, but the splint was ordered to be continued.

Case 38.—*Anchylosis of the Knee—Softening down—Subsequent Recovery.*

Louisa M., aged 37, a married woman, came under my care at Guy's Hospital on Nov. 27, 1865, for some disease about her left knee. It seemed from her history that thirty years previously, when 7 years of age, she had some disease of her knee-joint, that she was ill for four years, going about on crutches, and that after that the joint was perfectly stiff. She remained well for twenty-five years, going about her business without pain or other inconvenience than that produced by a stiff knee. Six months before her coming to me, without any known cause, pain appeared in the part; it was of a dull aching character and all over the knee; it rendered walking somewhat painful. When I saw her the knee was hot and painful; it was not swollen; pressure between the bones caused pain, and on moving the patella crepitation was felt. A posterior splint was ordered and walking forbidden. Tonics were given. Under this treatment she improved for a time, and for six months some hope of saving the limb was entertained. After this many bad symptoms appeared; locally everything seemed to be going wrong; there was more pain and swelling and more constitutional disturbance. The patient was consequently admitted into the Hospital Feb. 13, 1868, with the feeling that some operative interference would be called for. In this expectation, however, I was agreeably disappointed, for on complete rest being observed, good living, and tonics, all the symptoms gradually disappeared, and she left Guy's in September with a sound and useful limb. A solid leather splint was ordered to be worn for some months.

Remarks.—Cases like these two are instructive; they prove that patients may for many years have useful limbs after extensive disease of the knee-joint, that limbs which are stiff from anchylosis of the knee may be used freely without much inconvenience, and that at last, from illness or injury, the uniting medium may soften down and render the limb useless if not an incumbrance. In the two cases I have quoted of the knee a good result happily followed Surgical treatment, for in both the symptoms subsided and a good recovery ensued; but such

a result is not a constant one. I have seen joints that have been stiff for years undergo a degenerating process and become disorganised, and eventually require an operation. I have in my mind now a case of this kind of the knee in which amputation was performed for such a reason. In the elbow they are also met with in practice as well as in other articulations; nevertheless such a result is not very common, and in no way tells against the practice of attempting to secure a stiff joint after its disorganisation.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

OPERATIONS, ETC.—TUMOUR IN THE NECK—ULCERATED WEN—IMPERFORATE ANUS—PERINEAL SECTION—USEFUL RULE IN OPERATING—TORSION OF ARTERIES—IRRIGATION OF WOUNDS.

On Tuesday, January 18, although there were no operations of any magnitude at this Hospital, we saw enough to furnish some interesting notes for the readers of our Hospital reports. Mr. Poland had a case of tumour in the neck, which served well to demonstrate the occasional difficulty met with in attempting to decide upon the fluid or solid nature of a swelling. The patient was a lad of 19, who had noticed some seven years before a fulness in the neck, which had during the past twelve months grown so rapidly that he had taken fright and consulted a Surgeon about it. It had been duly painted with iodine, as is the custom with obscure swellings generally, but, as usual, the medication had not very obviously affected the rapidity of growth, so that it was now the size of a walnut, smoothly oval, painless, close under the skin, but not adherent to it, and with some obscure sense of fluctuation in it. It was situated just beneath the left parotid gland, and could be almost surrounded by the fingers. Mr. Poland demonstrated the case to the students as one of cystic formation, probably one of the congenital cysts occasionally met with in this situation; and on dividing the skin over it, and so exposing the tense oval encapsuled swelling, proceeded to prick it, to evacuate its contents before dissecting out the cyst wall. The exploratory puncture being infructuous, the tumour was laid open, and proved to be a solid growth of about the consistence and naked-eye appearance of a testicle. It was easily shelled out of its position, and Mr. Poland took advantage of the opportunity of impressing upon the students the care necessary in forming an absolute diagnosis even in a case so apparently simple. We were favoured with a bit of the tumour for examination of its minute structure. Under the microscope the only structure present was that of a lymphatic gland, the nuclei being of the usual size and arrangement; but in some places the delicate reticulated stroma of a lymphatic gland was hypertrophied—so to say—forming broad interlacing bands of homogeneous substance in the contracted meshes of which a few nuclei still remained. The tumour was, therefore, simply an hypertrophied lymphatic gland, but its structure was interesting to pathologists, inasmuch as it was absolutely indistinguishable from that of grey miliary tubercle as met with in the lungs, whilst the part in which the gland stroma seemed so much thickened, exactly corresponded to what is met with in that later stage of tubercle which is known as "fibroid induration" of the lung.

Mr. Poland next introduced a case of unusually large sebaceous tumour of the scalp, as a caution to his audience to remove these swellings early. The man was about 50 years old, and presented a very marked appearance of chronic Bright's disease, with yellow puffy face, pallid hands, and feeble gait. Projecting from the back of the scalp was a lobulated firm growth the size of a cricket ball, with large base, and ulcerated at more than one place on the surface. The state of the general health rendered any operation out of question for the present.

Mr. Durham then brought into the theatre a little girl aged 2, upon whom he had already operated some weeks previously for imperforate anus. The child had been taken soon after birth to a Surgeon in the country, and an attempt had been made to form an artificial anus. When Mr. Durham first saw her, there was no sign of any anal aperture in the perinæum, the fæces being discharged through an opening in the posterior wall of the vagina, an inch from the fourchette. A bent probe, passed into this opening, had entered the bowel, and could be pushed a short distance towards the perinæum. Mr. Durham had already once cut down upon the end of the probe so introduced, but the aperture made had closed up. He now again performed a similar operation, but this time slit up the small opening in the perinæum into the vagina, as there seemed little chance of securing the anal aperture in its proper position, fastening the edges of the wound to the mucous membrane of the bowel with fine horsehair suture. A feature of singular interest, to which Mr. Durham directed the students' attention, was that the child had apparently a double vagina—that is to say, a septum passed down the vagina, dividing it into two lateral passages. The little finger inserted felt an os uteri at the upper end of each; and it seemed at first, therefore, that two uteri were also present. Examination, however, with a bent probe in one passage and the finger in the other, showed that the septum did not extend the whole length of the vagina, the os being situated just opposite the upper free end of the septum.

Mr. Durham also performed perineal section for a man apparently sinking from exhaustion. It was an old case of neglected stricture, such as are now happily not very frequently met with, in which long retentions of urine and the failure of more than one operation had induced grave renal disease, many urethral fistulæ, and finally, recent extravasation with an impermeable stricture close behind the scrotum. Chloroform being given, Mr. Durham endeavoured in vain to wriggle an instrument through the stricture. Then keeping the forefinger of the left hand in the rectum, with its point pressed against the edge of the prostate in the middle line, he cut straight down in that direction, behind the stricture, and at once hit the urethra without any groping or trouble. He completed the operation in the usual way, opening a urinary abscess further forward, freely dividing the stricture, and tying a catheter in the bladder. The bladder being distended, and the urethra near it also filled with urine, of course made the operation easier than it often is, but Mr. Durham assured us that by following Mr. Cock's rule of cutting down towards the forefinger, which is kept pressed against the prostate in the middle line, this operation, which has been justly called one of the most difficult in Surgery, becomes almost invariably simple and easy.

Our readers are aware that, for many months past, three or four of the Surgeons at this Hospital have quite discarded the ligature, using in its stead free or unlimited torsion to all arteries of whatever magnitude. We wished much to see the process in the theatre, but no suitable case presented itself. We afterwards saw in the wards four cases in which torsion had been practised with excellent results. The first, a lad, aged 14, was one in which Mr. Durham had amputated the leg below the knee for disease. At the time of operation the bone seemed diseased, being unnaturally soft, and the periosteum readily peeling off, and bleeding from the bone took place on the second day, necessitating the use of the actual cautery. The hæmorrhage in this case was, however, clearly not connected with torsion, and three other cases—amputations of thigh, leg, and arm—had done extremely well. In the thigh case the arteries were exceedingly brittle, with atheromatous changes, and Mr. Bryant had gently twisted the main artery only once or twice; and, in the amputation of the arm, primary union of the whole wound had followed, save a small portion of sloughing skin, which had been damaged by the accident which called for the operation.

We saw also, in one of the wards, a very large sloughing ulcer of the leg in a middle-aged man, under Mr. Durham's care, for which continuous tepid irrigation was being practised with capital results. The method was not quite the same as that employed by Mr. Haynes Walton at St. Mary's Hospital, the water flowing from a large "rose" spout, from the holes of which bits of cotton hung, and a small proportion of carbolic acid was added to the water. The sloughing seemed to have been at once arrested by the treatment.

THE MIDDLESEX HOSPITAL.

AMPUTATION AT THE HIP-JOINT.

(Under the care of Mr. DE MORGAN.)

On Wednesday, January 19, Mr. De Morgan amputated the limb of a young man through the hip-joint for malignant disease of the femur. The patient was aged 23, and had led a hard and intemperate life for some years. He had sprained, as

he thought, his knee, slipping downstairs, four months previously, and soon afterwards noticed a swelling about the lower end of the right femur. This gradually increased, until on admission a large firm swelling occupied nearly the whole of the thigh, apparently springing from the lower two-thirds of the femur. The groin glands were not appreciably affected. Mr. De Morgan, anxious to cut as wide as possible of the disease and of the skin covering the tumour, performed nearly the whole of the operation with a short bistoury, dissecting up skin flaps, and cutting into the joint from the outer side, using an amputating knife to clear the muscles away before detaching the limb. Lister's tourniquet was used to compress the aorta, so that hardly any blood was lost, and the arteries and larger veins were secured with thread ligatures. Before sewing up the flaps Mr. De Morgan brought the deep parts firmly together with a stout thread passed through on a long needle and fastened to bits of bougie on the outside of each flap. The fresh wound was also freely sponged with strong sulphurous acid, as is the custom at this Hospital. The patient has not had a bad symptom since the operation. On laying open the tumour, it was found to be of a fleshy consistence, largely infiltrated with what looked like bone to the naked eye, many blood-containing cavities were cut across, and more than one cyst-like cavity containing pale yellow fluid. The bony portion was white and brittle, scraping up like chalk, and forming a dense mass the size of a tennis ball in the centre of the swelling, besides numerous minute spicules which studded the bulk of the growth. Microscopic examination showed the tumour to belong to the class sarcoma, large round, oval, and spindle cells lying imbedded in a more or less abundant granular stroma. There was no true bone found in it, but a large amount of infiltration with calcareous salts.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 12, 1870.

THE CONTAGIOUS DISEASES ACT.

The discussion on Monday evening last at the Social Science Association was a sufficient proof of the great interest excited by the proposal to extend this Act to the whole people, and of the necessity of the fullest and most open debate, in order that the question at issue may be simplified and stripped of all irrelevant considerations. That this has not been the case hitherto, and that the passing of the last Act was conducted after the manner in which the Œcumenical Council is alleged to do its work, was confessed clearly by Mr. Gilpin, the chairman of the meeting. Many members of the House of Commons knew nothing about the Bill, or thought that it related to the contagious diseases of horned cattle. But the public have a right to know what the evil is which is proposed to be remedied, what the remedies are, and what is likely to be the whole tendency of their operation. Mr. Acton, from whose work on prostitution we have of late quoted largely, conceives himself to be attacked, although, for our own parts, whilst dealing freely with his published opinions, we have always expressed the greatest admiration for the energy, fairness, and honesty of Mr. Acton—an honesty so great that his own book contains the very magazine of facts wherewith to refute his own arguments.

In Mr. Acton's letter of to-day we see how completely an exclusive devotion to one side of a question hinders him from seeing the true bearing of his arguments. He asserts "the absolute national necessity for applying to a great physical mischief the adequate remedy"—a proposition which might be applied to a dozen diseases, and which quite takes for granted that Mr. Acton's own remedy is "adequate." He goes on to say, "A disease exists which the well-being of mankind requires to have stamped out;" this he might also say of a dozen or fifty diseases. "Half measures," he adds, "are useless, and worse than useless." He says further that the fact that duties are "inconceivably repugnant" is no reason why the Medical Profession should not carry them out, if for the good of the community.

Now it is rather hard upon the Medical Profession, who have not shrunk from the dissecting-room, nor from the post-mortem theatre, nor from the still more loathsome and dangerous attendance on the sick poor, to suppose that they are unwilling "to treat syphilis," or unwilling to do any other Professional duty, however disgusting. But, thank goodness, it is not yet their duty to be inspectors of prostitutes, nor to teach them how to carry on their trade without injury; and they would deserve contempt if they should forbear to utter their opinion on a moral and political question like this.

In the first place, we deny the "absolute necessity" which Mr. Acton speaks of. Widely diffused as syphilis may be, and severe as it sometimes is, both its diffusion and its severity have been wonderfully exaggerated. Any man accustomed to gauge the health of society generally, must know this. What Mr. Acton says about the health of prostitutes is the best answer to the sensational fictions which are propagated about the universal spread and horrible consequences of syphilis. When the prostitute withdraws from her career, says Mr. Acton, "as withdraw she will in a few years, for old prostitutes are rarely met with, she is seldom found with her nose sunk in, her palate gone, or nodes upon her shins."(a) "Syphilis is the fate neither of the bulk nor of an important fraction of prostitutes."

In the next place, it is, *à fortiori*, unnecessary to adopt measures which tend to lower public morality; and that the inspection of women and the letting them go back to their trade does lower public morality, is shown by Mr. Acton at page 119 of his book, where he volunteers a caution on this very point. It is proved by the testimony of private individuals and by the notorious state of public opinion in countries in which inspection prevails.

In the third place, on Mr. Acton's own showing, any inspection possible would be one of the half measures which he denounces as worse than useless. He has shown that it is impossible quite to overtake the crowds of women who prostitute themselves occasionally or clandestinely. No legislation could or would reach men. A law against men, if passed, would be impotent and ridiculous. But a law respecting one sex only *is* a half measure.

Nothing that Mr. Acton has advanced will ever reconcile the English Practitioner to the notion of examining prostitutes, simply to see if they are diseased, and if not, to let them go back to their work, with a syringe and lotion to be supplied, as Mr. Acton proposed (see p. 191 of his book), at prime cost by the Government. The demoralising effect of such a system would be worse than the disease. Mr. Acton says that it is "not sufficient to detect, cure, and discharge diseased women; steps should be taken to make their career after leaving the Hospital less dangerous." With this end they should be taught

(a) Acton "On Prostitution," p. 35, second edition.

to have frequent recourse to ablutions and injections, "and it might be useful," continues Mr. Acton, "to supply them with syringes and lotion," either gratis or else "the Government should supply requisite lotions and instruments at cost price." If Mr. Acton cannot see the hideousness of such a proposition, argument is wasted. What minister could stand up in Parliament and explain the grant for purchasing syringes and lotions in order that prostitutes may carry on their career with less danger?

We will only express our wonder, in passing, that so well-educated and cosmopolitan a Surgeon as Mr. Acton should countenance the vulgar English idol worship of John Hunter, as if that great man were the sole authority or the first writer on syphilis. Surely there are such places as Paris and Edinburgh, and it would be becoming to mention the names of Ambrose Parè, Astruc, and Bell, and to discard the strange notion that the treatment of syphilis was ever thought beneath the notice of an educated Practitioner.

Luckily, we do find in Mr. Acton's work on prostitution materials for a plan for the repression of syphilis which shall be free from objection. He enforces the doctrine that prostitution is but a stage in the life of women, out of which they usually emerge somehow and somewhen. He calls attention, too, to the pitiable number of young children turned into the streets through destitution and neglect. Mr. Acton does not show, what we nevertheless believe to be true, that the number of women is largely in excess of the demand, and that they are obliged to ply for hire, and to create business for themselves, in a way which any police could put down—if they could execute the provisions of the Contagious Diseases Act. It would be an act of mercy, and a benefit to the public purse, if every female "infant" prostitute were swept out of the streets, and trained by some sisterhood of mercy for an honest life.

THE HAMPSTEAD FEVER HOSPITAL.

To provide for the epidemic of relapsing fever, the Metropolitan Asylum Board have caused a temporary Hospital to be erected on the ground already purchased for the purpose of building one of a more permanent character. This piece of ground is situated close to the road up to Hampstead-heath, not very far below the village of Hampstead. The situation is not badly chosen, and the building itself, of a type we should like to see more frequently, is worthy of attention. The materials are wood and iron, and the whole has been completed in two or three weeks. We have refrained from any description of the place up till this time, in order that we might see and test its working, but now, when patients to the number of four and twenty have been admitted, everything seems to work smoothly.

As for the building itself, it consists of three one-story pavilions, connected by a corridor; these pavilions are situated on different levels, so that in walking up the corridor one is practically ascending a hill. At the lowest point is the administrative block, so placed that, should the epidemic increase, three more pavilions might be constructed on the other or lower side of this block. This administrative block is arranged so that its different compartments open on to a small corridor at right angles to the main one already spoken of, and comprises rooms for the Medical superintendent, the dispensary, kitchen, mess-room, and suchlike accessories, all convenient and well placed. Ascending the main corridor, we first reach a small ward and waiting-room, intended for the reception of doubtful cases, or of cases which, not being relapsing fever, it would be impossible, from the condition of the patient, to remove to the Islington Fever Hospital. Nearly opposite is a building for the nurses who belong to the East Grinstead Sisterhood, and who seem to do their work most efficiently. After this comes the first pavilion, devoted to females, and almost opposite is the receiving-room, with a bath ready for such patients who, when admitted, are in a condition to receive it. This receiving ward is supplied with a low kind of truck, such that, when covered by a mattress, the level is that of the patient's bed, and on this they are removed from the bath-room to their permanent quarters.

There are, then, two male and one female ward, each 150 feet long, 25 wide, and 21 high, there being no ceiling. Opposite each ward is a coal-cellar, communicating directly with the outside, so that access to it is easy. The wards themselves are seen on entering to be divided into two portions by a glass screen; this is intended to separate the convalescents from those more seriously ill. Each ward has through and through ventilation, by its windows as well as by apertures near the floor between each bed. But unfortunately, as it seems to us, and this is the only fault we can find with all the arrangements, the pavilions are too close, not more than 30 feet apart, a distance insufficient to secure the full benefits of the system. Each ward is warmed and ventilated by three enormous double stoves, which act also as extract shafts for foul air. In one ward a more complicated system of ventilation known as Pott's system has been introduced; but the remaining two are provided with the simple and efficacious means already alluded to. The beds themselves are very neat and well provided with clothing, for which, as for the garments of the patients, a kind of disinfecting apparatus has been made ready. A laundry with every convenience for washing, drying, and mangling clothes, has also been provided.

One most important point remains to be discussed—that is the cost. Each ward contains thirty beds, with a cubic space to each bed of 1680 cubic feet, and the total cost will not exceed £60 per bed. The structure is spoken of as temporary, but we see no reason why it should not serve its purpose for many years, with this advantage—that after a time it might migrate from one portion of the grounds to another. Such a change would be impossible with a brick-and-mortar building; but we see no reason why it should not be done under existing circumstances, and most people are nowadays theoretically convinced of the benefits of such a change. Messrs. Giles and Bevan, of Craven-street, the architects, have done their work well. We do not see why their credit should be merely temporary.

We have spoken of the nursing staff. It remains to add that the Medical management has been intrusted to Dr. Claye Shaw, whose antecedents are sure guarantee not only for skilled Medical supervision, but also for what is equally important in such a position—administrative capacity. Mr. De Liefde, late House-Surgeon to Guy's Hospital, has been selected as Dr. Shaw's aide.

Dr. Shaw tells us that the cases hitherto admitted have mostly come from Southwark—from the parish of St. Saviour's; but others have been taken in from other parts of London. One patient was admitted moribund. He was intensely jaundiced, and, after death, the spleen, the kidneys, and the liver were all found softened and pulpy. In another case there was, apart from the ordinary symptoms of relapsing fever, a distinct petechial eruption similar to that of typhus. That the disease was true relapsing fever was proved by the crisis with perspiration and the immediate defervescence.

There is only one other matter on which we would touch—a matter which concerns the public rather than our Professional brethren. There seems to be some little hesitation on the part of the parochial authorities to send patients to this Hospital, the charge being 3s. instead of 2s. 4d. daily, as at the London Fever Hospital; but the difference is this—patients in the Islington institution are supported at the expense of the individual parishes, but, in the case of the Hampstead Hospital, whatever is expended by each parish on its patients will be repaid out of the common fund—a distinction which it is worth the while of the authorities to know.

THE WEEK.

TOPICS OF THE DAY.

THERE seems to be a chance that even yet the year 1870 may prove an eventful one for the Profession of Medicine. We can only guess at the springs by which the august machinery of her Majesty's Privy Council is put in motion, but when it does move, its effects are soon visible in the fresh activity it communicates to inferior organisations. We are informed that the members of the General Medical Council are specially summoned to meet on the 24th inst. to take into consideration a communication received from the Lord President of the Privy Council. Our readers must wait until the meeting of the Council for the text of the Lord President's letter; but it is understood that it expresses the Lord President's wish and readiness to co-operate with the General Medical Council in legislating for the Medical Profession, provided that the Medical Council will definitely inform his Lordship as to its wishes or wants, supposing, of course, that those wishes and wants are of a character that he can approve. The Lord President especially asks whether the Council is prepared to institute a single examining board in each division of the United Kingdom by a voluntary union of the examining bodies, or by giving the Council compulsory legislative powers for the purpose. We commend his Lordship's communication especially to the consideration of the Scottish and Irish examining bodies, who, it is well understood, have shown the greatest reluctance to join in any plan proposed by the English Corporations for the formation of national examining boards. The Lord President's letter can have but a single meaning. It is simply this—that if the Medical Corporations and Universities will not sink their jealousies and differences, and, renouncing selfish ends, terminate "the battle of the shops" and join in giving the public and Profession a uniform and high standard of Medical examination, the State will take the business of examining and licensing Medical Practitioners into its own hands. We cannot but believe that State interference of this kind would be injurious to the interests and honour of the Medical Profession. We hope that at the coming meeting of the General Medical Council conciliatory measures will be adopted, and that a well-considered and thoroughly equitable scheme for the formation of a national examining board in each of the three kingdoms will be drawn up and submitted to the Government. In England the licensing bodies, we know, are endeavouring to perfect a measure of the kind. The authorities of the Apothecaries' Society will, we hear, on Saturday have a meeting with representatives of the two Royal Colleges. Next week it is expected that a similar meeting will take place between delegates from the Universities and the Colleges. Unless the scheme to be proposed be glaringly unfair in its details, there can be little doubt but that a treaty of co-operation may be ratified. The success of the whole scheme, however, not only in England, but in Scotland and Ireland, depends upon the exercise by all parties of mutual consideration and justice, and the Profession outside can only hope that these Councils will prevail.

The Secretary of the Poor-law Board has written to the Board of Managers of the Metropolitan Asylums District complaining that the expense of the Leavesden Asylum is to exceed the estimates by £8000, and that the cost of the asylum at Caterham is to be £7000 in excess of the estimated sum. The Poor-law Board authorises the expenditure, but administers an unmistakable rebuke to the gentlemen who are spending the public money on the new metropolitan asylums. This strongly worded communication has drawn forth some as strongly worded speeches from different members of the Asylums Board. Sir James Hamilton charged the Poor-law Board with want of courtesy, which, he thought, was attributable "to Mr. Goschen's inexperience," and Mr. Harvey hoped that the reply of the Board would induce Mr. Goschen to show "English politeness to English gentlemen." The resolution, which, on the motion of Mr. Wyatt, was adopted and forwarded to the Poor-law Board in reply, is as follows:—

"That the letter of the Poor-law Board be acknowledged. That they be informed, in reply, that, notwithstanding the opinion expressed in their communication, the managers continue to feel much satisfaction in the fact that the two asylums at Leavesden and Caterham, which were in April roughly estimated to cost £257,000, appear likely to be completed for the sum of £272,000, an increase in cost only of £15,000, being an advance of less than 6 per cent on the original estimates.

"That the Poor-law Board be reminded that these estimates were distinctly stated to be approximate only, and that they not only included the buildings, but also the drainage, lighting, water supply, laying out the grounds, furnishing, and clothing, together with all kitchen and laundry fittings, and the managers believe there are very few, if any, instances of a building of similar magnitude being completed for a sum so closely approaching the original estimates.

"That the managers must regret that the Poor-law Board should have forwarded them a communication of such a character, and they would submit for the consideration of the Poar-law Board whether it is for the public advantage that such a course should be adopted by them. At the same time the Poor-law Board may rely with confidence that the managers will continue to exercise all possible economy in the discharge of the duties committed to them.

For ourselves, we think that the public will be heartily with the Poor-law Board in this matter. It is wonderful how liberal committees can be with public money. The natural and not unreasonable outcry which has been raised by the enormous expenditure on these asylums should at least have kept the outlay strictly within the estimates.

The guardians of the parishes in the Holborn Union have agreed to convert St. Luke's Workhouse into an infirmary for the whole union, and to establish Dispensaries for the outdoor sick in Clerkenwell, St. Luke's, and Holborn.

The Poor-law Guardians of St. Pancras have announced to the Poor-law Board that they do not intend to bring forward the fresh charge against Dr. Ellis to which we alluded last week. After the references to the matter in the public papers, this resolution places Dr. Ellis in the most unenviable position. We think that the Poor-law Board, in Dr. Ellis's interest, should insist that the matter be not left where it is.

The picturesque, if not convenient, old Hospital ship—the *Dreadnought*—will, before long, cease to make part of the associations of a whitebait dinner, and the patients of the Seamen's Hospital Society are to be safely housed in the Infirmary of Greenwich Hospital. Although this concession has been tardily made by the Admiralty, yet it is a welcome boon to the friends of merchant seamen. The use to which part of Sir Christopher Wren's magnificent building will be put is at least not foreign to that with which it has been so long associated, and the gain to the sick sailor in hygienic appliances and in comfort, and to the Hospital staff, will be very great. Few acts of the present Government will excite more general approbation than this.

The transfer of the whole system of telegraphic communication of the country into the hands of Government is a fact that affects the interests and convenience of Medical men at least as much as those of any other class of the community. Most of our readers have suffered from delays in the reception of telegraphic messages and from the mistakes which were so frequent whilst the business was in the hands of private companies. Under the Government we may look forward to telegraphic communication being more regular, more rapid, cheaper, and more nearly universal. The clerks employed will be taken from a more highly educated class, and mistakes will be less frequent. The possibility of sending telegraphic messages on stamped forms, which may be kept for the purpose and dropped into the next letter-box or pillar-post will, when the system is perfected, be of immense convenience to Medical men. If the Post-office authorities are only able to reduce the charge to sixpence for each message, telegraphic messages will be sent instead of letters in a vast number of cases.

Mr. Currey, the architect of St. Thomas's Hospital, has appeared as the apologist of the contractor and governors for the delay in the completion of the building. As, however, Mr. Currey does not deny the main facts urged by "F.R.C.S." in the letter to which we recently referred, the original charge seems to us to remain in full force. One of the points urged by "F.R.C.S." was that in the present St. Thomas's Hospital persons suffering from infectious diseases cannot be isolated. Mr. Currey met this charge in his recent letter to the *Times* by saying that there are two separate wards built specially for the purpose. In a subsequent letter "F.R.C.S." asserts that each of these wards contains only two beds—a number entirely insufficient. Mr. Currey's other attempts at exculpation are shown by "F.R.C.S." to be equally failures. There can be no doubt that the delay in the completion of the building is most injurious both to the poor for whom the Hospital is intended and to the interests of the Medical school and staff, and it is incumbent on the Hospital authorities to hasten the work as far as may be practicable.

Sir C. B. Adderley, the Chairman of the Sanitary Commission, in a recent speech at Warwick, expressed a strong opinion as to the present unsatisfactory working of the Public Health Acts, and the necessity for an undivided authority to enforce them. He said that,

"Under the existing system, the execution of those Acts being vested in a divided authority produced most unsatisfactory results, and that both in regard to economy and efficiency a change was absolutely necessary. He and other Commissioners considered that the powers should be vested in a sanitary committee, to be elected annually from boards of guardians, and that the carrying out of the provisions of the statutes should no longer be optional, but compulsory, and that, in the event of non-compliance, their execution should devolve on the Secretary of State, who would do the work and charge the refractory parish with the expenses. The Royal Commissioners had to report on the various laws and authorities, which were very complicated and numerous, and they wished to consolidate all the powers in one Act, and vest their execution in one body. In placing the power in the hands of the guardians, they would be acting on the principle that the ratepayers should control those who spent their money. Among the numerous proposals it had been suggested that the authority should be relegated to a body elected from each petty sessional division, or to the highway board; or that the whole of the powers should be exercised by the Secretary of State. He thought the duties were too vast to be undertaken by the Secretary of State, and also that the ratepayers would object to local government being so much centralised in the HomeOffice."

We understand that Mr. Solly is to be the Hunterian orator for the present year.

The reported murder of Dr. Livingstone by a tribe of negroes is dismissed as unworthy of belief by Sir R. Murchison, who argues, from the evidence of the news recently received of Livingstone, that the story is impossible.

The Government have appointed Mr. Giffard, Q.C., to prosecute the father of the Welsh fasting girl.

The subscriptions to the Faraday memorial have reached £1400. A monument, it is said, is to be erected in the British Museum. This is all the present generation of Englishmen seem inclined to do to perpetuate the memory of the greatest philosopher of their time.

We regret to hear that the scheme for the amalgamation of the various Societies is likely to break down. There has been exhibited, we hear, a good deal of passive opposition to the propositions of the Medical and Chirurgical Society, which is the more to be regretted, as the general impression is that this body has acted with considerable liberality.

NEW HONORARY SURGEON TO THE QUEEN.

Dr. Mackay, of the Royal Hospital, Haslar, has been appointed by her Majesty to be her Honorary Surgeon, *vice* Armstrong, who has been appointed her Physician. Dr. Mackay has been Surgeon of the *Agamemnon*, flagship of the late Lord Lyons in the general action of the combined fleets against Sebastopol, and has nine years' service as a Deputy Inspector-General at Hong-kong and Haslar Hospitals. Many naval Surgeons think that Dr. Mackay ought to have had the C.B. and promotion to inspector's rank long ago.

"CONTROL" IN MILITARY HOSPITALS.

A Southampton paper states that lately the number of beds and the equipment generally of the Royal Victoria Hospital, Netley, were considerably reduced by order of the Control Department. No sooner was the reduction effected than intimation was received that a considerable increase in the number of patients was likely to occur, in consequence of the arrival of invalids from foreign stations; so the bedding and stores had to be hastily brought back again from Portsmouth at considerable expense, and having received more or less damage in transit. So much for "control" in that branch of the public service.

THE SESSION AT NETLEY.—THE INDIAN AND NAVAL MEDICAL SERVICES.

The winter session of the Military Medical School at Netley has just closed with the usual examination of candidates, who, as on the last two or three occasions, have been exclusively for the Indian Medical Service, and of Assistant-Surgeons of the British Medical Service, who, having gone through the course, were examined as to fitness for promotion. We understand that, in each class, the result of the examinations was highly satisfactory. Twenty-three candidates have presented themselves in competition for the ten vacancies in the Indian, and ten for a similar number of vacancies in the Naval Medical Service. We believe that there are some very high-class students among them, so that the competition will be unusually close for the former service; but we had expected that even a larger number would have come forward, in consequence of the admissions to the British service being for the time suspended. The absence of competition for the Navy shows that that service has not yet attained popularity among students.

THE SEAMEN'S HOSPITAL SOCIETY.

In spite of the passive resistance of one Government and the active opposition of another, the *Dreadnought* authorities have at length triumphed, in that they have gained a footing in Greenwich Hospital for the sick sailors of the mercantile marine. The committee and secretary of the Seamen's Hospital Society have, indeed, fought a good fight with my Lords at Whitehall, and may very properly be proud of their successful persistency. We shall soon see the last of the *Dreadnought* Hospital ship, and there can be little doubt that its disestablishment is desirable on hygienic grounds alone. The wards of the Royal Infirmary in which the inmates of the *Dreadnought* are to be housed are small, and not specially well arranged; but they will form in most respects a much more convenient abode for our sick sailors than the large, low, ill-ventilated decks of the old ship. It may not be generally known to our readers that the Medical deck of this floating Hospital contains no less than sixty-three beds, and is probably the largest sick ward in the United Kingdom. The pathological department of the Hospital is capable of much extension and elaboration, and the museum, small though it be, contains one of the best collections of skulls to be found in this country. When this Hospital has fairly commenced a new lease of existence in the Infirmary of Greenwich Hospital, we see no reason why it should not eventually rank with Hospitals the practice of which is recognised by the examining boards. The opportunities for clinical teaching and study are, indeed, far greater than those afforded at several

recognised London institutions, as those of our readers who have studied on board the *Dreadnought* can attest. It is not likely, with the present cheese-paring arrangements, that any funds will be forthcoming from the Admiralty Office for the establishment of a Naval Medical School at Greenwich, though this is, as we are informed, a scheme viewed very favourably by the Medical Director-General. Meanwhile, we bid farewell to the old ship, as we would speed a parting friend who has stayed with us too long. We recommend the Seamen's Hospital Society to take "*Time nihil*" as their future motto, and to remember, from past experience, that energy and determination usually command success.

NEPHROTOMY.

On Thursday, February 3, the operation of cutting into the kidney for removal of renal calculus was performed by Mr. Durham at Guy's Hospital. The theatre was crowded with students and others anxious to see so rare an operation. We believe, indeed, that there is only one instance of its performance recorded, and that was by a Surgeon of Venice upon an Englishman some hundred and fifty years since. Two or three stones were then extracted to the great relief of the patient, a urinary fistula remaining in the loin. Owing, doubtless, as much to the uncertainty of the diagnostic signs of renal calculus as to the supposed risks of the procedure, the operation fell into oblivion, until a paper read before the Medico-Chirurgical Society last year by Mr. Thomas Smith, of St. Bartholomew's Hospital, again brought the subject before the notice of the Profession. Although Mr. Durham's bold attempt ended in disappointment, we saw enough to convince us that, as far as cutting down upon the kidney is concerned, there is neither great difficulty nor any apparent grave risk in the proceeding. Mr. Durham made his incision along the edge of the erector spinæ, from the pelvis to the eleventh rib, and quickly reached the hilus of the kidney without difficulty, and with little or no loss of blood, but no stone was found, although the symptoms previously manifested had been such as are considered characteristic of stone in the kidney. The hilus of the kidney and the ureter, for the space of an inch and a half, were thoroughly examined, but not opened, no stone being felt, and their general appearance, as well as that of the kidney, being perfectly healthy. So far from the operation having been injurious, five days later the woman expressed herself as being more free from pain than she had been for a long time! Full details of the case will be published whenever it may be considered to have terminated, whatever the termination may be.

SANITARY IMPROVEMENTS AT PORT LOUIS, MAURITIUS.

A CORRESPONDENT informs us that one of the principal sources of malaria at Port Louis is a shallow lagoon to the north of the harbour known as the Mer Rouge, which covers a surface of about 230 acres, and into which flow the Terre Rouge and Latanier Rivers, which are, in fact, the main drains of thickly peopled sections of the town and suburbs, chiefly inhabited by the lower classes. The proposal of Mr. Vander Meersch, the engineer to the General Board of Health, and which has met with the approval of that body, is to cut off the northern portion of the Mer Rouge from contact with the foul waters of the Terre Rouge by a causeway, along which is to be carried a main-drainage pipe, through which will be discharged, at a considerable distance out to sea, the sewage of the eastern suburb of Port Louis, which has hitherto found its way into the Mer Rouge at its south-eastern extremity by the Latanier River. The opposite banks of the Mer Rouge between the new causeway and that known as the Chaussée Tromelin, connecting Fort George with the mainland, are to be enclosed by a quay wall, the land reclaimed by that on the north side being planted with trees, and through that on the south side, as also through the present Chaussée Tromelin, will be flood-gates, through which the sea-water will have free access at suitable seasons, so as to renew and scour out the contents of the Mer Rouge, which is to be excavated and levelled where necessary, so that there will be a uniform depth of eighteen inches of water at low tide. The estimated expense of these improvements is £7000, to be borne partly by the Government and partly by the municipal board. The Government have also undertaken and commenced the deepening and clearing of the Caudan Basin at the southern side of the harbour, and to windward and in close proximity to the barracks and military establishments. Formerly this basin used to be sufficiently deep to admit vessels of considerable burden close alongside the artillery barracks for the discharge of stores, but it has been gradually filled up by sewage and silt carried into it by the drains of the western portion of the town, so as to present merely an expanse of foul malarious mud, which is now being dredged away and carried far out to sea. It is, of course, the intention for the future to intercept all sewage, so as to prevent the basin from again filling up. Much more remains to be done towards permanently improving the sanitary condition of the town; but the depressed state of the exchequer will long prevent the execution of all the projected improvements.

SMALL-POX IN JAPAN.

A LETTER from Yokohama, November 19, 1869, says:—

"The *Zebra* came in here last night with four cases of small-pox, and she had four more this morning; accordingly, she is in quarantine.

"It is rumoured that it has also broken out on board the *Ocean*, but that is uncertain. I am told that small-pox generally appears among the Japanese at this time of the year, so it behoves one to be careful."

And another letter, dated November 21, says:—

"We have heard no more about small-pox on board the *Ocean*, and the cases from the *Zebra* are all progressing well in Hospital on shore. They had 15 cases out of 180, but they are all pronounced to be of a mild form, and no further danger is apprehended as yet."

FROM ABROAD.—DISEASES AND MORTALITY OF THE PARIS HOSPITALS IN 1869.

AMONG our Medical societies we have no one resembling that at Paris termed the "Société Médicale des Hôpitaux," which consists exclusively of the Medical Officers of Hospitals. It offers great facilities for comparing the results of experience, and has sometimes very valuable memoirs laid before it. Its discussions are eminently practical, and it publishes its proceedings both in the journals and in a separate form. It also undertakes separate investigations, and has one now on hand concerning phthisis. A committee also undertakes the record of the prevalent diseases under the name of "Commission des Maladies Régnantes," together with the meteorological conditions under which they appear. This committee publishes, in the *Union Médicale*, very able and instructive reports from the pen of M. Besnier, derived from communications made directly to it by the Medical officers of the statistics and remarkable occurrences in their various services. In this way a Medical History of Paris is forming of great interest and authenticity. The last report relates to the months of November and December, and gives a general review of 1869. It is commenced by a meteorological table for 1869, one giving a comparative view of the principal affections liable to be influenced by atmospheric causes, and the mortality from these in the Paris Hospitals during 1869, and another showing the distribution of this mortality over the different months of the year. Ranged according to their *relative frequency* during the four years 1866-69, the diseases stand as follows:—(1) phthisis, 22,778 cases; (2) bronchitis, 18,134; (3) rheumatic affections, 11,818; (4) pneumonia, 8580; (5) typhoid fever, 6618; (6) variola, 6378; (7) pleurisy, 4769; (8) erysipelas, 3127; (9) diarrhœa, 3020; (10) angina, 2373; (11) rubeola, 2159; (12) enteritis, 1942; (13) icterus, 1327; (14) croup, 1083; (15) influenza,

987; (16) laryngitis, 631; (17) scarlatina, 618; (18) dysentery, 561; (19) pertussis, 504. Ranged according to their *relative mortality*, these affections stand as follows:—(1) croup, 66·28 per cent.; (2) phthisis. 50·27; (3) pneumonia, 33·47; (4) enteritis, 31·92; (5) typhoid fever, 21·02; (6) rubeola, 16·29; (7) scarlatina, 15·02; (8) pertussis, 14·90; (9) erysipelas, 14·47; (10) dysentery, 11·18; (11) variola, 11·02; (12) icterus, 10·40; (13) diarrhœa, 9·65; (14) pleurisy, 9·11; (15) laryngitis, 5·82; (16) angina, 5·14; (17) bronchitis, 4·60; (18) rheumatic affections, 1·39; (19) influenza, 0·55.

The total mortality in the civil Hospitals and Hospices during 1869 was 13,167, being almost exactly the same as that (13,052) registered in these institutions in 1868. We notice some of the facts relating to the various diseases:—

1. *Bronchitis.*—M. Besnier states that the word bronchitis is a scientific nullity as regards returns in causes of deaths, and, although the cases of this are returned in the tables as 4828 in number in 1869, and the deaths as 236, he places no reliance on the numbers, so carelessly are statements concerning the existence of this affection made both in French and foreign registers.

2. *Pneumonia.*—The number of patients treated in 1869 was 2252, with a mortality of 33·92, which is slightly less than the mean mortality of the four years—*i.e.*, 33·47. The general opinion during the year had been in favour of the success of stimulant treatment by alcohol.

3. *Phthisis.*—The number of these patients admitted is always on the increase, and has augmented from 4740 in 1866 to 6208 in 1869, the mortality being somewhat less—viz., 48·51, as compared with the mean of 50·27. The real mortality is even greater, for the same patient may resort to several Hospitals and be returned as so many cases, while he only furnishes one death; and still more, because many cases are registered as bronchitis instead of phthisis. This latter error prevails to a far greater extent in private practice, quite vitiating the municipal statistical returns on this disease. The military Hospitals are encumbered with cases of phthisis in every form and every stage; and if it were not that the patients are drafted out every month to their friends, the buildings could not contain them. In the winter months they are very averse to leave the Hospitals.

4. *Croup.*—The mortality from this affection during 1869, in spite of all the care literally lavished on these patients and the improvements in their Medical and Surgical treatment, amounted in 1869 to 73 per cent., the mean of the four years having been 66 per cent. The mortality is, in fact, greater still, for some of the children are removed by their parents in a dying state, while others, discharged as convalescent, soon afterwards die.

5. *Variola.*—This disease has been very fatal in the two months, 34 deaths taking place in November and 47 in December. In 1867 the entire Hospitals furnished but 953 cases; in 1868 the number rose to 1952, and in 1869 increased to 2079. The reporter regrets that no steps have been taken in the Hospitals for inquiry as to vaccination and revaccination in these patients. He relates a case exemplifying the short incubation of the disease, and another of hæmorrhagic variola.

6. *Scarlatina.*—A marked contrast to London has been exhibited at Paris with respect to this disease, 231 patients, with 42 deaths, having constituted the entire number of cases during 1869.

7. *Typhoid Fever.*—The epidemic of this disease, which had attained its maximum during September, October, and November, declined in December. The mortality for the year was 26 per cent., as contrasted with 21 per cent. for the four years. Numerous interesting particulars in different cases are referred to, for which we have not space.

8. *Puerperal Affections.*—The mortality from these affections was somewhat larger than during the preceding years. Thus in 1866 there were 6957 deliveries with 241 deaths, or 3·46 per cent.; in 1867, 8382 with 324, or 3·86; in 1868, 8515 with 332, or 3·89; and in 1869, 7944 with 319, or 4·01. The different Hospitals varied greatly in this respect, from the Necker, where there were 40 deaths in 344 deliveries, or 10·41 per cent., to the Hôtel-Dieu, where there were but 15 deaths (1·86) in 788 deliveries. In fact, the greatest inequality in this respect prevailed amongst all the Hospitals without the mortality being in any way proportioned to the apparent salubrity of the Hospitals or to the number of women delivered within their walls. On the contrary, Lariboisière had but a mortality of 2·36 in its 1030 deliveries, and the Hôtel-Dieu but 1·86 in its 788, while the Necker with its 344 patients lost 10·41 per cent. M. Besnier enters at some length into a discussion on the causes of such irregularity, but with little result as respects the explanation of them. He truly adds that, however explained, the facts go powerfully to protest against the agglomeration of lying-in women in Hospitals.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

By J. F. CLARKE, M.R.C.S.,

For nearly forty years on the Editorial Staff of the "Lancet."

Introductory.

For a long time past I have contemplated placing upon record my recollections of the Profession for the last forty years. Having been for nearly that long time officially connected with the first weekly Medical journal which was established in this country, I have had peculiar opportunities of becoming acquainted with persons and circumstances, a knowledge of whom and of which might be interesting and instructive to the present race of Medical Practitioners. I had first thought of writing the history of the Profession during the time mentioned. I was anxious to carry this out for many reasons, but chiefly from the fact that I had on very many occasions been requested to do so by friends and acquaintances. It was urged upon me that it was a duty I owed to the Profession, and to various persons associated with me in my labours, to fill up an hiatus which existed. Moreover, I had the honour, about thirty years since, of assisting Dr. Wm. Farr in the editorship of the *Medical Annual*. In that very elaborate work Dr. Farr published the history of the Profession from the earliest times to the establishment of the *Lancet* in 1823.

This contribution to our literature is one of the most valuable ever made, and I have often been astonished that it has never been reproduced. It seemed as if the work was to be continued by myself, and I made certain arrangements for carrying it out. But now, in the autumn of life, and occupied largely in practice, I find that I could not do justice to the subject in so extended a form; but still I felt I ought to do something in that direction. I have therefore determined, in the pages of the *Medical Times and Gazette*, to publish a series of papers, each, I hope, complete in itself, which will embody my own personal experience, my recollections of men and things, and a description of certain scenes behind the curtain which may serve to enlighten the present generation on some of the most interesting circumstances of a very eventful period in the history of the Profession. The great reforms effected by the press were undoubtedly mainly achieved by a man of extraordinary ability and courage—the late Thomas Wakley. But he could never have been successful if he had not been assisted by a staff of sub-editors and reporters. Of these men there is only, I believe, one now living besides myself—William Coulson—who was associated with the *Lancet* in its infancy. He rendered most important services to that journal during his connexion with it. His reports of Hospital practice, his translations of foreign articles, and his "leaders," did much to raise the reputation of the *Lancet*. In future contributions I shall have occasion to mention many other able men who were on the staff of that journal. It is due to them that what they did in the "good cause"

should not be forgotten. They had to fight a battle against fearful odds, and, with one or two exceptions, they did their duty ably and manfully. Some have risen to great distinction since, some fell by the way, and some retired early, worn out by hard work and vexation of spirit. Now that the war is over, a calm retrospect can be taken of events that at the time were so complicated by passion, prejudice, and personal animosity, that no just judgment could be arrived at respecting them. An exposition of the means by which great reforms were effected at vast personal and pecuniary sacrifice, and often attended with danger to individuals, cannot be without value. It will tend to show that, however desperate the evils with which we have to contend, however fortified by power, by long usage, and hallowed by time, those evils will be remedied by a fearless, consistent, and persistent opposition. It will be found that though the means resorted to by the early reformers were often desperate, and occasionally even unjustifiable when submitted to the test of history, at the time, at least, they appeared to be absolutely necessary. It is doubtful that if a more scrupulous and righteous course had been pursued, results of such magnitude would have been obtained; but, anyway, there is much to be regretted, while there is much that merits admiration. It was impossible that great benefits could have been obtained for the mass of our brethren some forty years since without the infliction of injury and even ruin upon individuals. This has always been the case in all great reforms. The cause of Medical reform is no exception to the rule. In recording my recollections of events with which I was more or less intimately associated, I hope to hold the balance evenly, and that—

> "I may safe betwixt the dangers steer—
> Of Scylla, flattery; and Charybdis, fear."

THE NEW INDIAN BARRACKS AND CHOLERA.

(*From a Military Correspondent.*)

A CORRESPONDENT draws our attention to some remarks in the official report on cholera by Dr. Bryden, which go far to indicate that the liability of soldiers occupying raised and roomy barracks in India to suffer from that disease is much less in proportion than of those who are less favourably accommodated. That such is the case has for some time been well known in India; but, as of late various representations adverse to the improved style of buildings for soldiers have reached us from that country, it is satisfactory to meet with such evidence in their favour as Dr. Bryden gives. At page 225 of the report in question he writes in this wise:—"But the necessity for some measure adequate to cope with air-borne or soil-generated causes of disease is recognised in the general adoption throughout Upper India of lofty double-storied barracks, and it will be fortunate if the same results follow as have followed in the case of Fort William, *where cholera has scarcely intruded during the past seven years.*" At page 226, referring to the same subject, he observes:—"It is the diminution of the ratio of attack that is aimed at—the possibility of affording locally such conditions as shall place the soldier beyond the reach of the ground-seeking miasm altogether, or place him in a stratum of air so diffusely impregnated by the miasm as to be powerless to affect either the individual or the regiment as a body. This seems to have been attained in the case of Fort William, and the European soldier, though given to frequent the cholera-infected bazaars of Calcutta, appears to be now placed, as regards liability to attack, *on a footing with the population of Chowringhee.*" Our correspondent considers that too much is expected from the new description of Indian barracks; that no kind of buildings can protect soldiers altogether from endemic diseases in such a climate as that of India; but that such evidence as has been given of their utility against the most generally fatal of all diseases in that country is a very strong argument in their favour, and ought to make us hesitate before accepting all that is being said against them, for the chief reason that they are expensive.

REVIEWS.

A System of Surgery, Theoretical and Practical, in Treatises by various Authors. Edited by TIMOTHY HOLMES, M.A. Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital, etc. 2nd edition, in five vols. Vol. I.: General Pathology. London: Longmans. Pp. 783.

It is now ten years since the first edition of this "System of Surgery" made its appearance; it then assumed the first position as an exposition of British Surgery, a position which it has since maintained, and is likely to maintain. The first volume of the second edition contains nineteen essays by various authors, all excellent in their way. They are, in order—"Inflammation," by Mr. Simon; "Abscess," by Mr. Holmes Coote; "Sinus and Fistula," by Mr. Paget; "Gangrene," by Mr. H. Coote; "Ulcers," by Mr. Paget; "Erysipelas," by Mr. Campbell De Morgan; "Pyæmia," by Mr. Callender; "Hectic and Traumatic Fever," by Mr. Croft; "Tetanus," by Mr. Poland; "Delirium Tremens," by Dr. Barclay; "Scrofula," by Mr. Savory; "Hysteria," by Mr. Savory; "Syphilis," by Mr. Lee; "Tumours and Cancer," by Mr. Paget and Mr. Charles Moore; "Animal Poisons," by Mr. Poland; "Wounds of Vessels," by Mr. Moore; and "Collapse," by Mr. Savory. In these there are, of course, degrees of excellence, some being revised with the utmost care; others we regret to find, whilst thoroughly practical, hardly abreast of the science of the day. It would be invidious, perhaps, to select these last for notice; but, on the other hand, we may point to certain of the essays which are remarkable for the care with which they have been brought up. The first of these is that strikingly able and original essay on "Inflammation," by Mr. Simon, which, however, we regret to find incomplete. Just before it should have gone to press, Colnheim's researches were published; and, although we are inclined to believe that the importance, if not the whole tenor, of these have been misinterpreted, still it was good that they should be thoroughly investigated before being received into or rejected from a work like this. This part of the essay, therefore, which refers to the *process* of inflammation, will be published by itself as an appendix to the fifth volume. Meanwhile, as we understand, Mr. Simon has secured the able assistance of Dr. Burdon Sanderson in his experimental inquiries into the subject, and with two such investigators, we need not fear but that something satisfactory will be the result. We are, indeed, inclined to believe that in their hands the subject will assume a new aspect. Meanwhile, that part already published is in every way worthy of its author.

A special feature of the new edition is the illustrations it contains, both as woodcuts and as lithographs. The article on syphilis is well illustrated by a series of eight chromo-lithographs, but nearly all of them are devoted to the primary sores, or those produced by inoculation, secondary and tertiary conditions being hardly represented. The article has been most carefully revised, many new and important cases having been added, and Mr. Lee's views having become a shade more developed. At this time of day we need hardly say that Mr. Lee is a professed dualist, for comparatively few hold different views. It is perhaps more significant that he gives a figure representing vaccinal syphilis, although he confesses he himself never saw a case. That such should be the case with one of Mr. Lee's experience, argues that the affection must be a rare one in this country, if indeed it exists at all. In our own experience we have only once encountered a skilled Practitioner who professed to have seen a case in this country. And even in that case the nature of the sore was doubtful, there being no specific eruption. The dreadful narratives which come to us from the Continent are not confirmed by home experience. Intimately connected with the subject is that of the hereditary transmission of syphilis, about which Mr. Lee gives some curious accounts, believing that in certain instances it may not develope till late in life, and that it gives to its possessor a certain degree of immunity from acquired disease.

The article on tumours which has for the most part been entirely revised by Mr. Moore is also good, and as a special feature is accompanied by a series of excellent lithographs after drawings by Mr. Arnott, constituting altogether the best series of illustrations of morbid growths we have seen. The article on cancer, which immediately follows that on the other varieties of tumours, is important as containing the results of Mr. Moore's very extensive experience of the disease in the cancer wards of the Middlesex Hospital. In some respects, however, the separation of cancer from the other malignant growths is inconvenient. No doubt cancer is the type of these, but the

gradation is so fine that an abrupt line of demarcation is artificial, not natural.

Of the other articles in the volume worthy of special attention, we would point to those by Mr. Paget, especially those on wounds and ulcers, to Mr. Campbell De Morgan on erysipelas, to Mr. Callender on pyæmia, and to Mr. Poland on tetanus—the last, by the bye, being accompanied by an excellent chromo-lithograph of the changes in the spinal cord, the result or the cause of the disease. There are certain other subjects which lie on the borderland of Surgery and Medicine, and of these we might say that they are treated somewhat too much from a Surgeon's point of view—if indeed, that is any disparagement in a work professedly Surgical. But we must not be hypercritical. The book is an exceedingly good one, and may well represent British Surgery.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

February 7.

The Liverpool Workhouse Hospital is one of the largest of the kind in England. Besides the general Medical and Surgical wards, it possesses distinct departments for the treatment of lying-in women, diseases of the eye, children's diseases, venereal diseases, and infectious fevers. The Hospital is generally full. The class of patients is, as may be imagined, low, and within the same walls which enclose the Hospital are always some two or three thousand healthy paupers. All these circumstances would lead one to expect an exceptionally high rate of mortality in that special department which, perhaps more than any other, requires pure air and plenty of it. Yet the returns of lying-in cases, which I give in the form of a table below, for the years 1868 and 1869 will, I venture to think, contrast favourably with those of any other European Hospital, especially as regards the mortality to the mothers. These years, moreover, have enjoyed no special exemption from mortality, but may be taken as a fair average of the past ten at least. Included in the table are four cases of abortion for 1868 and one for 1869. Of the 58 still-births in 1869, 20 of the children were in advanced decomposition when born.

Summary of Lying-in Cases at the Liverpool Workhouse Hospital for the Years 1868 *and* 1869.

	1868.	1869.
Number of women attended	515	444
Married	164	159
Single	351	285
Male children born	296	223
Female ditto	216	225
Twin births	1	5
Mothers who died in, or as the result of, confinement	2	2
Children born dead	79	58
First confinements	223	207

The striking feature in these returns is the immunity from puerperal fever which they indicate in circumstances that would rather have been expected to favour the development of that terrible disease. How far the fact of this not being an educational institution, and therefore not liable to the visits of numerous students from the bedsides of patients suffering from all kinds of disease, affects the results, is, perhaps, worthy of consideration. The marked diminution in the mortality in the great Vienna Lying-in Hospital after the enforcement of strict rules for cleansing the hands on the part of the students before and after a vaginal examination points in no doubtful way to one of the modes by which puerperal fever has been propagated, as well as to one of the ways of preventing it where students' visits are unavoidable. The high mortality, however, of 1 in 74 which still prevails at that institution contrasts too strongly with that of 1 in 239—the average in the Liverpool Workhouse Hospital—to be explained by the mere fact that a very much larger number of deliveries are effected in the former than in the latter.

The reign of terror in Ireland has now reached our Profession. A Medical gentleman of Dublin has been threatened with death unless he discontinues his Professional visits to a lady who has the misfortune to be the owner of property in the County Meath.

GENERAL CORRESPONDENCE.

ALLEGED "FALSE" CERTIFICATE OF DEATH.

Letter from Dr. Broadbent.

[To the Editor of the Medical Times and Gazette.]

Sir,—You have noticed in your columns a report of an inquest which appeared in the *Times* of Saturday, January 29, headed "False Medical Certificate," this title having been apparently suggested by the remarks of the Coroner, Dr. Lankester, who is reported to have said that "the peculiar features of the case were that a doctor who had attended deceased had given a certificate stating that he had seen deceased on January 22, and he died on the 25th of rheumatic gout and effusion of serum into the left pleural cavity. The jury would hear that that was not the cause of death, so that a Medical man had given a certificate when he knew nothing of the cause of death, and had guessed the cause of death," and so forth.

This report I characterise as unfair, untrue, and calumnious, as will be seen by the following account of the case of Mr. F. R. Smith, whose death was the subject of the inquiry:—

He had been under my care for some time, suffering from rheumatic gout; on January 6 or 7 he came to my consulting room, after an interval of more than a month, extremely weak, greatly emaciated, and breathless on the least exertion. I suspected that he must have had an attack of acute disease, but could obtain no history whatever of such an attack. His weakness and loss of flesh he attributed to complete loss of appetite and slight diarrhœa, and I endeavoured to discover the cause of the breathlessness by an examination of the chest. I found signs indicating the presence of fluid in the left pleural cavity, but a most careful examination of the heart failed to yield any evidence of endocardial or pericardial mischief. It was easy to see that the condition of the patient was most serious. I forbade his coming here to see me, and I saw him twice subsequently at his lodgings, the last time at 4 or 5 p.m on Saturday, the 22nd. The only apparent change was increasing weakness. The physical signs about the left lung were much the same; the heart sounds as heard by the stethoscope were normal. I did not examine the region of the heart by percussion. Mr. Smith was found dead in his room, as I was informed, on the Tuesday morning—the report says on Monday.

The fatal termination was not unexpected by me, and I should not have been astonished to hear of it at any time after seeing him early in January; that it appeared sudden to others was due to the character of the man, his dislike or dread of being dependent on those around him, which made him refuse to remain in bed, and to the fact that I was unable to find out the name of any relative or friend to whom I might communicate my apprehensions. Perhaps this is the right place to state that Mr. Smith came to me because he had been a teacher in a school where I received a great part of my education, and that I was allowed throughout to look upon him and treat him as a schoolmaster disabled by illness.

It is a duty imposed upon Medical men, that when they have watched an illness to a fatal termination, they shall give a certificate of the cause of death. I considered that I had no right to refuse a certificate in the case of Mr. Smith, and under similar circumstances I should again give one, notwithstanding the liability, which it seems is to be taken into account, that it might be made a text for sensational observations by the coroner. The certificate, as is customary, indicated the chronic disease, rheumatic gout, in the course of which supervened the fatal malady. I beg to note in passing the way in which the sense of this is tortured in the report. The fatal malady I set down as "effusion into the left pleural cavity;" the serum is an interpolation of Dr. Lankester's or the reporters. I suspected the effusion to be the result of pleuro-pneumonia, and that it masked changes in the substance of the lung; but in the absence of definite indications, either in the history or in the physical signs, I stated simply what I considered I had ascertained.

Here is Dr. Gibson's account of the post-mortem appearances which he has kindly sent me. "Heart large, pale, fatty; valves healthy; great effusion into the pericardium. Right lung healthy. Left lung and pleura a consolidated mass of disease, the lung infiltrated with pus; the pleura on the costal side contained a great quantity of pus."

In the report all reference to the condition of the left lung is suppressed, and the cause of death assigned is simply effusion into the bag of the heart.

I need scarcely say to Professional readers that the effusion into the pericardium bore much the same relation to the disease in the left lung as the last straw which proverbially breaks the camel's back to the rest of the load.

Dr. Lankester has not the excuse of ignorance; he must have known that effusion into the pericardium is often only the last in a chain of events leading to death. He must have known also that the diagnosis of this condition is not always easy; that it may become extremely difficult when there is disease in the adjacent lung, and yet he permits himself to say of an absent Medical man, that he knew nothing of the cause of death, but had guessed it.

Had I been altogether wrong, had I mistaken effusion into the pericardium for effusion into the pleura, Dr. Lankester's remarks as reported would have been utterly unjustifiable—under the actual circumstances they were altogether inexcusable.

It will be seen that I assume Dr. Lankester to have used expressions attributed to him. During the week which has intervened since the appearance of the report, I have been in communication with him in the hope that he would disavow it—publicly, of course, I mean—but all I have been able to obtain is the stereotyped form of evasion, that he does not hold himself responsible for the reports of his inquests, and a sort of explanation which in no way touches the point at issue. Since, then, he is content to appear before the public as the author of statements which I again say are unfair and untrue, I have no alternative but to consider him as such. I am willing to believe that he did not deliberately say what he knew to be untrue. I prefer to suppose that he was seduced by the opportunity of making a telling speech to the jury, as is suggested by the rest of the report. I forbear, therefore, from saying much that is prompted by a not unnatural indignation. I will add, however, one or two common-sense reflections. Any inquiry as to the cause of death is obviously incomplete without the evidence of the Medical man who has attended the patient during the fatal illness, when a certificate of such attendance has been given. Still more obviously is it unfair (a stronger expression comes to the end of my pen) to subject a Medical man who has given such certificate to injurious remarks in his absence, no opportunity of explanation having been afforded him; and it is intolerable that this should be done by one who, like Dr. Lankester, was placed in his present position mainly by the exertions of the Medical Profession.

I conclude with a final recommendation that if the cheap glory of making sensational remarks before a jury is a necessary or agreeable stimulus to the coroner in the exercise of his functions, these remarks should not be at the expense of some unlucky Medical man apparently for the moment in his power, but that he should limit himself to the impressive but safe generalities exemplified in what appears to have been the peroration of his speech, "that if some people had their way there would be no law in the land."

I am, &c. W. H. Broadbent, M.D., F.R.C.P.

44, Seymour-street, Portman-square, Feb. 8.

MILK DIET IN DIABETES.

Letter from Dr. Donkin.

[To the Editor of the Medical Times and Gazette.]

Sir,—In reply to one of your correspondents, in your last week's issue, at page 166, you state that I do not seem to be aware that the milk diet which I have recently introduced to the Profession, through the medium of the *Lancet*, as a cure for diabetes, "was long ago suggested and adopted by Dr. Headland, even in the first edition of his work on Therapeutics."

Now, on referring to Dr. Headland's work, third edition, I observe he states in a footnote at page 127 his belief "that milk may be given with advantage" in diabetes. At page 220 he again refers to his essay on the nature and treatment of the disease, read before the Medical Society of London (reported in the *Medical Times and Gazette*, February 17, 1855), in which he recommended "that fresh milk should be freely consumed as an article of diet in this disorder," and at the same time "that milk just turned sour should be administered as a therapeutic agent." He further informs us that in several instances this recommendation has been successfully adopted. But that Dr. Headland did not find this mode of treatment very successful may be learned from his statement at page 127, "that the radical cure of the patient by mere dieting may be considered hopeless."

Permit me to direct your attention to the fact that this is not by any means the same treatment as that which I have originated and systematically carried out with complete success, as can be attested by several members of the Profession here, and by Dr. Wiltshire, of London. The difference is exceedingly important. In the first place, I have not prescribed either fresh milk in its natural condition nor milk just turning sour; and in the second place, I have not allowed milk to be taken largely with other kinds of food, so as to form a portion of the daily diet. On the contrary, I have caused my patients to live on skim milk (from which the cream has been carefully skimmed after standing twenty-four hours) exclusively from the commencement of the treatment until long after the sugar had been completely removed from the urine. Experience has convinced me that both these conditions must be strictly observed to insure success and effect a cure. If the diet is only partially milk, and if the latter is given in its ordinary natural condition, with its contained cream, certainly a radical cure, or more than moderate relief of the symptoms, by mere dieting, "may be considered hopeless."

I trust these observations will suffice to show that my method of treating diabetes exclusively by skim milk is entirely different from prescribing ordinary milk to be largely consumed without system, and with other kinds of food, as in the treatment of Dr. Headland. I am, &c.

Sunderland, February 8. A. T. Donkin, M.D.

IS IT INCONSISTENT WITH THE DIGNITY OF THE PROFESSION TO PERFORM THE DUTIES WHICH WOULD BE ENTAILED ON SURGEONS BY THE EXTENSION OF THE CONTAGIOUS DISEASES ACT TO THE CIVIL POPULATION?

Letter from Mr. W. Acton.

[To the Editor of the Medical Times and Gazette.]

Sir,—The leading article which appeared in last week's impression of your paper, containing, as it does, a direct attack upon myself, calls for a few observations on my part. It seems to me that the article in question entirely lost sight of a most important point—that there is an absolute national necessity for applying to a great physical mischief the adequate remedy. And further, with regard to this necessity, I may remark that the work which it requires us to do we must do thoroughly—a disease exists which the wellbeing of mankind requires to have stamped out. Half measures are useless, and worse than useless. Let us face the question fairly. Is there this necessity or not? If there is, we must make up our minds to meet it, and to leave undone nothing, however disagreeable or repulsive, that is calculated to cause the work that we have in hand to be done well and thoroughly.

The different details to which attention must be paid, to insure this necessary thoroughness, are doubtless repulsive to many minds. There are also many to which any consideration of the question is thoroughly repugnant. This has been well expressed by Lord Lifford in a pamphlet addressed by him to the Earl De Grey and Ripon, Lord President of the Council, in which his lordship remarks "that few persons not influenced by imperative official duty would allow their names to be mixed with such matters as these, unless impelled by the highest of all motives." If our legislators will, like Lord Lifford, view their voluntary duties in this way, how much more must members of the Medical Profession feel the importance of faithfully performing the obligations resting on them! If the Contagious Diseases Act is to be carried out, the country will look to the Medical Profession to do it, and Government will have to call to its assistance the better class of responsible Practitioners, if it would have the work done in a systematic and effectual way.

Pardon me if I put the question to you—Is the fact that because the duties that we shall have to perform are (in the opinion of some) inconceivably repugnant, any reason why we, as a body, should refuse to do our part in carrying out laws enacted for the good of the community? Let me ask, is this the first time the Profession has been called upon to perform duties that on account of their repulsiveness would have been declined had the Profession had any option? It seems to me that, if Parliament should call on the Profession to discharge a duty which has been efficiently performed by Surgeons of note on the Continent, with the assurance "that freedom from syphilis will be a boon to the whole human race," the nation will expect us to answer readily to the summons, and our motto will be, as that of the *Medical Gazette*, "*Humani nihil alienum.*"

I have heard it hinted in more than one quarter that much

of the opposition in our Profession does not depend upon what the *Saturday Review* has called "appeals to the Bible and the British Constitution," but flows from a disinclination to face what some are pleased to imagine is "an inconceivably repugnant duty."

If there are men among us who wish—ignoring the good old maxim, "*salus populi suprema lex*"—to repudiate their public duties, and who hope to stifle necessary legislation by imitating the Old Bailey lawyer, and abusing their opponents when they feel the weakness of their case, they may damage their own position, but will not by such means throw dust in the eyes of the nation. Surely they must perceive that the attention of the country has been called to the necessity of doing something, though what that something should be, is not yet definitely settled; but the question is being ventilated, and we shall gradually obtain the necessary enactments.

Let me remind your readers that this "inconceivable repugnance" to treat the disease did not always exist. Will you bear with me if I take you back to the fifteenth century, the period when syphilis is supposed to have arisen? In those days, as I have shown in the introduction to my "Treatise on Diseases of the Urinary and Generative Organs," the complaint was supposed to be communicated by means of the air, and was called an infectious disease, and was not then, as is now, believed to be contagious only; consequently, those who suffered from its ravages did not conceal their affliction from their friends, as implying immoral lives, and the highest Medical authorities then existing were consulted for, and readily treated, those complaints.

The inability of the regular Physicians to cope with the disease, and the belief in its infectious character, produced a reaction, and instead of being permitted to apply to the best Medical authorities, the sufferers were driven out of the cities as lepers, and sought refuge in hovels and caves similar to those depicted lately as inhabited by the lowest class of women outside the Curragh camp. Popular prejudice having thus been excited against the scientific treatment of syphilis, its consequences became as frightful in the human subject, as the cattle plague threatened to become lately, among our herds, before we took steps to stamp it out. The neglect of Medical men created a shoal of itinerant nostrum-mongers and charlatans, and thus a stigma attached itself to the study of the disease that has never been got over.

We still find the words "foul ward" retained in our largest London Hospital as describing the rooms where the male and female syphilitic patients are now harboured. The name remains as a vestige of old times side by side with the little bundles of Marjoram still placed before the governors as they admit the cases, this strong-smelling herb having been supposed to have a most potent charm against infection.

At a somewhat later period, Hospital authorities, becoming a little less barbarous, treated the patients, but whipped those whom they cured; and it is within my own recollection that the governors of many a London Hospital refused to admit venereal patients on the plea that these ailments were the retributive accompaniments of vice.

It is from these dark ages that we in England derive the name by which these complaints are still vulgarly known—namely, "secret diseases," a term likewise employed by the advertising fraternity in Paris at the present day, leading to the belief that there is something special in the treatment.

Hence arose, likewise, the disinclination of general Surgeons to be supposed to be conversant with such cases, and consequently the treatment of these complaints had almost passed from the domain of educated Practitioners. Our celebrated countryman John Hunter first attempted scientifically to investigate these affections, and his work on the subject is even now quoted as an authority on syphilis. Let those who may venture to sneer at any one devoting himself to the study of this complaint recollect that Ricord has obtained his European reputation and his present position as Senator, President of the Academy of Medicine in Paris, and Surgeon to the Emperor Napoleon, by his brilliant investigations of the laws regulating these affections.

History will not fail to speak of Parent Duchatelet as one of those philanthropic men who, by devoting their lives to the elucidation of social problems, have conferred everlasting benefits on society. By his laborious investigations on the subject of prostitution he has shown that the evils inseparably connected with it may be mitigated by systematic treatment, and that the plague of syphilis may be removed, if only all nations will unite in stamping it out.

Surely, if such men as these have not thought it beneath their Professional dignity to inquire into these social evils, we all, under Government sanction, may, without degradation, assist the legislature in its efforts to heal the diseased and reform the outcast.

As one of the first assailed, I claim a right to protest against dealing "*foul* blows." I ask in the coming struggle a fair field and no favour; let us, as Professional men—discussing a great social evil—evince gentlemanly feeling towards one another. There are indications abroad of a great moral struggle—only last night I heard Mr. Gilpin, the Chairman of a meeting of the Social Science Association held to discuss this question, declare, that as a Member of Parliament, he would constitutionally leave no means untried, not only to prevent the extension of the Contagious Diseases Act, but remove from the Statute Book those that had been passed, and he thought perhaps he should do this most effectually, by moving, that the Acts be applied to both men and women.

I am, &c. W. Acton.

17, Queen Anne-street, Cavendish-square.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, January 18, 1870.

Richard Quain, M.D., President, in the Chair.

Mr. George Lawson exhibited a lad whom he had trephined in April, 1866, on account of a stellated fracture of the frontal bone, caused by his falling on to a stone pavement from the height of thirty feet, whilst engaged in cleaning some second-floor windows. The boy made a rapid recovery, and left the Middlesex Hospital in six weeks. After a month's rest in the country, he returned to his work about the stable, and shortly afterwards he became a waiter in a coffee shop. About eighteen months after his discharge from the Hospital, he was readmitted with the following curious symptoms:—On October 21, 1867, he had severe headache, chiefly referable to the site of the scar, which, however, passed off towards night. Four days later the pain returned, accompanied by giddiness and some projection of the thin cicatrix. By the next day the swelling had reached the size of half a hen's egg, and was hot and painful, and associated with a high state of fever. He now came under the care of Mr. Shaw, who, suspecting that the symptoms might be due to pressure from pent-up pus, pricked the scar with the point of a lancet, when some clear fluid exuded. From this puncture a transparent limpid fluid continued to trickle, when, on the morning of October 27, a thick crop of herpes appeared by the side of the mouth. All the febrile symptoms at once began to subside. From this time until October 30, the tumour gradually lessened, but continued to discharge the same clear fluid in a daily decreasing quantity until on that day, when the exudation ceased, and the swelling wholly subsided. The boy left the Hospital quite well, and has continued at his work, which is now in the stables, up to the present time. He has never since suffered from headache. At the time of the appearance of the herpes, the fluid, which was clearly cerebro-spinal, ran so quickly that an ounce was collected in one hour; it also seemed to run more freely during sleep than in the day time. It was alkaline, containing only a trace of albumen and no sugar.

Dr. Hilton Fagge exhibited two patients suffering from Tinea tonsurans of the Nails. In a family of five all were affected with ringworm—not in large patches, but in points where the hairs were broken short and split up. The nails of one child and the mother were affected, discoloured, and softened. In the mother they were roughened, and had transverse ridges on them. In both the disease began with an eczema. The fungus was found near the root of the nail. The spores were longer than usual, and arranged in tubes.

Dr. Bristowe had seen a family with Tinea tonsurans; the mother and one child had the disease in the nails. On some parts of the body was what is called herpes circinatus. The disease of the nails began as a kind of herpes. One can generally find a mycelium.

Dr. Tilbury Fox did not think the size of the spores of much importance, as that depends on heat and moisture. The term "tinea circinata" was now used generally.

Drs. Moxon and Beigel reported on Dr. Clapton's specimen of Ruptured Heart. There was no extravasation round the tear, which consisted of a separation of the muscular fibres merely. They therefore thought it post-mortem.

Dr. Peacock exhibited three specimens, the first two of which had been sent to him by Mr. Royds, the Resident Medical Officer of the Royal Berkshire Hospital. The first specimen was the heart of a cyanotic female, who survived to the age of 15, and had been under the care of Dr. Woodhouse and Mr. Harrison. She died with tuberculous deposits in both lungs, thus affording another instance, in addition to several previously recorded, of the incorrectness of the assertion of Rokitansky that tuberculosis is directly opposed by cyanosis or a venous condition of the blood. The case was one in which there was a nearly complete separation between the sinus and infundibular portions of the right ventricle, the two cavities only communicating by openings between the muscular fasciculi which formed the septum. The septum of the ventricles was incomplete over a large space, and the aorta arose, in part, from the sinus of the right ventricle, while the pulmonary artery took its origin from the infundibular portion. The pulmonic valves were only two in number, and one of them, the larger of the two, showed indications of an imperfect division into two segments. The foramen ovale was imperfectly closed, and the ductus arteriosus was also pervious. The heart thus very closely resembled that organ in the turtle, there being, in effect, two aortic ventricles and one pulmonic ventricle. The second case was one of true aneurism of the apex of the left ventricle. It was removed from a patient of Mr. Walford's, an old man 73 years of age, who sustained a slight accident, and after that presented cardiac and pulmonic symptoms, the most marked being extreme breathlessness. He died about a month after the occurrence of the accident. The heart is of large size, and the left ventricle especially is increased in capacity, and its walls thicker than natural. The aortic and mitral valves are atheromatous, and the coronary arteries are large, and their coats very thick and cretacified. Towards the apex of the left ventricle, and presenting somewhat in front and towards the right side, there is a very decided hollowing of the parietes which would more than lodge a large walnut, and the walls of the ventricle in this situation are thin, and have undergone the fibroid transformation. In the interior of the cavity there is a large clot, partly decolorised, and showing a tendency to lamination; and, on the outside, in the corresponding situation, the pericardium is thickened, and there are remains of adhesions. The specimen affords an example of a true lateral or partial aneurism of the left ventricle in what may be called the second stage. The third case was one of ulcer of the stomach, which had perforated the splenic artery, and occurred in his own practice at St. Thomas's Hospital. The subject of the disease was a female, 20 years of age, who had had copious hæmatemesis two years before. At that time the catamenia were irregular, and she had never been quite well since, suffering from dyspeptic symptoms. Shortly before her admission she brought up a large quantity of blood; and when admitted she was very pallid and prostrated. Three days after her admission she vomited at intervals very large quantities of blood, which was bright-coloured, fluid, and coagulated, and she passed a small quantity by stool. She improved under treatment, and had no return for about sixteen days, when she again vomited fully four pints of blood, became collapsed, and died in a few hours. After death the stomach was found distended by partially coagulated blood, and, on removing that, a small ulcer with abrupt edges and deeply excavated was found about the middle of the lesser curvature on its posterior aspect. At the base of this there was a small papilla with an open orifice, by which a probe readily passed into the splenic artery. Dr. Peacock remarked that it was very remarkable how large quantities of blood were sometimes vomited by young girls, who yet readily recovered. This was, however, the second case in which death had ensued in such instances in his own practice. In the former case a branch of the hepatic artery was perforated.

Dr. Crisp exhibited the cerebellum and a cast of the brain of a girl 14 years of age, who died suddenly after being affected with loss of motion and sensation in the extremities for three days. She had always enjoyed good health until within six or eight weeks of her death, when she had giddiness, unsteadiness of gait, and great pain in the nape of the neck. All the ventricles of the brain were greatly distended with more than a pint of serum, and an inflammatory tubercle about the size of a small nut was found in the fourth ventricle at the apex of the uvula.

Mr. Hulke thought the holding of the head with hands indicated spinal disease.

Dr. Ferous, of Marlborough, exhibited a specimen illustrative of Fatal Disease of the Appendix Vermiformis removed from a boy aged 17. He complained one day of pain in the stomach; next day there was great pain in the right iliac fossa, with tenseness of the abdominal wall. Two days after he was worse, and sank. There was no history of previous illness. When examined there was great peritonitis, the vermiform appendix was tilted forwards; it was gangrenous, and contained calculi. He had seen a case where a plum-stone had escaped, and had remained outside in the tissue for a time. Dr. Bristowe was appointed to examine the calculi.

Dr. Fagge had seen several cases where the diagnosis had been correct, and which, after appropriate treatment, did well.

Dr. Martyn had seen a child which died after a short illness from this cause. A tubercular deposit had allowed the more easy escape of the calculi from the gut.

The President thought Dr. Fagge's observations scarcely restored the reputation of the vermiform appendix, as he referred to fæcal accumulations, not to cherry-pips.

Dr. Moxon showed a specimen of primary hydatid of the heart. The case was one so rare, on account of the very few cases in which hydatids have been found in the heart only, that on this score it would claim a notice; but the exhibitor's desire was to draw attention to a very curious fact—namely, that the hydatid, which was situated on the back of the heart in and about the place of meeting of the septum of the auricles with the septum of the ventricles, had, by its pressure, totally occluded the coronary sinus. The coronary sinus, where it crossed the hydatid, was indeed closed up by old adhesions of its compressed surfaces, and these adhesions were so firm that the track of the sinus could not be reopened. Traced from its opening in the right auricle, the sinus formed a tube about half an inch long, which ended in a blind extremity. It was difficult to conceive on what plan the circulation in the heart's walls had been maintained. There were pericardial adhesions; these did not appear to contain any unusual amount of blood-vessels, but were delicate, easily torn, and consisted only of a little common connective tissue. This case proves the heart to have some power of establishing a collateral circulation under occlusion of its only considerable vein, such as we surely would not have anticipated. Dr. Moxon mentioned a case which he had shown at the Society where all the sinuses of the dura mater were entirely impervious through thickening and filling of the narrowed channels with pus. The heart had been removed from the body of a boy, aged 19, who died in Guy's Hospital with the ordinary symptoms of cardiac obstruction. Dr. Moxon concluded by asking that a committee should examine the specimen.

Dr. Bastian asked why the hydatids were called primary. He could not understand them being secondary, for if they have once grown in any part they cannot infect another spot without undergoing their true cycle of change.

Dr. Moxon said that in certain cases where both liver and lung were affected, it was not unnatural to suppose that the hydatids had extended from the one to the other through the diaphragm.

Dr. Bastian thought this an unlikely mode of propagation, as by the time buds were formed they were too large for transmission. Referred to Drs. Greenhow and Cayley.

Dr. Moxon then showed a specimen of Tubercular Meningitis of the Spinal Dura Mater. The dura mater was thickened to twice its natural thickness, and its inner surface was studded with fine grains throughout the whole extent; in the recent state its vessels were unnaturally injected with blood. It was a remarkable thing that the spinal dura mater should be thus diseased while the dura mater of the cranium escapes, for, in the four cases in which Dr. Moxon has seen this condition, the cranial dura mater has been healthy. He could give no reason for this, but it was interesting to note that the dura mater of the spine is a purely meningeal membrane, while that of the cranium is also periosteum. The observation he believed to be new. It had no clinical interest except that it served to explain the severe pain in the body and limbs that some cases of tubercular meningitis suffer. The particular patient from whom the specimen came had complained much of these pains. Since his first observation of this state he had seen it in four out of nine cases.

Dr. Powell saw some granulations on the dura mater over the medulla oblongata in a case of tubercular meningitis.

Dr. Bastian had brought forward a case three years ago where small papillary growths were found mostly on the left side of the dura mater. They looked like an irritative outgrowth. In structure they were fibro-nuclear.

Dr. Moxon's specimen had not been examined microscopically.

Dr. Moxon showed a third case of universal Thrombosis of the Renal Veins occurring during chronic albuminuria through an attack of pyæmia. The patient underwent an operation for

old disease of the femur, and died in thirteen days with symptoms of pyæmia. The usual results of pyæmia were found in the body, but the kidneys, which were very large and beautiful examples of the large, pale, lardaceous kidneys, had all their veins full of curd-like ante-mortem clot. This was the fourth case in which Dr. Moxon had seen general thrombosis of the renal veins. In all the cases there was a damaged state of the kidneys; twice the kidneys had been injured in cases of fractured spine, (these cases are in *Guy's Hospital Reports* for 1868), and, in the other case, there was an interesting likeness with the present. It was a case where, during old albuminuria, an attack of typhus fever had caused the coagulation. In all the cases it appeared that a general febrile state, acting together with the local renal disease, so lowered the vitality of the kidney that its blood coagulated while yet the rest of the blood continued to circulate.

Dr. Wilson Fox said thrombosis was mentioned by Virchow as likely to occur in any case where the circulation is retarded. He had seen a somewhat similar case, but the examination was imperfect. He could not say what kind of nephritis it was—he rather thought acute.

Dr. Dickinson said the precise conditions of thrombosis had long ago been laid down by Mr. Prescot Hewett, who wrote them in the St. George's Hospital records.

Mr. Thomas Smith exhibited thirty-one stones removed by lithotomy in India by Dr. Wyse. The Hindoo was aged 35, and ten days after the operation he ran away, but was afterwards discovered harvesting, quite well.

Dr. Crisp said vegetable feeders were more liable to stone than carnivorous animals.

Dr. Wilson Fox exhibited a Heart in which a tricuspid murmur had been heard during life. The man had intense dyspnœa and orthopnœa, with distension of jugulars. His urine was albuminous. The murmur was heard over a limited area over the ensiform cartilage, low pitched, and with no special accentuation. The heart was mostly covered by lung. The tricuspid opening was found slightly larger than usual. The free edge of the valves was slightly thickened, and that was all. The heart was hypertrophied, the kidneys granular.

LEGAL INTELLIGENCE.

COURT OF QUEEN'S BENCH.—February 9.

After Term Nisi Prius Sittings at Westminster.—(Before the Lord Chief Justice and a Special Jury.)

EDMUNDS *v.* BECK.

This was an action for slander.

Mr. D. Seymour, Q.C., Mr. Philbrick, and Mr. Nasmith, were counsel for the plaintiff; Mr. Serjeant Parry, Mr. Prentice, Q.C., and Mr. Patchett, were counsel for the defendant.

The plaintiff and defendant were Medical men, and connected with the British Lying-in Hospital and the Female Medical College, which institutions became associated together in 1866. The slander complained of had reference to the manner in which certain Professional duties were performed. Before the plaintiff's examination was concluded, the defendant, through his counsel, made an ample apology, and withdrew all the charges he had made against the plaintiff, and a verdict was taken by consent for the plaintiff, damages 40s.

BECK *v.* SIMPSON.

This was an action for slander arising out of the same circumstances, and in consequence of the withdrawal in the above case, the record in this case was withdrawn.

OBITUARY.

JOHN BRIGHT, M.D.,

Died at a very advanced age, at his house in Manchester-square, last week. He was M.D. Oxon., F.R.C.P., and Consulting Physician to the Westminster Hospital. Dr. Bright was a gentleman of large fortune, and, though at one time actively engaged in practice, for many years past had devoted himself to agricultural pursuits at his estate, Overton-hall, Chesterfield. He was a man of very retired habits, and, as far as we know, never mixed in Professional society or contributed anything to the literature of his Profession. He was an amiable, though somewhat eccentric, person.

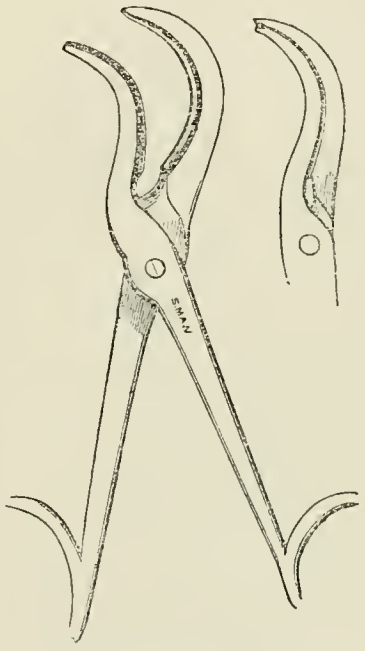
JOHN LOVE, M.R.C.S.,

Was for many years in general practice in Brook-street, Grosvenor-square. He was educated at the Middlesex Hospital, was a Fellow of the Medical Society of London, and was formerly Honorary Surgeon to the Westminster and North-West Penitent Female Asylum.

NEW INVENTIONS.

INTRACISOR FORCEPS FOR ARTERIES, TO SUPERSEDE THE LIGATURE.

Through the kindness of Messrs. Maw, we are able to place before our readers the engraving of the Intracisor, invented by Mr. Webber, for the purpose of securing all the advantage of the ordinary ligature without entailing any of its strangulating consequences or its inconvenience—as a foreign body left in a wound which it is desirable to heal quickly. Among its



recommendations are, it seems, the small wound necessary in exposing the vessel to be operated upon; the facility with which the lower concave blade can be passed under, and made to isolate the vessel from the contiguous tissues; and the complete circumferential division of its inner friable lining, accomplished without interfering with its outer coat when bringing the two blades into close apposition. We have witnessed the effect of the intracisor on a dead artery: nothing can be more perfect.

SYRUP OF HYDRATE OF CHLORAL.

(*Ferris and Co., Union-street, Bristol.*)

The hydrate of chloral is coming largely into use as a soothing medicine, and any preparation which tends to render it more easily taken will be welcome. Messrs. Ferris have succeeded in preparing a tolerably palatable, and easily dosed syrup, which will save much trouble in dispensing. We have administered it in a case of obstinate irritable cough during pregnancy and in another of sleeplessness from general malaise and mental anxiety, and have found it agree perfectly, and produce the desired result in both cases. We may add that the syrup contains ten grains of pure chloral to the drachm, and that the price is eight shillings per pound.

Dr. Letheby on Tuesday reported that 94 deaths and 81 births had been registered in the City of London during the past fortnight. The mortality returns were below the average (116) for the corresponding period of the last ten years.

NEW BOOKS, WITH SHORT CRITIQUES.

Some Points on the Physiological and Medical Aspect of Sewage Irrigation. By Alfred Carpenter, M.D. Croydon. Pamphlet.

*** No one has more thoroughly studied sewage and its effects on the health at all stages of its existence than Dr. Carpenter. In this pamphlet he shows the conditions that must be observed if sewage is to be applied to land profitably and without danger. The chief points seem to be that the sewage should flow *evenly over* the land, and that it should not filter through it to any system of subsoil drains. If the subsoil drainage idea be adopted, much of the sewage will be wasted, by being carried down through holes made by rats, worms, and leeches, before it has parted with its valuable elements, and will undergo putrefaction afterwards. The objections to sewage grass as fodder are well disposed of. We must confess, however, that the details of Dr. Carpenter's pamphlet fill us with a secret longing for the dry-earth system wherever it can be easily carried out.

The Food Journal. A Review of Social and Sanitary Economy and Monthly Record of Food and Public Health. No. 1. Johnson, Castle-street, Holborn. Price 6d.

*** We are disappointed at seeing in this new journal not much more than a repetition of the "Sanitary" and "Health" Journals which have appeared from time to time, and have died of inanition. We cannot help saying that there is no use in hashing up again old threadbare topics of sanitary declamation. There is abundance of material for such a journal, such as would make it a welcome inmate in every house, if the conductors would but look alive. Mr. Gamgee contributes a useful paper on the relation of Cattle Disease to Food, which should be read by every one who has a vote in the cattle importation question. Mr. Yapp gives an account of a new method of making bread from whole wheat, invented by M. Sezille. It would have been better had Mr. Yapp tried the plan and reported the results. Dr. Muter gives an account of butter adulteration, which does not speak well for English honesty. Mr. Cochran writes on the substitution of coffee leaves for the coffee berry, but his essay, like Mr. Yapp's, is devoid of any results of experiment. Mr. Phillips Bevan treats of meat supply and meat preservation; Dr. Thudichum of the wines and brandies of Languedoc. The *Food Journal* has a wide scope of usefulness, but we will not judge of it by No. 1.

An Etymological Dictionary of the French Language. By Edward Pick, Ph.D. London: Murray.

*** This ought to be used in every school where Latin and French are taught. It is a scandal that so little use has been made of Latin in teaching French to children who already learn the former language. Dr. Pick has given a good contribution to the study of philology.

MEDICAL NEWS.

Royal College of Surgeons.—At a meeting of the Council on the 10th inst. the following gentlemen having previously been elected Fellows of the College were admitted as such—viz.:

Kelly, Frederick, of Wandsworth-road, diploma of Membership dated May 26, 1843.
Neverre, Arthur, of Park-street, Grosvenor-square, August 29, 1836.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, February 3, 1870:—

Hogg, Christopher Haynes Jenner, High Escall, Salop.
Lee, Edward Samuel, 4, Savile-row, W.
Petch, Richard, Slotley Bridge, Durham.
Robinson, Richard Swanne, Gray's-inn-road.
Stanger, William, Nottingham.
Weston, Thomas Brodribb, Devonshire-place, Wandsworth-road.

The following gentleman also on the same day passed his First Professional Examination:—

Hickman, Richard, St. Mary's Hospital.

Frederick T. Roberts, M.B., B.Sc., Demonstrator of Anatomy at University College, has been recommended to the Council for the vacant post of Assistant-Physician to University College Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Armstrong, Dr. Alexander, Director-General of the Medical Department of the Navy.—Honorary Physician to her Majesty, *vice* Dr. Bryson, deceased.

Bernard, Dr. Robeat, Deputy Inspector-General of Hospitals and Fleets.—Honorary Surgeon to her Majesty, *vice* Dr. Folds, deceased.

Burger, Alexander, M.D., M.R.C.S.—Assistant-Surgeon to the German Hospital, Dalston.

Clarke, W. Fairlie, M.A., F.R.C.S.—Assistant-Surgeon to the Central London Ophthalmic Hospital.

Donnet, Dr. John Louis, Deputy Inspector-General of Hospitals and Fleets.—Honorary Surgeon to her Majesty, *vice* Dr. Stewart, deceased.

Mackay, Dr. George, Deputy Inspector-General of Hospitals and Fleets.—Honorary Surgeon to her Majesty, *vice* Dr. Armstrong.

Rascu, Adolph, M.D., M.R.C.P.—Physician for Diseases of Women to the German Hospital, Dalston.

Reeves, Henry Albert, M.R.C.S.—Assistant-Surgeon to the Central London Ophthalmic Hospital.

Walker, T. Shadford, M.R.C.S., Assoc. King's Coll., Lond.—Honorary Surgeon to the Liverpool Eye and Ear Infirmary, *vice* Dr. R. Hibbert Tayler, appointed Honorary Consulting Surgeon.

Whitehead, J., M.D., L.S.A.—Surgeon, etc., to the Hornsey-road Branch of the North London and Islington Dispensary.

MILITARY APPOINTMENTS.

Medical Department.—Assistant-Surgeon Walter Crisp, from the 3rd Foot, to be Staff Assistant-Surgeon, *vice* Dominick Lynch Olden, deceased; Assistant-Surgeon Denis Joseph Canny, from 11th Foot, to be Staff Assistant-Surgeon, *vice* Thomas William Patterson, appointed to 11th Foot.

War Office.—The following appointments have been made:—3rd Foot: Staff Assistant-Surgeon Richard Jackson, to be Assistant-Surgeon, *vice* Walter Crisp, who exchanges. 11th Foot: Staff Assistant-Surgeon Thos. William Patterson, to be Assistant-Surgeon, *vice* Denis Joseph Canny, appointed to the Staff.

BIRTHS.

Adams.—On February 1, at Martock, the wife of J. Dixon Adams, M.D., of a son.

Hawkins.—On February 7, at 17, Tredegar-place, Bow, Middlesex, the wife of James S. Hawkins, Surgeon, of a daughter.

Jackson.—On January 3, at Meerut, Bengal Presidency, the wife of J. Rawlinson Jackson, M.D., Surgeon H.M.'s Indian Army, of a son.

King.—On February 7, at 18, Stratford-place, the wife of E. Holborow King, M.R.C.S., of a daughter.

Long.—On February 6, at 24, Marine-parade, Worthing, the wife of C. F. Long, M.D., of South-park, Salehurst, of a son.

MARRIAGES.

Breary—Shortt.—On December 27, at St. George's Cathedral, Madras, John Edward Breary, Esq., of the Bank of Madras, to Cecilia, eldest daughter of John Shortt, M.D., Superintendent-General of Vaccination, Madras Presidency.

Davis—Kean.—On December 29, at St. Paul's Cathedral, Calcutta, W. Parry Davis, Esq., District Superintendent of Police, Nudiapore, to Margaret, youngest daughter of the late Archibald Kean, M.D. H.E.I.C.S., late Civil Surgeon, Moorshedabad.

Kelly—Davidson.—On February 2, at St. John's, Brixton, George Lloyd Ashburnham, eldest son of Captain Kelly, I.C.S., District Superintendent, Punjab, to Kate Montgomerie, only daughter of F. M. D. Davidson, L.R.C.P.E., Brixton.

DEATHS.

Allen, Henry A., M.D., at Singapore, on December 23, 1869.

Berryman, Mary Anne, the beloved wife of John Berryman, M.D., and third daughter of George Sinclair Brodie, Esq., at St. John, New Brunswick, on January 14, aged 26.

Baight, Dr. John, at 19, Manchester-square, on February 1, aged 87.

Eyles, Gabriel Manning, second son of G. Eyles, Assistant-Surgeon R.M.L.I., Portsmouth Division, at The Beeches, Barcomb, on February 1, aged 30.

Growse, Robert, M.D., eldest son of Robert Growse, Esq., of Bildeston, Suffolk, at Brentwood, Essex, on February 2.

Hammond, Frederic George, youngest child of J. H. Hammond, M.D., at Winckley-square, Preston, Lancashire, on February 5, aged 14 months.

Hunter, Helen Wilkie, wife of William Hunter, M.D., at Woodbank, Larga, Ayrshire, on February 3.

O'Donnell, Henry James, F.R.C.S., at 1, Albert-terrace, London-road, Southwark, on February 6, aged 57.

Prater, Charles Augustus, M.R.C.S. and L.R.C.P.E., at Dover, on February 2, in his 29th year.

Rymer, Frances, widow of the late John Rymer, M.D., of Weston-super-Mare, on February 4, at Croydon, aged 72.

Taylor, Dr. Richard, at Whickham, Durham, of typhus fever, taken while in the faithful discharge of his duty, on February 5, aged 37.

Welch, Phœbe Elizabeth, eldest daughter of the late Edward A. Kemp Welch, M.D., Downton, Wilts, aged 32.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bristol Royal Infirmary.—Assistant House-Surgeon; must be M.R.C.S. Lond., Edin., or Dub., and be registered. Applications and testimonials to the Secretary on or before the 21st inst.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to P. Rose, Esq., Hon. Sec., at the Institution, Brompton, S.W., and before March 5. Candidates to attend the Medical Committee on March 7, at 4 p.m.

LITTLEMORE PAUPER LUNATIC ASYLUM.—Resident Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to John M. Davenport, Esq., County Hall, Oxford, on or before the 19th inst. The duties will commence early in March.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary on or before February 26.

LONDON FEVER HOSPITAL.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, Islington, N., on or before February 22.

METROPOLITAN FREE HOSPITAL.—Honorary Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, at the Hospital, Devonshire-square, City, on or before February 24.

NEWPORT INFIRMARY AND DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before March 1.

NOTTINGHAM DISPENSARY.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

PARISH OF ST. GEORGE, HANOVER-SQUARE.—Dispenser for the Workhouse in Mount-street. Applications and testimonials to the Clerk, at the Board Room, Mount-street, on or before February 14.

ROSS UNION.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

ROYAL ALBERT ASYLUM FOR IDIOTS AND IMBECILES OF THE NORTHERN COUNTIES, LANCASTER.—Medical Superintendent; must have Medical and Surgical qualifications. Applications and testimonials to the Secretary, on or before March 11.

ST. MARYLEBONE PROVIDENT DISPENSARY, 16A, DUKE-STREET, PORTLAND-PLACE.—Medical officer; must have either a Medical or Surgical qualification and be L.S.A. Applications and testimonials to the Secretary on or before the 26th inst. Further particulars at the Dispensary between 10 and 2 o'clock.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Board of Management on or before February 19.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.—Lecturer on Materia Medica. Applications and testimonials to J. G. Wilkinson, Secretary, on or before February 14.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

WORCESTER UNION.—Medical Officer for No. 1 District; must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. Knott, solicitor, Worcester, on or before the 16th inst. Election on the 17th inst.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

East Ward Union.—The Brough District is vacant; area 34,100; population 2787; salary £16 10s. per annum.

Glendale Union.—Dr. Paxton has resigned the Lowick District; area 12,875; population 1946; salary £10 per annum.

APPOINTMENTS.

Haslingden Union—William J. Stott, M.R.C.S.E., L.R.C.P. Edin., to the new Workhouse.

Holbeck Union.—David Mann, M.R.C.S.E., L.S.A., to the West District.

Wolstanton and Burslem Union.—Ralph Goodall, M.R.C.S.E., L.S.A., to the Wolstanton District. John Alcock, M.R.C.S.E., L.S.A., to the North-east Burslem District.

MR. J. G. PERRY, F.R.C.S., the late Inspector of Prisons, whose death we recorded in a late number, has left to his friend, Bishop Colenso, £2000, free of legacy duty.

MR. JOHN FOX, M.R.C.S. Eng., of Weymouth, has been presented with a magnificent silver waiter, a purse containing two hundred and fifty sovereigns, a drawing-room clock, etc., by a number of his old friends and patients, on relinquishing the active duties of his Profession.

ABOUT 4000 cinchonas which were recently planted at St. Helena are in a thriving condition.

ACCORDING to the *Athenæum*, there is no lecturer on Dentistry at either of the Medical colleges or schools in France; but M. Préterre and others are endeavouring to get the defect remedied.

THE Board of Guardians of St. George, Hanover-square, have intrusted the parochial dispensing to the South-Western Provident Dispensary, Denbigh-street, Pimlico, from the 7th instant.

SCARLATINA IN DUNDEE.—According to the report of Dr. Pirie, Medical Officer to the Local Board of Health, scarlatina carried off 121 persons in December, and 67 in January.

GERMAN HOSPITAL, DALSTON.—The appointment of Dr. Rasch as Physician for the treatment of diseases of women does not cause the vacation of his office of Physician to the Dispensary for the East-end of London.

HOSPITAL FOR INCURABLES, DUBLIN.—The board have decided not to elect a successor to the late Dr. Croker, who was one of the Physicians to the Hospital.

UNFOUNDED CHARGE AGAINST A MEDICAL MAN.—Mr. Hasler, the Medical officer of the Killiney Dispensary District in the Rathdown Union, having been charged with neglecting a patient, named Colclough, who afterwards died, the circumstances were investigated by the Board of Management, and they, after hearing all the witnesses, unanimously acquitted Mr. Hasler of all blame.

BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT SOCIETY OF IRELAND.—The anniversary meeting of this Society was held on Wednesday week. It was numerously attended. The objects of the Society are entirely philanthropic. A handsome list of donations and subscriptions was announced. A committee was elected, and votes of thanks cordially passed to the officers of the institution.

NEW BATHING ESTABLISHMENT AT BATH.—This establishment was opened on Wednesday week. The important event was of an effective, without being of a too demonstrative, character. The Bishop of the Diocese, the Rector of Bath, the civic authorities, and other persons of local importance joined in the ceremony, which was one of a most interesting and satisfactory character.

HEALTH OF ROME.—Rome has been peculiarly unhealthy, unprecedented wet having been followed by unusual cold; seventeen frosty nights is a large proportion for an Italian January, and 10 degrees of frost of Fahrenheit involves not a little punishment where there is a total deficiency of warming apparatus—that is to say, in most houses. Churches in this atmosphere of winter are like wells, positively dangerous after the bright sun of the streets: only the prudent escape unpleasant attacks.—*Guardian.*

SMALL-POX IN A WORKHOUSE.—Dr. Macaulay, the Medical Officer of the Brentford Union, stated in his report of last week that a tramp suffering from small-pox had been admitted into the Workhouse Infirmary from a common lodging-house, there being no less than 135 patients in the ward at the time. Two days after his admission the disease was communicated to two patients in the ward, and day after day fresh cases broke out. An old man named Barnes, who was under treatment for a broken leg, was attacked with the disease, and died two days afterwards. There are now thirteen bad cases, and others are sickening. In addition to this, relapsing fever has appeared in the house, which contains in all 600 persons.

DEATH FROM QUACK MEDICINE.—The Liverpool Coroner held an inquest on Tuesday last on the body of a man named McDowell, 20 years of age. He had for some time been afflicted with an affection of the skin, and on Wednesday last he obtained a French specific, which was intended to be mixed with water, and used in a bath. Instead of thus using it, he rubbed it on his body just as he received it from the chemist. The poison it contained was rapidly absorbed into the system, mortification followed inflammation, and death resulted. It was proved at the inquest held on the body of the deceased that the preparation used was a strong solution of the perchloride of mercury. In addition to the symptoms on the skin, the deceased suffered from violent cramp of the stomach and legs.

THE DISMISSAL OF DR. M'DOWEL FROM SIR PATRICK DUN'S HOSPITAL.—At a meeting of the Fellows of the Royal College of Surgeons, Ireland, held on February 8, the President in the chair, the following resolutions were unanimously agreed to:—"1. That this College has learned with regret that the Board of Trinity College, Dublin, has lately adopted the very unusual course of dismissing from the post of Clinical Surgeon to Sir P. Dun's Hospital a Fellow and Councillor of this College, a proceeding which, this College has been informed, was adopted by the Board of Trinity College without any open investigation into the assigned cause of complaint, although a full inquiry was repeatedly requested by the Surgeon in question. The condemnation of any individual without a full and open investigation is a proceeding of which this College disapproves, and, in the case of a Fellow of the College, is one against which it feels it to be its duty to protest. 2. That the College desires to tender to Dr. M'Dowel the expression of its entire sympathy in the unjust treatment to which he has been subjected, and is of opinion that the high professional rank and position which he has for many years occupied, convey an assurance of professional ability which, so far as the College, in the absence

of the challenged inquiry, has been able to learn, remains unaffected by the course which has been adopted towards him. 3. That we consider it expedient that the foregoing resolutions be published in the Medical journals and in the Dublin morning papers."

COLLEGIATE PROCEEDINGS.—An ordinary meeting of the Council of the Royal College of Surgeons was held on the 10th inst., when Mr. Samuel Solly, F.R.S., the senior Vice-President of the College, was appointed Hunterian Orator for the ensuing year, and will, like Mr. Quain, in all probability deliver the discourse when deservedly occupying the President's chair. Several important matters came on for consideration, as the motions that an authorised report of the proceedings of each meeting of the Council, with the division lists, be posted in the hall of the College within three days after each meeting, but that such report be previously submitted to the President, or, in the event of his absence, to the senior or junior Vice-President, for approval. The other, "That, for the future, in the opinion of the Council, the two offices of Examiner and Councillor of the College ought, as far as practicable, to be made disqualifications each for the other." Upon this a committee was appointed, with power to take legal advice, to consider and report to the Council as to the steps by which effect might be given to this principle prospectively as vacancies occurred.

STATE AID TO SCIENCE.—In reference to the argument frequently urged that State aid tends to paralyse the spirit of philosophical inquiry, and lately suggested from a source so unexpected as Professor Huxley, *Nature* asks, does Mr. Airy's salary paralyse astronomy? Does Sir Henry James's salary paralyse Geodesy? Does the money spent on art at South Kensington, on pictures for the National Gallery, and on collections at the British Museum, paralyse these establishments? Is there something so peculiar in experimental labours as to place them in a category by themselves, subjecting them to malign influences from which the whole of the rest of the business of life is exempt? Are such labours so exceptional in their nature that, whilst a public body like the Royal Institution shall purchase apparatus and pay salaries, and so stimulate the genius of Davy, Faraday, and Tyndall, the same apparatus and stipends given to them by the State must have reduced these men to torpor?

DRINKING IN BRUSSELS.—Although we cannot say we are showing many signs in our own country of a diminution of drunkenness, still we do not believe that this is on the increase. It would seem, however, judging from the complaints we hear of, that in France, Switzerland, and Belgium, the increased prosperity of modern times has been attended by a great increase in the consumption of absinthe and other alcoholic compounds, so that John Bull stands a very good chance of being distanced in what at one time was pre-eminently his own field. A writer in the *Brussels Presse Médicale* tells us that there are in that city, with its 315,000 inhabitants, 4358 *cabarets* or publichouses—*i.e.*, 1 for 72 men, women, and children. But if we say that of the 72 there are but 20 who are in a position to frequent these places, we have the startling statement that 20 drinkers support a *cabaret*. The *cabarets* must, on an average, sell to the value of 5000 francs per annum to make a living, and we come to the alarming conclusion that each drinking inhabitant pays his 250 francs to the support of the *cabarets*—in other words, nearly 22,000,000 francs being thus spent annually.

A SOLUTION of morphia—one grain in six minims, the most convenient strength—may be made by first dissolving one drachm of the acetate (recently prepared) in about four fluid drachms of hot distilled water, adding a drop or two of diluted acetic acid, if the solution be not complete. Filter into a graduated measure while hot, and the fluid being all passed through, wash the filter by sprinkling over it sufficient distilled water, that the whole filtered product, when cold, may measure exactly six fluid drachms. It is important that the acetate of morphia be recently prepared. It has then, as found in commerce, a faint acetic odour, and is an almost pure white dry powder. If of a pale brownish-grey colour and having a somewhat musky odour, characteristic of age, it will be less soluble. This is not due to the loss by volatilisation of acetic acid merely, as this loss is replaced, and a complete solution effected by applying heat—the strength of one grain in six minims being adhered to—the solution, probably on account of the salt having undergone some molecular change by keeping, will, when cold, become a mass of feathery crystals. The solution should not be kept long. When prepared as above, it is almost void of colour, but gradually changes to a vinegar-brown. If the acetate of morphia be not quite fresh, this colour is produced in the solution when first prepared. Where there is not much demand for the acetate it will be impossible to have it *always* recently prepared. In such cases it would be better to prepare the solution direct from pure morphia and acetic acid, using twenty-five per cent. less than would be required of the acetate, to allow for the combined acetic acid. To make six fluid drachms of the solution in this manner, forty-five grains of morphia and about four fluid drachms of diluted acetic acid will be required. Mix them in a small flask or ordinary ounce phial, and apply the heat of a water-bath till dissolved, adding a drop or two more of the acid, if necessary, being careful that the solution is at last neutral or only slightly acid. Filter as directed above, and add sufficient distilled water to make six fluid drachms. In this solution one grain of pure morphia will have been dissolved in eight minims, and it will contain one grain of the acetate in six minims.—*Mr. Martindale in Pharmaceutical Journal.*

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN JANUARY, 1870.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	20·03	0·113	0·066	0·002	15·0	4·6
West Middlesex	20·57	0·117	0·066	0·001	14·8	4·2
Southwark & Vauxhall	19·87	0·133	0·050	0·004	15·0	4·3
Chelsea	21·43	0·102	0·056	0·002	15·5	5·0
Lambeth	19·90	0·102	0·078	0·003	14·8	4·4
Other Companies.						
Kent	28·07	0·011	0·129	0·000	20·0	6·0
New River	20·53	0·059	0·075	0·002	14·9	4·1
East London	21·83	0·106	0·091	0·002	15·2	4·1

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was more or less turbid—viz., the Chelsea Company and the Lambeth Company.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 93,650,519 gallons; and the number of houses supplied was 474·010. Thus is at the rate of 29·5 gals. per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 27·7 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and Bois de Boulogne.

H. LETHEBY, M.B.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

The review of Professor Ziemssen on the cold-water treatment of typhoid fever is in the printers' hands, and will be inserted shortly.

London Milk.—With reference to our late analyses, we are informed that the Messrs. Skurray, of 41, Archer-street, whose name (misspelt Scurry) stands in the first class, keep their own cows in sheds in the suburbs, and do not procure their milk from the country.

C. N., Great Ormond-street.—We cannot take the responsibility of recommending the gentleman named, whose advertisements are seen too frequently to be agreeable to a Professional eye. Consult any Physician in good practice.

A Deluded Wretch.—We believe the advertising person you mention to be a mere robber; all his titles are false, and his remedies swindles. Go to any Physician of repute, who will explain away your fears, and put you into the way of regaining the *mens sana in corpore sano.*

PURE AIR FOR INVALIDS AT HOME.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In your review of Dr. Bennet's work you quote a passage of his, where he remarks that, in preference to a crowded town, a class of invalids would do better to remain at home on some healthy common, where they can breathe fresh and pure air. Having had occasion lately in all weathers to pass over Clapham and Wandsworth Commons, I was struck by the congenial feel of the air against my healthy skin, and I wondered how these open healthy places could be so neglected by the pulmonary victims who retreat to Italy. I am, &c. ALFRED WILLIAM MOORE.

2, Bessborough-street, Belgravia South, S.W., Feb. 7.

P.S.—Perhaps some of your able contributors would write an account of the open spaces in and around London for the benefit of invalids who would like to be near their Physicians and their friends.

M. S.—Both books are thoroughly good; it matters not which you choose. Fownes's Chemistry.

A Surgeon, Hollaway.—When a Medical Practitioner is urgently sent for to a patient said to be in danger, he *must* go, unless there be some valid reason to the contrary. Etiquette is no valid reason, for no etiquette must stand in the way of saving life. Undoubtedly he ought to be paid for his visit, whether another Medical man be in attendance or not. Of course his conduct should be such as to support his absent *confrère* in the patient's confidence, and to do to him as he would wish to be done by. If he choose to forego payment for himself on the ground that he acts for his *confrère*, who receives the fees due for his visits, that is a matter of private arrangement and mutual courtesy. But certainly he has an undoubted right to be paid if he choose; and if the service required be one which supplements that of the regular attendant, and does for the patient what the latter cannot do, he need not be scrupulous in accepting a fee. Mr. A., who lives five miles off, attends Mr. B. B. is nervous, and is always sending to C., his Medical neighbour. Without doubt C. should respect the interests of A., but he should also be rewarded for his trouble.

Ether Spray in Hernia.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I find in the *Practitioner* of the current month a note on the use of ether spray in strangulated hernia. Will you accept the following case in confirmation of its value?

On June 12, 1869, I was hastily called to a young man in the country who was said to be suffering from colic and vomiting, and who had been ill for several hours. I found the patient lying in bed with a countenance expressive of great suffering, and writhing in agony. He had been suffering for twenty-four hours from pain in the bowels and vomiting, which, during twelve hours, had been very offensive. On examination, I found on the right side a small direct inguinal hernia, which was very hard, tense, and tender. For some time I tried in vain to reduce it, when suddenly the thought struck me that I had in my carriage a Richardson's spray producer, which I at once brought into use. After applying it for rather more than two minutes, I again attempted to reduce the hernia, which I succeeded in doing with the greatest ease. I am, &c.

27, Long-street, Devizes, February 8. C. H. Marston, M.D.

Omega.—Yes, if the bill of particulars have been delivered.

T. H. C. (*Wantage*) will find an article on the subject in Copland's Dictionary.

T. R.—The fee varies; but from one to three guineas may be charged.

The Contagious Diseases Act for General Application to Prostitution.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—May we not contend that wherever disease may be found it should be efficiently met either by public or private means? Now, when we look at general prostitution as an evil, the question arises whether prostitutes all over the country have the means of paying Doctors to be cured of gonorrhœa or syphilis. I think not, and, if not, the means should be afforded them; and for these reasons—because they may not go on spreading disease—in fact, as in the application of the Act to garrison towns, etc. How and in what manner the Act may be made applicable is another question; but it is evidently a desideratum. In naval ports and garrison towns it saves men from much hurtful disease, and women also. It must do the same, by the same rule, all over the country. At present and in past time young men and married men have contracted disease, and bequeathed it to their offspring in the absence of such legal enactments. That is well known, and the unprincipled and ignorant quacks have flourished upon the unfortunate victims falling into their hands. This is another great evil desirable to be got rid of. As to the licensing of sin by carrying out the Act for this purpose, it is utterly beside the question. The physical evil is dealt with for the public good and health. The moral or religious view does not apply, for conscience and religion restrain forbidden sexual exercise, whether disease may or may not be contracted, and persons so disposed have taken and always will take the risk.

I am, &c. Spectator.

Sheffield.—As the question between Mr. Taylor and the board of the Sheffield Dispensary respecting his dismissal is shortly to be brought before a legal tribunal, we refrain from making any comments upon it; we hope, however, that all the circumstances of the case may be thoroughly investigated.

The Action of Chloral Hydrate.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In addition to the well-known hypnotic action of this drug it may be well for those of your readers who have not had the experience to know that it is a valuable adjuvant to chloroform and opium. I have at present a patient whose case presents many points of interest, of which I intend to make further use. He required the hypodermic injection of nearly twenty-four grains of the bimeconate of morphia daily for the relief of pain; and even this enormous quantity never had the effect of really producing sleep, while it made her sick and destroyed her appetite. When the bed linen required changing it was necessary to put her thoroughly under the influence of chloroform, and this was seldom effected by a quantity less than an ounce. From sixty to eighty grains of chloral hydrate now produce a quiet slumber, which lasts from twelve to sixteen hours, and during this time she frequently wakes, free from pain, to partake of nourishment. When any operative measure or change is required, if the chloral is in action the inhalation of a few drops of chloroform produces the most profound anæsthesia. She suffers from occasional diarrhœa, and this is effectually checked by the addition of ten drops of laudanum to the starch enema in which the chloral is administered. This facility for the combination of the action of chloral and chloroform will, I believe, prove invaluable in obstetric and surgical practice. I have used in the past week nearly a pound weight of chloral hydrate, and become more impressed with its value in every fresh case in which I use it.

Wakefield, Feb. 6. I am, &c. Lawson Tait.

John K. Spender, M.D.—As soon as possible.

A. R.—It is a quack medicine, and cannot be recommended.

Cubic Space.—There is a sensible article on the subject in the *Examiner* of January 8. Dr. Bence Jones long ago propounded the true doctrine that it is not space, but movement of air, that is needed; and he is seconded by Dr. Edward Smith and Dr. Angus Smith. It is pure folly to describe any number of cubic feet as indispensably needful or as settled by authority. Of course there should be plenty of floor space for convenience' sake; for as to height and cubic space, they may be subordinate to principles of ventilation. It is ridiculous to say that people die in a workhouse infirmary because "the cubic space does not come up to the requirements" of some given committee. The huge barracks building in India are believed by some of our military readers to be mistakes. The English are thoroughly unpractical, and believe that their beefsteaks and porter and huge buildings and water-closets must follow them over the world.

St. Moritz and the Engaoin.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have read your correspondent's rejoinder to my letter published in the *Medical Times and Gazette* of December 18, and also Dr. Hermann Weber's letter in that of January 15.

I should not trouble you with any further remarks were it not that many readers of your paper and many members of the Medical Profession, some of them acquaintances of mine, visit St. Moritz annually, and that my silence might be misconstrued. It is essential to rectify misstatements, which might, if not set right, prove injurious to the cause of a system that will, I hope, ultimately, when its merits are better known, prove of great benefit to a large portion of suffering mankind.

Your correspondent leaves unanswered—not being able to refute them—the chief points of my letter—*i.e.*, his error as to the cause and date of departure of the other English last winter, and his negligence to obtain information from Drs. Berry and Brügger—and enters into minor matters.

I was quite aware that most of the guide-books write Engad*ine*. My parenthetical remark that *-ine* should be *-in* meant simply that the latter is the correct German termination, and more true to the meaning of "Engadin," which is "Upper Valley of the Inn." We retain the name of the river which flows through this valley in its original form. Why should we not that of the valley itself? I do not see the connexion between this and the address I gave at the top of my letter as that best adapted to reach me by post. An address should follow the languages of the countries through which it passes. French being, *par excellence*, *the* European language will carry any Continental letter (and especially those that pass through France or Belgium) most readily to its particular country. Once there the language of that country is the most suitable.

I can quite believe that your correspondent has "often lately, when sitting with others, found a temperature of 54° Fahr. exceedingly comfortable." Every rule has its exceptions. I maintain that the temperature usual (I do not say unexceptional) in our English sitting-rooms is above 60° Fahr. I was ordered by a London Physician, when in tolerably good good health and at college, to keep my sitting-room at a temperature of from 60° to 65° Fahr., and this as something moderate. But your readers can solve the problem for themselves by testing the average warmth of their own and their friends' sitting-rooms. I touch upon this point again because it evinces the extreme dryness of this climate, and I believe it to be one important element in the benefits accruing here that, whilst being braced out of doors, one does not, as is often supposed to be the case with stove-heated rooms, become enervated indoors.

For the benefit of your general readers I will just explain that St. Moritz is less shut off from communication with the rest of Switzerland and Italy in winter than summer for the reasons I alleged—*i.e.*, that sleighing is more rapid and less clumsy than diligence travelling. The post from Chur comes in about an hour earlier than in the summer—*i.e.*, at 5 p.m.—and does not leave Chur earlier than then. It happens that once in three or four years, so the natives tell me, it may be detained half-way at Mühlen overnight, should a fall of snow be unusually heavy, just as our mail trains are delayed on such exceptional occasions. The post in such a case reaches this place at 10 the next morning, and is followed the same evening at the usual hour by that day's post. It is amusing that whilst your correspondent plays upon my use of the word "imagination," and states he thinks "imagination entirely out of place in investigations of this kind," he should (using it purely in an imaginative sense) a few paragraphs before write, "I had imagined, in common with most persons, that mountain passes at an altitude of nearly 8000 feet above the sea were often rendered impassable during the winter by snow storms." I will allow that I should have said, to avoid misapprehension of my use of that expression, "But want of that imaginative faculty which leads to faith in the assertions of others need hardly lead him to discredit and disregard facts that do exist, though unrecognised by him."

As to the entry in the Kulm Hotel visitors' book of the number of persons who spent last winter there, I have it before me, and it stands thus. The page in question is headed by the names of two ladies—first, a patient of Dr. Weber's who spent the winter here; second, that of a lady to whose name is attached the date of her departure (October 28, 1868), which fact your correspondent appears to have overlooked. Then follows my name, then that of my sister. The rest of the page and that opposite is taken up by my remarks, signed with my initials, "F. G."

I can not only corroborate what Dr. Weber has written to you, but I can add that I personally, in August, 1869, referred your correspondent to Dr. Berry, one of the Medical men here, and in my remarks in the visitors' book of the Kulm Hotel I refer any of my fellow-countrymen seeking fuller information (of whom we know he was one) to Dr. Hermann Weber, giving, at the same time, his address. I have it on their own authority that he did not apply to either of the Medical men here or to Dr. Weber. I am, therefore, quite at a loss to understand your correspondent's assertion as to the distinct refusal to impart information by those who were said to possess it, unless, as Dr. Weber conjectures, he refers to my refusal to allow him to copy the monthly means of the meteorological tables I lent him to study. He asked permission to copy these for publication (I presume, now, in your journal); I explained my regret that I did not feel authorised to grant this, because—1stly, up to March 1869 (they dated from October, 1868, to July, 1869), they were copies of the observations taken by my predecessor; and, 2ndly, because they were all taken at the request of Dr. Hermann Weber, who might, I thought, wish to reserve to himself

the right of publication. Your correspondent professed at the time to understand and acquiesce in my refusal. With this exception I satisfied fully every inquiry he made, though he only questioned me superficially as to my own case, not even feeling my pulse or examining my lungs (which I would readily have allowed had he wished to do so); yet I know he felt himself competent to declare to myself and others that he did not think much of my case, and competent, moreover, though a mere summer visitor of a few weeks, to doubt my assertions respecting the winter here.

Your correspondent made a few inquiries of another patient of Dr. Weber's and, I think, of a gentleman who spent three weeks here the previous winter, and these were the extent of his researches. Though there were in the hotel with him three of the previous winter's patients, he did not examine one of them. This is hardly a specimen of the candid inquiry so grave a subject merits.

I am, &c. F. Greatheed.

St. Moritz, Ober-Engadin, Suisse, Jan. 27.

COMMUNICATIONS have been received from—

M. S.; Dr. Letheby; Mr. A. W. Moore; Messrs. Skurray and Co.; Dr. Spender; Mr. J. N. Radcliff; Mr. F. C. Ghose; Dr. MacCormac; Mr. Lawson Tait; Mr. John Taylor; Dr. A. Spengler; Dr. Rasch; Dr. Sankey; Mr. F. Pike; Messrs. Carl and Bergmann; Messrs. A. and C. Black; Dr. Broadbent; Dr. Donkin; Spectator; Mr. C. Noble; Dr. C. H. Marston; Mr. W. Watson; Dr. J. A. Bowen; Dr. J. Whitehead; Mr. P. Le Neve Foster; Mr. G. H. Leah; A Deluded Wretch; Dr. J. N. Vinen; Dr. Fairbank; Mr. T. Shadforth Walker; Professor Erasmus Wilson; Dr. Peacock; Dr. P. Campbell; Mr. Haynes Walton; Mr. W. Acton; Mr. H. Arnott; Mr. A. Tarrant.

BOOKS RECEIVED—

Monthly Microscopical Journal, February—Smitz's Water and Baths of Neuenahr—American Journal of Insanity—Transactions of the Pathological Society, vol. xx.—Transactions of the Odontological Society—Norton's Infantile Diseases—A Map of the Geographical Distribution of the Medical Substances contained in the British Pharmacopœia of 1867—Food Journal, No. 1—American Journal of the Medical Sciences, No. 117—The Practitioner, February—Wilkinson on the Possibility of Long-continued Abstinence from Food—Dr. Hutchinson (Brooklyn, N. Y.) on Acupressure—Syson on How to dispose of our Refuse.

NEWSPAPERS RECEIVED—

California Medical Gazette—Ulster General Advertiser—News List and Index, No. 32—Bath Express—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

February 12. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Scott, "Meteorology."

14. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 3.

Medical Society of London, 8 p.m. Mr. Henry Hancock, "A Case of Removal of a Bony Tumour with the Lower Half of Radius and a Portion of the Ulna." Mr. J. R. Wells, "A Case of Attempted Suicide by Chloroform." Mr. Weeden Cooke, "On Lupus."

15. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Dr. Barnard Davis and Mr. A. Welch, "Aborigines of the Chatham Islands." Dr. John Campbell, "Polygamy." Mr. R. Tate, "Inscribed Stone from Venezuela."

Pathological Society, 8 p.m. Dr. Barclay, "Tumour of Spinal Cord." Mr. Maunder (for Mr. Porter, of Lindfield), "A Larynx after Croup." Mr. Carr Jackson, "Diseased Knee-joint." Mr. Nunn, "Abscess between Vesiculæ Seminales and Obstructed Intestine." Dr. M. Mackenzie, "Disease of Cricoid Cartilage." Mr. H. Marsh, "Communication of Aorta with Psoas Abscess." Mr. Heath (for Mr. Symonds, of Oxford), "Medullary Cancer of Bladder." Mr. De Morgan, "Secondary Deposit in Lung of Fibro-plastic Tumour." Dr. Payne, "Portal Phlebitis and Coagulum in Pulmonary Artery," &c.

Royal Institution, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

16. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

17. *Thursday*.

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Dr. Day, "On Infantile Pneumonia." Followed by a Clinical Discussion on "Croup."

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

18. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal Institution, 8 p.m. Mr. Clifford, "Theories of the Physical Forces."

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 5, 1870.

BIRTHS.

Births of Boys, 1172; Girls, 1206; Total, 2378.
Average of 10 corresponding weeks, 1860-69, 2172·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	938	890	1828
Average of the ten years 1860-69	774·0	753·7	1527·7
Average corrected to increased population	...	...	1680
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	5	11	1	9	1	...	1	2
North ...	618210	6	4	25	3	9	4	3	5	2
Central ...	383321	1	1	7	...	4	1	1	1	1
East	571158	2	8	21	...	24	4	2	4	3
South	773175	2	10	43	1	33	4	3	1	9
Total	2803989	11	28	107	5	79	14	9	12	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·048 in.
Mean temperature	42·0
Highest point of thermometer	50·4
Lowest point of thermometer	27·0
Mean dew-point temperature	38·3
General direction of wind	S.S.W., S., & S.S.E.
Whole amount of rain in the week	0·25

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 5, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Feb. 5.	Deaths Registered during the week ending Feb. 6.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2378	1828	50·4	27·0	42·0	5·56	0·25	0·64
Portsmouth ...	122084	32	60	40	59·8	27·0	46·3	7·95	0·93	2·37
Norwich	81087	27	55	70	47·7	25·5	39·4	4·11	0·10	0·25
Bristol	171382	90	121	90	51·8	26·7	42·7	5·95	0·42	1·07
Wolverhampton ...	72990	53	59	33	48·5	32·8	42·5	5·84	0·29	0·74
Birmingham ...	369604	117	242	188	48·5	24·8	40·8	4·89	0·74	1·88
Leicester	97427	75	81	43	50·5	25·0	40·5	4·72	0·50	1·27
Nottingham ...	88888	110	55	68	48·0	25·1	39·2	4·00	0·41	1·05
Liverpool	517567	250	417	352	51·6	31·4	41·5	5·28	0·36	0·91
Manchester ...	374993	207	281	263	51·0	29·0	41·2	5·11	0·31	0·79
Salford	121580	58	99	84	51·7	28·3	42·3	5·73	0·28	0·71
Bradford	143197	34	87	75	48·0	23·0	40·2	4·55	0·21	0·54
Leeds	259527	30	183	162	48·0	25·0	39·6	4·22	0·36	0·91
Sheffield	247378	27	181	144	49·7	26·0	40·3	4·61	0·47	1·20
Hull	130869	91	90	63	...	...	...	...	...	...
Sunderland ...	94257	52	92	36	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	101	78	46·0	25·0	38·5	3·61	0·17	0·43
Edinburgh	178970	100	111	113	46·7	25·0	39·8	4·34	0·10	0·25
Glasgow	468189	228	376	315	47·3	31·5	41·0	5·00	0·40	1·02
Dublin (City, etc.*)	321540	82	192	207	53·5	28·0	43·3	6·28	0·27	0·69
Total of 20 Towns in United Kingd'm	7209603	83	5267	4258	59·8	23·0	41·2	5·11	0·37	0·91
Week ending Feb. 5 Paris	1889842	242	...	1105	...	...	...	...	...	...
Week ending Jan. 29 Vienna	605200	162	...	327	...	...	21·0	−6·12	...	...
Week ending Feb. 3 Berlin	702437	112	667	395	...	...	25·3	−3·75	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·648 in. The barometrical reading decreased from 29·99 in. at the beginning of the week to 29·47 in. on Friday, Feb. 4.

The general direction of the wind was S.S.W., S., and S.S.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

INTRODUCTORY LECTURE
TO THE
COURSE OF COMPARATIVE ANATOMY.

DELIVERED AT
The Royal College of Surgeons of England,
FEBRUARY 14, 1870,

By WILLIAM HENRY FLOWER, F.R.S., F.R.C.S.,
Hunterian Professor.

MR. PRESIDENT AND GENTLEMEN,—I am sure that the feeling that is uppermost in the minds of all assembled in this theatre is regret at the cause which has placed me before you on this occasion. Of the able and distinguished men who have filled this chair since it was instituted in the commencement of the century, not one was more able or more distinguished than its last occupant, either as an original investigator in the branch of science he adorns or as a facile expositor of its truths. The loss of Professor Huxley's services to this institution is indeed to be deplored. The only consolation is that what is loss to us may be gain to others. He but leaves us that he may concentrate his time, his energies, his genius elsewhere. Among his multifarious avocations something had to be sacrificed. We were the victims—this institution, you, my present audience, and, severest sufferer of all, myself, his unworthy successor.

Feeling as deeply as I do the responsibilities of this office, and my incapacity to discharge its duties in a manner worthy of its dignity and importance, I should certainly have declined to undertake it when it was proposed to me, if it had not been for the thought that these lectures are emphatically *museum* lectures, intended to illustrate and explain the treasures of our noble collection, and that from these has been derived almost all that I know of the great subject I am now called upon to teach. I shall therefore, perhaps more than another might, speak to you directly from those specimens. I am, as it were, *their* mouthpiece. Having lovingly dwelt and worked among them so long, I felt that I could hardly refuse to tell you something of what they are always telling me—to endeavour to put their silent eloquence in some sort of articulate language. If I can only succeed in awakening an interest in them, and lead any one who may chance to come into this theatre to continue his studies in the museum, where he will meet with far greater return for his time and his attention than here, the delivery of these lectures will not have been altogether in vain.

I have just mentioned the museum. It is impossible to do so without recalling the circumstance that this day is the one on which we have been accustomed to celebrate the anniversary of the birth of the illustrious founder of that collection.

February 14 is a red-letter day in our calendar. On this day a series of eloquent tributes have been paid to the merits of that great man by successive Hunterian orators.

I will not delay the commencement of the proper subject of this course by endeavouring to speak of Hunter either as a philosopher, a physiologist, or a Surgeon, but I cannot refrain from making a passing allusion to his work in relation to the special subject of these lectures—*Comparative Anatomy*. And even this would have been superfluous, after the able analysis of Hunter's work in this branch of science contributed by Professor Owen to the fourth volume of Palmer's edition of his collected writings, if it had not been for the vast elucidation of the nature and amount of that work by the subsequent publication of these two closely printed octavo volumes of "Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology, by John Hunter, being his Posthumous Papers on those Subjects," arranged and revised by Professor Owen (1861).

Hunter's reputation has suffered grievously from the extreme difficulty he always met with in giving adequate expression to his ideas. Mr. Clift, who acted for a time as his amanuensis, has told us how he has often "written the same page for him at least half a dozen times over, with corrections and transpositions almost without end;" and those who are familiar with his writings must own that, after all this labour, the result was often far from satisfactory. Hunter was himself painfully aware of the deficiency. This it is which has detracted much from the estimate in which many of his published works are held, and it is this which was, I suspect, the reason why his published writings bear so small a proportion to the vast mass of rough manuscript which he left behind him, especially on the subjects with which we are at present engaged.

The perusal of the work just mentioned will show how, while occupied with a large and anxious practice—in itself labour enough for ordinary men—while cultivating with what I might describe as a passionate energy the sciences of physiology and pathology, while collecting and arranging a museum such as never has been formed before or since by a single individual, he had also carefully recorded a series of dissections of different species of animals, which, as his learned editor justly says, if "published *seriatim*, would not only have vied with the labours of Daubenton as recorded in the 'Histoire Naturelle' of Buffon, or with the 'Comparative Dissections' of Vicq d'Azyr, which are inserted in the early volumes of the *Encyclopédie Méthodique* and in the *Mémoires de l'Académie Royale de France*, but they would have exceeded them both together." (Palmer's edit. vol. iv. p. vi.) In fact, they would have established Hunter's fame as by far the greatest contributor to the knowledge of animal structure of his time, and, what is more important, would have aided most materially in the advancement and diffusion of that knowledge.

The work as now published contains notes of dissections, more or less complete, of no less than 129 species of mammalia, 80 species of birds, 20 species of reptiles, 9 of amphibia, and 19 of fishes, besides numerous invertebrated animals of various classes; and these appear to be by no means the entire series of dissections left by Hunter.

The fate of the original manuscripts forms a sad page in the history of our science, and, I must also add, in the history of a man whom our Profession, and this College especially, might otherwise have regarded with feelings of respect and gratitude. Exactly thirty years after Hunter's death, his brother-in-law and executor, Sir Everard Home, who had retained possession of them when the collection was transferred to the College, committed them all to the flames. The use that he had made of them in composing the first course of lectures on comparative anatomy delivered from this chair, though often previously surmised, since the publication of this work has become but too obvious.

Happily, Hunter's devoted assistant and friend, the assiduous and excellent custodian of his collection for nearly fifty years, William Clift, had occupied himself in the interval between Hunter's death and the removal of the manuscripts to Sir Everard Home's house, in making copious extracts from these precious documents. The publication of these extracts, nearly seventy years after their author has passed away, however meritorious a labour on the part of their editor, can unfortunately do little to regain for Hunter that place among the leaders of science which his own untimely death, and the negligence, or worse, of his executor, had deprived him. Highly original and valuable as are the observations contained in these volumes, they have by this time been nearly all anticipated by others. A crowd of workers in the same field, pressing in from all directions, have covered the ground which ought to have been occupied by the figure of Hunter, and from which no tardy recognition of his merits can ever dispossess them.

We shall still continue to look to Cuvier and to Meckel as the main sources of our modern knowledge of comparative anatomy, and not to Hunter. Let us, though, never forget that our illustrious countryman had, before their time, collected materials for a work which needed but the finishing touches to have made it one of the greatest, most durable, and valuable contributions ever made by any one man to the advancement of the science of comparative anatomy.

The present course of lectures, as just said, are intimately associated with the museum; their annual delivery was one of the conditions on which the care of the Hunterian collection was entrusted by the Government to our College, and it was expressly stipulated that they should be "illustrated by the preparations." I am bound, therefore, in my choice of subjects to consider what the museum teaches, and what it does not teach. The museum teaches one subject, and, primarily, only

one subject—namely, the variations in the form and relations of the different parts or organs of which the bodies of various animals are composed. In brief, it teaches *Animal Morphology*, which is pretty nearly synonymous with *Comparative Anatomy*.

Now, *morphology*, I need hardly say, is not *physiology*, though it may be one of the foundations on which that complex science is based. But, contrary as it may seem to some of the most cherished notions of the founder of the collection, an anatomical museum can scarcely do more in teaching physiology than a collection of minerals can in teaching chemistry. The physiologist should certainly be well versed in the nature of the materials and organs by which the functions of which he treats are carried on—having, indeed, need of all the help he can obtain from all quarters in the solution of the difficult problems which come before him, but his science is, in the main, experimental. Whether it be from the inherent difficulties that attend such inductions, or from the hasty and illogical way in which they have often been made, hitherto a large proportion of the attempts to solve physiological inquiries by an appeal to morphology alone have ended in failure, often of a mortifying character. We still have to confess our ignorance of the purpose and application of innumerable most obvious or striking modifications of structure, which no amount of reasoning or guessing, without actual observation on the living organism, seems able to remove. I am speaking of physiology in the sense in which the term is ordinarily restricted. There is a more general and higher physiology to which I shall refer presently, to elucidate which morphology is one of the most essential aids.

When morphology was first cultivated with anything like scientific precision, views since called "teleological" exclusively prevailed. Every animal was looked upon as an isolated machine; every part of that animal was supposed to have some function expressly adapted for carrying on the economy of that particular species or individual in the most efficient manner, without any reference to other species or individuals. If anything further was looked for in anatomising an animal beyond the mere gratification of curiosity or love of knowledge for its own sake, it was *direct adaptation to purpose*.

Many, indeed, are the curious speculations indulged in by anatomists of this school, impelled as they appear always to have been, to find an immediate use for every modification of form. In numerous instances these were mere conjectures, which an enlarged knowledge of the habits and economy of the animal treated of, or of kindred species, showed to be fallacious.

As time went on, however, and men began to obtain a deeper insight into these subjects, resemblances either between the whole structure or between particular parts of different animals, which could not be explained on the utilitarian principle, became strikingly obvious. Moreover, such things as rudimentary and functionless organs in one animal representing developed or functional organs in another, became known in the further prosecution of morphology. Then the idea gradually dawned that there was some "secret bond" which linked creature to creature, and which permitted deviation only to a certain point from a certain given pattern of construction.

This was the doctrine of *type* or *common plan*. A type or a "common plan" for each natural group of the animal kingdom was supposed to have influenced, or to have been held in view at, the creation of every different species composing that group, the deviations from this type being related to the special exigencies of the particular species.

This was a great step in advance when regarded as a mere exposition of the facts of morphology, and when the view was not carried out by fanciful imaginations beyond the point warranted by these facts. Upon this view many anatomists of great eminence seemed disposed to rest. But still it explained nothing, accounted for nothing. It gave not even a shadow of a reason for the resemblances amid diversity found everywhere. It only asserted that the Creator had imposed certain apparently quite arbitrary restrictions to His power, but, beyond this almost paradoxical assertion, it gave no clue to elucidate anything like a theory of creation.

In the meanwhile, however, the great results arrived at in other branches of science, the increasing accumulation of facts from various sources, all tending to show that the orderly and harmonious working of the whole universe was due to constantly acting causes or laws, acting now, having acted for immeasurable time past, and, as far as we can see, about to act for immeasurable time to come; the great work of the astronomers and the geologists, leading to "the general conception of some *great principle of orderly evolution*, according to which the present as well as past systems of existence have been produced out of preceding orders of things,"(a) could not pass unnoticed by the biologists.

First, with a faint and uncertain sound, but in later times more boldly and confidently, a theory or hypothesis has been propounded, which does profess to account for the facts of animal creation, and to afford a real guide to the solution of the problem; if not of the original beginnings, at least of the present diversities, as well as resemblances, among the animal and vegetable life on the globe.

This theory has for its basis that the secret bond of union is not "conformity to type," is no ideal to which the operations of creation were limited, but is one of actual consanguinity, or, as more concisely expressed, "genetic affinity."

The fundamental part of the theory is, in other words, that, as individuals are known to come into being by a process of generation acting according to fixed and certain laws, the same to-day and yesterday and to-morrow, in like manner have races, varieties, species, and other larger groups of animals and plants come into being—that the species existing at any one period on the earth's surface are, in fact, the direct descendants, modified according to definite laws, of the creatures inhabiting the earth in previous periods.

The theory of orderly evolution already applied to most of the phenomena of the physical world has thus been also applied to organic nature.

This hypothesis, promulgated in a crude form by Lamarck near the beginning of the present century, and advocated in an equally crude form in this country by the author of the "Vestiges of Creation," for a long time found little favour with English naturalists of eminence. Indeed, so late as 1856 Baden Powell, in his masterly essay "On the Philosophy of Creation," arguing with great force "that one grand overruling principle, the universality of law, order, and continuity, presiding as powerfully over the earlier stages of creation as during its continuance at the present moment, applies equally to organic as to inorganic existence," can find little support from the writings of any who had made the diversities of organic life their special study. It was, in fact, in opposition to the views then held by most naturalists, and chiefly from a profound and philosophical analysis of the laws which govern the physical universe, that, reasoning from the general to the special, he came to the conclusion that "at least, as a *philosophical conjecture*, the idea of transmutation of species under adequate changes of condition and in incalculably long periods of time seems supported by fair analogy and probability."

Very shortly after, however, these views received an immense stimulus by the working out of a necessary complement to the main theory, one which was absolutely essential to its general reception—namely, an intelligible suggestion of a possible *modus operandi*—almost simultaneously by Wallace, studying the exuberant displays of nature in the unexplored forests of the Malayan Archipelago, and by the patient accumulation and careful and candid examination of fact upon fact, drawn from every branch of biological science, and all converging on the theory of "*the origin of species by means of natural selection*," by the great naturalist whose name is now so thoroughly identified with the entire transmutation hypothesis that already in the German booksellers' catalogues "Darwinismus" is made a prominent subdivision in their classification of scientific literature, and in this country "Darwinianism" is the term popularly applied to the general doctrine of "organic evolution." Since the publication of this remarkable work, the author's views have been widely adopted by leading naturalists in this country, the Continent, and America.

The learned President of the Linnæan Society, in his last anniversary address, has justly termed the investigation of the origin, development, and life history of species or races "*the great problem of the day*;" and the impulse given to the study of biology in general, and particularly to our special branch, is not exaggerated by the eminent German anatomist Gegenbaur in stating, in a work just published, that "*the theory of descent will begin a new period in the history of comparative anatomy*."

On the other hand, it happened rather unfortunately that popular views of natural theology, probably through the great influence of a famous work published during what I have described as the first or "utility" stage of morphology, have attached themselves more or less to the ideas of that period, and well-meaning but mistaken persons profess to regard with aversion and alarm the modern theories which are, to a certain extent, subversive of those ideas. I have no hesitation in saying *mistaken*, for it is perfectly evident that all arguments as to "the power, wisdom, and goodness of the Creator," derived

(a) Baden Powell, "Unity of Worlds and of Nature," p. 448.

from an animal structure not miraculously created, but produced by the ordinary laws of generation, as all known animal structures are, must be entirely and equally valid, whether the laws producing that structure have been operating for a shorter or longer period.

As Professor Asa Gray has well put it, "If the argument from structure to design is convincing when drawn from a particular animal—say a Newfoundland dog—and is not weakened by the knowledge that this dog came from similar parents, would it be weakened if, in tracing his genealogy, it were ascertained that he was a remote descendant of the mastiff or some other breed, or that both these and other breeds came (as is suspected) from some wolf? If not, how is the argument for design in the structure of our particular dog affected by the supposition that his wolfish progenitor came from a post-tertiary wolf, perhaps less unlike an existing one than the dog in question is to some other of the numerous existing races of dogs, and that this post-tertiary came from an equally or more different tertiary wolf? And if the argument from structure to design is not invalidated by our present knowledge that our individual dog was developed from a single organic cell, how is it invalidated by the supposition of an analogous natural descent, through a long line of connected forms, from a cell, or from some simple animal existing ages before there were any dogs."(b)

Those who recognise that the ebb and flow of the tides, the thunderstorms, the rains, and frosts are beneficent in their effects, although the result not of direct miraculous interference, but of unchanging cosmical laws, have not the right to accuse of want of reverence the man who affirms that the wonderfully complex and beautifully adjusted contrivances of animal structure may also have been brought about through the intervention of agencies of similar nature.

This opposition, moreover, may have done harm in another manner, by evoking the natural tendency that exists in many earnest and intensely truth-loving minds to recoil against any display of unphilosophical dogmatism, and any appeal to passions and prejudices, where reason alone ought to have sway, and may thus have led in some cases to a too warm and partial adoption of theories condemned on such grounds.

The rising school of biologists are destined to live in troublous times. There can be no doubt whatever that many of the questions now opening consequent upon the rapid and widespread acceptance of the evolution theory, will give more disquiet to a large class of persons otherwise not indisposed to welcome the advances of scientific discovery, than was ever given by the promulgation of the astronomical revolutions of the sixteenth century, or the more recent establishment of the high antiquity of the earth, and are likely to lead to equally active reprisals.

The astronomers and geologists have in their turn had to confront the storm—they and their sciences have survived and triumphed; and, on the other hand, the faith and morality of the world has not suffered. Now the biologists are standing in the breach. As a part of or necessary sequel to the great doctrine of organic evolution, the question of the origin and position of Man will inevitably obtrude itself.

In the coming discussion on this subject, all who take part in it, or alarm themselves about it, would do well calmly to consider this point. It is one similar to what I have just mentioned with regard to the so-called "natural theology."

Whatever man's place may be either *in* or *out* of nature, whatever hopes, or fears, or feelings about himself or his race he may have, we all of us admit that these are quite uninfluenced by our knowledge of the fact that each individual man comes into the world by the ordinary processes of generation, according to the same laws which apply to the development of all organic beings whatever, that every part of him which can come under the scrutiny of the anatomist or naturalist has been evolved according to these regular laws from a simple minute ovum, undistinguishable to our senses from that of any of the inferior animals.

If this be so—if man is what he is, notwithstanding the corporeal mode of origin of the individual man, so he will assuredly be neither less nor more than man, whatever may be shown regarding the origin of the whole race, whether this was from the dust of the earth, or by the modification of some pre-existing animal form. This, I conceive, is the ground on which those who would maintain unimpaired the spiritual and moral dignity of the human race may safely stand; resting assured, moreover, that scientific research, having for its sole end the discovery of truth, can never lead to aught that is opposed to the best and highest interests of mankind.

In 1861 one of the most distinguished of American naturalists wrote:—"Those, if any there be, who regard the derivative hypothesis as satisfactorily proved must have loose notions as to what proof is. Those who imagine it can be easily refuted and cast aside must, we think, have imperfect or very prejudiced conceptions of the facts concerned and of the questions at issue." The experience of nine years, in my judgment, leaves the case precisely as thus stated by Professor Asa Gray.

I think, therefore, that it may be worth while to devote a few words to two objections which I frequently hear urged, not indeed against this theory, but against the prominent place I would assign to its consideration by all who would enter deeply into the philosophy of biology. Both of these objections are founded upon misconceptions as to the real nature of the present aspect of the theory of development.

The first, taking its leading idea from the title of Mr. Darwin's book, is that it is unprofitable work to trouble ourselves about the *origin* of species, or, indeed, of anything else. These events of the very remote past, it is said, are quite beyond our ken; we really can never know anything certain about them, and had far better occupy ourselves with things of the present—things which we can really hope to know much about.

The other, akin to this, has lately been put forth on high authority. Let the "derivative hypothesis" be granted, the studies of the geologist are not thereby in any way affected. "For all intents and purposes of the descriptive and recording naturalist," it is said, "species are constant; they will last our time. When the existing binomial units of botanical and zoological specific lists cease to show their present distinctive characters, the *homo sapiens* of Linnæus will have merged into another, probably a higher specific form."(c)

As I have said, both these objections are founded on an entire misconception of the main question at issue. If the developmental theory as held by Darwin, Wallace, and their followers, is true, the origin of species is as much a thing of the present as of the past. It is an essential part of the theory that the laws which have produced the diversity of organic forms in the world are the laws by which the world not only has been, but *is* governed. They are as constant, ever-acting, and unchanging as the laws which direct the movements of the clouds or cause the torrents to flow down from the mountain side. There is no proof whatever that the laws of variation and natural selection, if such are the laws which lead to the introduction of new forms and extinction of old ones, were ever more potent than they are at present. A large class of the arguments by which the theory is supported is derived from observation upon the present phenomena of life. According to the hypothesis, transitional forms and incipient species are to be met with everywhere around us. It is this, in fact, which has given rise to the difficulty zoologists and botanists always meet with in defining the limits of the various so-called species composing so many groups both of animals and plants. Until it is settled whether there is an insensible blending in the conditions expressed by the terms "variety," "race," "subspecies," "species," or whether the old idea of the immutability of species is to be maintained, zoology can hardly be said to have a philosophical basis.

The second objection just named appears to suppose a simultaneous march of all organic beings from form to form—a transmutation *en masse* of the whole—so that to any one among them they would all appear stationary. Such a view is utterly opposed to the great number of zoological and palæontological facts, and to all the necessities of the Darwinian hypothesis. One species, either with little inherent capacity for variation, or so circumstanced that such variation as may have occurred in different individuals has never been accumulated by selection, may remain without alteration for ages, while other species differently constituted or circumstanced may have undergone vast transmutations during the same period. In fact, the derivative hypothesis is not a theory of things long ago; it is not a curious speculation into the beginnings of the present condition of things. It may be appealed to every day in the solution of constantly occurring problems in morphology. Anything which assists to throw light upon it, to lead us nearer either to its acceptance or rejection, is of primary importance to the biologist. We must not refuse to take it into earnest consideration.

I will give an example from the subject of our present course. There is in Australia an animal, the koala (*Phascolarctos cinereus*),

(b) "A Free Examination of Darwin's Treatise on the Origin of Species," 1861.

(c) Owen on the "Aye-Aye." *Trans. Zool. Soc.*, vol. v. p. 92.

rather larger than a cat, but having more the aspect of a small bear. It is covered with a soft woolly fur, and lives entirely among the boughs of trees, on the leaves of which it feeds. Its tail is a mere rudiment. Its feet are admirably adapted for grasping the branches on which it climbs. The hind feet especially are remarkably modified for this end, being very broad, and having a strong prehensile or opposable hallux, like a thumb. The skeleton of that foot is very singular (see Fig. 1).

Fig. 1.

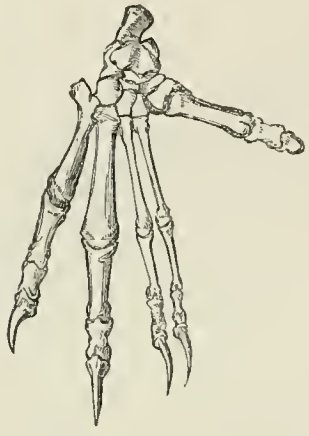


Fig. 1.—Skeleton of the hind foot of the koala (*Phascolarctos cinereus*).

The hallux is stout, and placed nearly at a right angle with the other toes. The next two digits are rather slender, placed close together, and in the living animal are united almost to the claws in a common integument. The two outer toes are free and much stouter than the others, the fourth especially so.

Now, a naturalist of the last century would have looked upon this foot simply as a piece of machinery beautifully adapted for the particular work it had to perform in the animal's life. He would have pointed to the broad palm, the opposable great toe, and would doubtless, if a worthy representative of his school, have developed some ingenious theory to show that the smaller size of the second and third toes, and that being wrapped up to their ends in skin, added to the efficiency of the foot as a climbing organ, though indeed he might be at a loss to say why the American opossum, of pre-

Fig. 2.

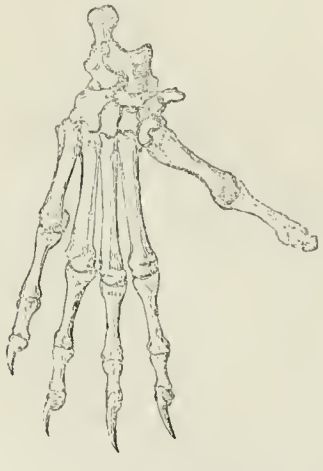


Fig. 2.—Skeleton of the hind foot of the Virginian opossum (*Didelphys virginiana*).

cisely similar habits, and with similarly opposable great toes, have all their other four toes free and equal.

The philosophical naturalist of the second of the types that I have sketched out, in investigating this structure, will institute a careful comparison between the foot of the koala and that of other animals belonging to the same group.

Among the marsupial animals of Australia, few are so well known as the kangaroo. Like the koala, it is a vegetable feeder, and these two forms have some dental and other structural characters in common. But the mode of progression, and the limbs which effect this, offer the greatest possible contrast.

Fig. 3.

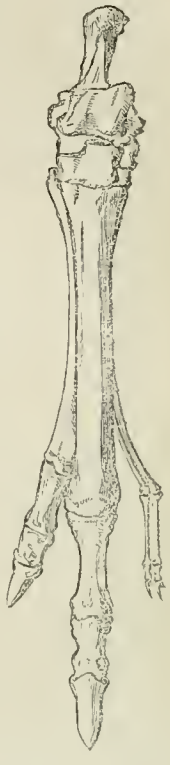


Fig. 3.—Skeleton of the hind foot of the kangaroo (*Macropus major*).

In the kangaroo, the hind legs are disproportionately large. The foot especially is long and narrow, and at first sight appears composed of a single large toe. Its motion along the ground consists of a series of leaps or hops effected entirely by these powerful hind limbs. On looking more closely at the foot (see Fig. 3), it will be seen that the first digit or hallux is entirely wanting, but the other four toes are present with their complete number of phalanges. The fourth is immensely developed, the fifth moderately so, but the second and third are reduced to the most slender rudiments, and are so united in life by a common integument, that they look like a single toe with a double claw.

Now, here are two feet as unlike as possible in their function—the one formed for rapidly hopping along over the arid plains, the other for slowly and securely climbing among the boughs of the forests—yet presenting a deep-seated resemblance in a character not found in the feet of any other known mammal except the immediate allies of these two.

We may call this "conformity to type" without getting much nearer to an explanation of the phenomenon. Perhaps it is safest to rest at this stage.

But is it not powerfully suggestive—I will not say more, for, of course, by itself it cannot be considered as a proof—of true relationship, of inheritance from a common ancestor? We can easily see that for some purpose the great preponderance of the one toe in the kangaroo, and the reduction of the others, would be advantageous in its mode of progression, reducing the foot to a narrow spring-board as it were, and we can see that this attenuation of the second and third toes, after the first had quite disappeared, might be a stage in the direction of their total disappearance. But while this was taking place, let us suppose that one branch of the family took to climbing trees (I must not enter fully into all that might be supposed on this subject, as I am merely introducing this as an example of the mode in which morphological problems are illustrated by these general views) and the variations in a particular direction, tending towards better climbing, were preserved and accumulated on the Darwinian hypothesis, the hallux, a common part in all mammals, only in abeyance when not wanted, was redeveloped in a form best adapted for its actual purposes, the other digits gradually resuming their normal condition; these two, however, still preserving strong reminiscences of the ancestral state.

It is certainly significant that all the Australian vegetable-feeding climbing opossums have feet constructed on this type, more or less akin to the kangaroos of the same country, while the American opossums, further removed geographically and therefore, in all probability, in actual relationship, with feet functionally the same, show no trace of this deep-seated structural peculiarity—a peculiarity most important for the consideration of the philosophical anatomist, as it evidently depends on some more far-reaching cause than mere adaptation to purpose.

In considering a little more fully the application of such views to the study of morphology, I must say a few words on *classification*. It was felt at the very outset of the study of natural history that without some system of classification the subject was little more than a hopeless chaotic confusion. The

first instinct of a zoologist is to arrange in some sort of order the multitudinous objects with which he has to deal. In the beginning of science, with little sound knowledge, such classifications were often mere arbitrary arrangements, founded on some easily accessible peculiarities, and forming nothing more than a means by which the distinction between certain objects and certain other objects could be grasped by the mind of the founder and communicated to others. Classifications based on such characters became so general, and were often so carelessly and ignorantly put together, that they threatened to bring the whole system into disrepute; whereas I have little hesitation in saying that, viewed by the light of modern philosophy, *classification* is one of the, if not the, most important aims and ends of the study of morphology. It is the best contribution which we can make towards the solution of the great biological problem, for a true classification, viewed by the light of the derivative hypothesis, is nothing more than an expression of the actual amount of affinity between different objects. An order, a family, or a genus becomes no longer a group of animals linked together by some arbitrarily selected characters, but a group that are supposed to have descended from a common ancestor, and have become, by whatever process, gradually differentiated from other groups of animals.

As in such groups, when once established, there can be no crossing with other groups (as in human families, to which they are sometimes compared), all the resemblances which are found between members of different groups must either be characters inherited from the common ancestor, perhaps lost through many generations and reappearing at a subsequent period by the process of "reversion," or they must be characters having merely *analogical* resemblances—*i.e.*, characters developed by variation, but which, by similarity of conditions of existence or other causes, have become similar to each other.

To discriminate between these two classes of characters—namely, those that are essential and fundamental, or, in the language of one school, are dependent on conformity to type, or, according to the derivative hypothesis, are inherited from remote ancestors, and those that are modifications to suit the conditions of existence to which the animal is exposed, or, in other words, adaptive characters—is a constantly recurring problem to the systematic morphologist; and the difficulties that encompass the solution of this problem are the main causes of the little progress hitherto made towards a general agreement as to systematic classification otherwise than in the main groups. Let me illustrate this point by a single and, as it happens, by no means difficult example.

You have before you the skeletons of two animals very similar in their general or superficial characters—one is the common dog, the other the carnivorous marsupial, the thylacine, sometimes called "Tasmanian wolf." These animals, when wild, have very similar habits. You will see that, in the general characters of the skeleton, the structure of the limbs, and the arrangement of the teeth, a remarkable similarity prevails. You might easily conclude that these animals were related. They were, indeed, formerly placed near together by systematists.

Now, if I place by the dog another well-known animal, a sheep, you will see that in many characters of its bones, its feet, its teeth, etc., it differs far more from the dog than the latter does from the thylacine. Yet zoologists affirm, without the slightest hesitation, that the sheep and the dog are far more nearly related to each other than either is to the thylacine. This assertion is founded on a discrimination of the essential from the adaptive characters. The dog and the sheep belong to one great branch of the mammalian class, although they represent different stocks of that branch. The thylacine belongs to another primary branch, but in that branch it has taken the place, functionally, of the dog in the other; its organs have become adapted to perform the same work.

It has been asserted, in a recent very able pamphlet by an anonymous writer "On the Difficulties of the Theory of Natural Selection,"(d) "that on the theory of 'natural selection' it is all but impossible, such are the probabilities against it, that identical structures should have arisen independently. Yet many structures undeniably exist, which, to all appearance, must have so arisen." And the "remarkable identity of structure between certain of the teeth of the large predatory marsupial, the thylacine, or Tasmanian wolf, and those of the common dog," is cited as a case in point. Now, though I am fully willing to admit difficulties in the theory, quite inexplicable on our present knowledge, as many almost as the author quoted, I cannot see this one in the same light. It appears to me that the probabilities, instead of being against the independent origin of such similar structures (erroneously called *identical*) as those just mentioned, are exceedingly in their favour. I cannot in the least see why a marsupial animal should not be carnivorous and predaceous as well as a placental animal, and, if so, why its teeth should not have come to possess the general attributes essential to animals of such habits—namely, large pointed recurved fangs at each of the anterior angles of the jaw; the teeth between them much reduced, so as not to interfere with the piercing and holding action of the canines; the molars more or less scissor-shaped. These are plainly adaptive characters, and whatever process has produced them in the one case is just as likely to have produced them in the other—I might almost say must have produced them in the other. So far, however, are the teeth of the thylacine and the dog from being essentially "identical," that in numerous non-adaptive and non-functional characters, as the number of the incisors, premolars, and molars, the mode of succession, and the minute structure (all which will be spoken of at a later period of the course), they widely differ, the dog conforming in all these points with the ordinary placental mammals, the thylacine with the remaining marsupials. Such characters, underlying in large groups of animals the various modifications in relation to use, cannot be too diligently sought out as the true landmarks to guide our steps through the intricacies that beset our path in tracing affinities.

Another valuable guiding principle in morphological studies is this. It is a remark of Gegenbaur's, in his valuable work "On the Structure of the *Carpus* and *Tarsus*," but it must have occurred to any one who has given much thought to these problems. When we wish to discover the distinguishing characters between different organisms, it is necessary to examine them in their most fully developed condition. If, on the other hand, our object is to trace their resemblance, their intimate relationships, we must study them in their early embryonic stages. By these methods we can do much to separate what is secondary or superadded from what is fundamental or essential in the character of an animal. The further back we can carry our researches, the more prominent do the characters, common to the whole group to which the animal belongs, become. The more completely mature the specimen, the more do the special characters of the species or even of the individual predominate.

It is not my province in these lectures to indulge much in speculations. Indeed, as students of morphology, we are as yet little in a position to do so. I shall not say much more even on general views to which I have lately referred, for I feel that the acquisition of a sound basis of fact to work with is what is, at present, most needed in comparative anatomy. The difficulties which beset the beginner, and indeed the more advanced student in this subject, are very great. As regards the branch to which I propose more particularly to direct your attention, the anatomy of the class mammalia, and which, we might suppose, was better worked out than any other, the information to be found in books is scattered, fragmentary, unequal, and often untrustworthy; even good elementary treatises are wanting, much more anything like an exhaustive work. Moreover, our museum—superior as I believe it to be to any other of the kind—is, as yet, far from adequate to supply the knowledge constantly sought for in it.

In considering the special subject for these lectures, I have often thought that the greatest permanent benefit would be conferred on our science by collecting together in a systematic form all the available information upon limited groups of the animal kingdom, supplementing, as far as possible, the deficiencies of knowledge by fresh observations, and illustrating the subject by a complete series of preparations. At the present day it is only by working out a definite branch of limited extent *monographically*, that any solid advances in detailed knowledge can be attained. Courses of lectures on this principle, especially if they were published so as to reach a wider circle of students than this theatre is apt to contain, might do much to *advance* knowledge; but, on the other hand, they might do less than more elementary or general lectures skimming the surface of a larger variety of topics, to *diffuse* knowledge; for it is probable that they would be attractive to only a limited number of auditors or of readers.

I think it therefore advisable, in the first course I have the honour of addressing to you, to take a general survey of the structure of the animals of the highest class of organised beings, and I think that this will prove of the greater importance and interest to the audience assembled here, because it may be presumed that we have all already either commenced

(d) Published originally in the *Month*.

or completed the acquisition of a knowledge of the structural anatomy of one, the most elevated member, of that class. I propose, therefore, to take human anatomy as a point of departure, and, presuming on your acquaintance with its details, shall refer only to some of its general outlines, and shall point out the deviations from and resemblance to the mammalian structure as we know it in man, in descending throughout the series of animals composing the class.

Even this general outline, I found, would embrace too large a range to treat of fairly in the present course of eighteen lectures, but, as you will see from the syllabus, it is only proposed to take up certain of the systems of organs, leaving the remainder for a future period if circumstances should permit.

I trust that some further interest may be given thereby to the daily work of the student of our Profession. Human anatomy is too often learned as a mere collection of hard names applied to a complicated network of structures, the form, position and relation of which has to be got up, probably to be forgotten soon afterwards. It might, however, be made a far more attractive and useful subject if taught by the light of a wider morphology. But I am afraid that very little of our anatomical teaching, either by books or lectures, is of this class at present. If any comparative anatomy is introduced, instead of enlightening and illustrating the subject, it often only adds another load to the already overburdened memory—for instance, after the usual dry, detailed and technical description of the part treated of, a disquisition is added on what is called its "transcendental" anatomy, extremely incomprehensible to most minds, and consisting chiefly in the imposition of a new set of names to parts of which the student has just succeeded in mastering the old ones.

All this ought to be reversed; the essential nature of the part in question, as deduced from comparative anatomy, should be first announced with a glance at its principal modifications, then its special characters as seen in man will be a subject of intelligent interest. I knew from experience that after studying and teaching human anatomy for many years on the ordinary methods, there were many parts the meaning and nature of which I never understood until I began to dissect animals, and increase of knowledge in this direction constantly throws light on apparently unmeaning or incomprehensible parts of human structure.

The extremely important question of development, at least in its earlier stages, was so ably and lucidly treated from this chair last year, that I shall not feel under the necessity of entering so fully into it as otherwise might seem requisite. Moreover, I propose to deal little with topics which cannot be directly illustrated by specimens from the museum—indeed, my principal aim will be to make the lectures a series of demonstrations of objects from the museum, which shall be brought before you in a connected and systematic order.

One word more by way of introduction. I began with the mention of my immediate predecessor in this chair. To him I must once again return. The subject matter of the present course will embrace many points treated of by him, more or less fully, in some of his lectures delivered in this theatre, and many on which I have had the advantage of his conversation and counsel. His teaching has entered so deeply into, and mingled so closely with, observations and reflections that may have suggested themselves in the course of my work in the museum, that in many cases it would be difficult to trace the sources of information that I may have to impart, and I may, perhaps, appear guilty of appropriating what should belong to another. Let me acknowledge, then, once for all, how deeply I am indebted to Professor Huxley, not only for the information conveyed in the public manner of lectures and books, but also for the generous way in which, on all occasions, his time, his knowledge, his thoughts, have been freely given to me. And I say this the more willingly, because I know that I am but one of many whose labours have been lightened, whose efforts have been stimulated, whose difficulties have been smoothed by his encouragement and support, by his candid and judicious criticism, and by the example of his often self-sacrificing devotion to the advancement of scientific truth.

I also desire, in conclusion, Mr. President, to take this opportunity of publicly expressing the obligations which I as well as numbers of others feel towards you and your predecessors in that chair, as well as to the former and present members of the Council of the College, individually and collectively, for the immense aid that you have given to the progress of philosophical biology in this country, and I may say, in the whole world, by the maintenance and augmentation of John Hunter's museum.

An epoch of revolution appears to be at hand in our Profession, which may lead to a material alteration in the respective positions and opportunities of the various corporate bodies. Whatever changes may take place, the College of Surgeons will always look back with satisfaction to the fact that, for the first seventy years of the century, when these studies were less appreciated than they are now, or will be hereafter, it has, with scanty aid from the national resources, cherished the growth of a truly national institution, the benefits of which are not confined to any one class or profession, but are freely open to the whole community. I can say, moreover, with perfect assurance, speaking both from my own experience and from knowledge of the history of the Museum, as recorded in its archives, that any deficiencies which exist in the condition of the collection, any needs which it does not supply, must be due to other causes than want of encouragement to the officers of the establishment, or want of liberality in supplying the requisite funds, on the part of the Council of the College.

ORIGINAL COMMUNICATIONS.

THE THERAPEUTICS OF CHRONIC CONSTIPATION.

By JOHN KENT SPENDER, M.D. Lond.,
Surgeon to the Mineral Water Hospital and to the Eastern Dispensary, Bath.

I do not think that the usual Professional treatment of chronic constipation of the bowels is very satisfactory. It appears to aim at the relief of the one obtrusive symptom, and to help the patient out of a present difficulty without sufficient reference to the future. It removes the obstacle of to-day by legitimate and easy means, but the obstacle of to-morrow is not prevented; hence what is done to-day must be done again to-morrow, and the remedial formula has an awkward *ad infinitum* look about it. My object in this paper is to try and raise a point of every-day practice to a scientific level.

The peristaltic action of the bowels is essentially a quiet and unfelt reflex function. Assuming that the voluntary movements subsidiary to defecation are efficiently performed—I mean the pressure exercised by the muscles of the abdomen on its containing viscera—the fault lies mainly in a defect of the peristaltic action: either it is too slow, or it has too little force, or both force and time may share the torpidness so characteristic of the phlegmatic and scrofulous temperaments. And the root of this state is a sluggish habitude of the nervous system; an insusceptibility which is strictly congenital, which may be roused for a while by dynamic and even by physical stimuli, but which tends to lapse by inherent vice into its chronic torpor. This is the key to any right theory of obstinate constipation of the bowels. The term implies simply that a person being otherwise in tolerable health, the excretory function of the alimentary canal is performed at rarer intervals than is compatible with complete health. And a twofold discomfort arises—partly mechanical, and partly depending upon a contamination of the blood by excrementitious matters.

Among the odd idiosyncrasies which nature displays in the regulation of the digestive functions, an infrequent evacuation of the bowels is very common; and it is important to distinguish this condition from the genuine morbid state rightly denominated constipation. For what is natural to a person can in no sense be called a disease. Many persons seem well, and really are well, whose physiology could not be transferred to any one else, without becoming a pathology more or less developed. No strong hard line can ever be drawn between what is health and what is not health. And it may be declared with absoluteness that if a person can bear an infrequent flux from the intestines without the slightest apparent inconvenience, it is part of his regular vital plan, and ought not to be stigmatised by the name of disease at all.

It does not come within the scope of this paper to discuss the subject of constipation as subordinate to other maladies, but only when it exists by itself as a primary disorder of function. Assuming, then, that we have before us a case which clearly deserves the name of constipation of the bowels, the therapeutic inquiry is, how shall it be treated? And by the word treatment I push aside all temporary refuges and expedients, all drastic doses and exosmotic drains which merely empty the bowels *pro hâc vice* in the fashion of flooding out an unclean sewer. It may be necessary to do this once as a preliminary step, but what ought to come next? The object of philosophic

Medicine is to enable the patient to live without medicine—to realise such a state of health that the medicine (*i. e.*, the medium of health) is no longer required. To purge again and again largely and painfully for a chronic disorder is to clear away a nuisance without removing its cause, and therefore the nuisance must again and again recur. Galen and Hippocrates would have done more than this, any herbalist or quack can scarcely do less.

And yet in recent sound and classical works on digestion and its troubles, I find no very precise indication of higher aims. Aperient medicines are enumerated, and their characteristic properties described, with the completeness and minuteness of a system of Materia Medica. Each drug has its specific virtues; give this or that according as the constipation is more or less obstinate, and according as you have an adult or a child, a strong or a weak person, to deal with. But when the present exigency is remedied, what about a week hence, a month, a year? Is the same drugging to go on eternally—the same potions, pills, or powders to come round in rhythmic order, always satisfying the present need and no more?

The plan which I now propose does bestow some care on the future, and professes to be, so far, curative in its operation. It comprises four therapeutic factors; (*a*) minute and frequent doses of watery extract of aloes, very rarely of extract of colocynth; (*b*) a dose of sulphate of iron (gr. jss. or ij.) always combined with each dose of the direct aperient; (*c*) regulation of the diet; (*d*) constitutional exercise. I have to write chiefly of factors (*a*) and (*b*). The quantity of extract of aloes, in all but extraordinary cases, should not exceed one grain. It is conveniently given in the form of a pill. With this pill there should always be mixed a dose of sulphate of iron varying from one to three grains; this is the essential point of the treatment. Any other tonic of the neurotic kind cannot supply the place of the iron; for the purpose I am now relating, iron is not only *facilè princeps*, but is not interchangeable by anything else. Extract of nux vomica may be added, if the prescriber pleases, as an ornamental appendage or as a means of blending the other constituents together; and belladonna is a remedy of definite auxiliary power, but both these drugs, *quoad* constipation of the bowels, are uncertain or unsatisfactory, and rarely do permanent good. I begin, then, by desiring an adult patient to take a pill composed as above three times a day, immediately after the principal meals. He is cautioned that at first there will be probably no apparent effect, and that two or even three days may pass before any medicinal evacuation of the bowels takes place, perhaps even then difficult and discomforting. But within the next forty-eight hours there will be most likely an evacuation of the bowels once or possibly twice in the day; *but nothing approaching to purgation ought ever to be permitted*, and therefore the patient must be instructed, on the occurrence of the first loose motion, to withhold a pill, and to take only one in the morning and one in the evening. He then continues for a time his morning and evening pill, and is pleased to discover that so slender a medicament has such a decided effect. Not improbably, at the end of another week or fortnight, he is compelled by the same reason as before to drop another pill, and the same result is now brought about by one pill daily, as was originally produced by three pills. Within another month, he may reduce his allowance of medicine to a single pill once or twice a week; and, finally, his whole scheme of Medical treatment becomes merely preventive in its design and scope, and he takes a pill occasionally for the sake of maintaining health and warding off old troubles.

When there is a real or fanciful difficulty in the administration of pills, the best way of carrying out the plan above described is by combining the *mistura ferri composita* with the *decoctum aloes compositum*, the doses being determined by an application of the same principles. There is wider room for the addition of auxiliary drugs, but, on the whole, I have not obtained such satisfactory results by this method.

I cannot lay too much stress on avoiding anything like an over-purgative effect by the drugs employed. If on this account the treatment has on any occasion to be stopped, there is so much time lost and so much ground to be retraced. A patient may, unintentionally, exaggerate his difficulties, but the skilful Practitioner will not therefore depart from the fundamental principle of minute and frequent doses of his medicine. In this way Nature is coaxed and assisted, instead of being forced and worried; and I declare without hesitation that only by this means can a sure and permanent benefit be realised.

The urgency of regulating the quantity and quality of the food is so obvious, that I need add nothing to what has been so well laid down by systematic writers. The necessity of constitutional exercise—a definite amount every day—is equally clear, and its physiology requires no illustration here. The serious and ingravescent forms of constipation which are secondary to stricture (cancerous or fibrous) may be temporarily relieved by the plan I have sketched; but ultimately the obstruction will defy all ordinary remedies, and our suspicions should be aroused to the possibility of organic disease, whenever a retrograde step occurs again and again after apparent success has been attained.

I append outlines of a few cases:—

Case 1, 1863.—The widow of a clergyman, aged 72, had taken for twelve years a strong dose of drastic medicine once a week, without which she alleged that the bowels would scarcely ever be moved at all, or only with extreme difficulty. She was confined to her bed, or to her room, by some obscure injury of the hip-joint. She took three iron and aloes pills daily, with an almost immediately good result; and, at the end of three months, she was able to relinquish medicine almost entirely. Until her death, in the autumn of 1865, she had an action of the bowels nearly every day, without any aid from the pills, or perhaps a pill once a month.

Case 2, 1867.—A young man, aged 21, assistant in a bookseller's shop, suffered from extreme constipation. His habit was to have an action of the bowels only once a week, or thereabouts. The pills were taken four times a day for two or three months with scarcely any result. Suddenly everything came right, but he continued the pills in diminishing numbers for nearly a year to prevent relapse. At present he rarely takes any, and enjoys good health.

Case 3, 1868.—A clergyman, aged 43, had suffered for some years from constipation, which, however, was qualified by the fact that mild aperient medicine easily caused diarrhœal purging; and this, again, was succeeded by constipation worse than before. Here I lost ground in my treatment, at first, by prescribing overdoses of the extract of aloes; but a quarter of a grain with the sulphate of iron three times a day answered precisely, and he is now reducing his medicine month by month.

Case 4, 1864.—The daughter of a tradesman, aged 18, had suffered from early childhood. Previous Medical advice had sanctioned the routine treatment of a very powerful dose, once a week, of senna, aloes, and sulphate of magnesia, and this had been continued for several years. In less than three months my plan succeeded so well (assisted, of course, by appropriate diet and systematic daily exercise) that no medicine was required for some time. She now (1869) takes a precautionary pill every three or four weeks.

Case 5, 1867.—A poor woman, aged 37, consulted me at the Eastern Dispensary, Bath. Symptoms very aggravated and painful. Here aloes entirely failed, and so I gave, three times a day, two grains of compound colocynth pill with two grains of sulphate of iron. Complete success in four months, so that no medicine of any sort was needed.

Case 6, 1868.—The wife of a military officer had been compelled for several months to take every day (or nearly every day) three grains of compound colocynth pill, in order to obtain a satisfactory evacuation of the bowels. I persuaded her to adopt my plan, and I found that she required only a quarter of a grain of aloes with the iron in each pill. She now takes only one pill daily (the treatment was begun ten weeks ago) with an excellent effect, and the health is much improved.

I remember one case in which only $\frac{1}{12}$ of a grain of the extract of aloes was taken from the very beginning. In every instance I have quoted the amelioration of the general health was remarkable, due partly to the hæmatinic properties of the iron, and partly to the removal of the incessant dread and worry of being obliged to take painful and potent medicines. A haggard nervous face becomes bright, and a weary step becomes elastic and quick. I have often combined cod-liver oil with the pills, and the result has been usually good. The amenorrhœa which is sometimes associated with constipation in women is curable *pari passu* by the same means; and, if pregnancy exists, the prospects of parturition are made more encouraging if the treatment be carried out with suitable watchfulness.

There is a form of constipation, observed chiefly among women, marked by intense neuralgia of the rectum after every motion. It is well to ascertain that there is no fissure of the mucous membrane; but, this point being assured, speedy (and eventually perhaps complete) relief may be obtained by the following powder taken twice a day:—Sesquioxide of iron, one drachm; bitartrate of potash, one drachm; powdered cubebs, fifteen grains; mix. This may be con-

tinued once daily for weeks or months. I conclude with a caution. Constitutional tuberculosis had better be let alone, *quoad* aperient medicines. Peritoneal or intestinal tubercle is a grave malady to light up, and a state of comparative constipation may be nature's method of keeping things quiet in the abdominal region. At all events, aperient medicines of every kind ought to be strictly subordinate to general treatment.

Bath.

ON FRACTURES OF THE RIBS OCCURRING IN THE INSANE.

Read at the Quarterly Meeting of the Medico-Psychological Association, January 27, 1870,

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Doubtless there is at present no subject of greater importance to us and to the public, in relation to insanity, than that of the frequency with which fracture of the ribs has been found in patients dying in asylums. Its importance has relation to the causes of these injuries, to the obscurity which exists in connexion with their origin, and to the manner by which they are to be prevented.

In entering upon an inquiry into the causes of these fractures I must separate all other cases of ill-treatment and injury which have lately been collected together in articles that have appeared in the newspapers, and confine my remarks solely to the cases of fracture of the ribs.

In the first place, I find, on going into details of the published accounts, that there is a certain similarity or uniformity of the attendant circumstances in these fractures which it will be as well to premise, and which will afford us some light to our investigation. I find—1. The existence of most of these fractures has only been discovered after death. 2. The fractures have nearly all been very extensive, much more so, in fact, than is usually met with from violent accidents among the sane. 3. The patients have nearly all been but recently admitted into the Asylum. 4. The subjects have all been males.

I will first examine the above circumstance a little more in detail before I proceed to a second question—viz., Is there anything peculiar in the nature of the cases in which these injuries are found which render the bones more easily broken? There is no doubt that they are exceptionally extensive; the violence, therefore, it is evident, must have been either exceptionally severe, or the facility of fracture unusually great.

1. The existence of these injuries has been only discovered after death.

In these cases of the severest injuries at which I have assisted at the post-mortem examination the state of the ribs was not indicated by any of the ordinary signs or symptoms during life. With respect to the usual symptoms of fractured ribs, Sir William Fergusson gives them so concisely that I will quote his words:—

"Fracture of one or other bones of the chest is of frequent occurrence; indeed, the ribs, perhaps, suffer more frequently than any other bones. There is seldom much difficulty in detecting such an injury." Now, in the insane, great difficulty occurs. Sir William goes on to say: "The fall or blow which has occasioned it and the subsequent pain will excite suspicion; possibly the patient may feel the bone grating."

Now, in the insane that I have seen, and in whom I have detected fracture of the ribs in the examination always instituted on admission, there has been no indication of any pain whatever. Instead of the usual stitch or catch on deep inspiration, the majority of these patients have exercised their lungs and chest by raving and shouting, and they have made the freest movements of the body. They have denied the existence of any pain whatever. The application of the hand to detect the fracture has not occasioned pain. In several cases the application of the stethescope, which is useful to detect the crepitation of the bone, has been impossible, on account of the patients' raving and noise.

In several of these cases, notwithstanding the existence of the most extensive injuries to the bones, the patients have continued to be violent, noisy, and raving.

There has existed, therefore, a remarkable absence of sensibility in the parts, a dulness of the ordinary sensation. This is one fact which will assist us in ascertaining the nature of these injuries. But though the sensibility to pain has been diminished to this marked degree, and therefore many of the symptoms of the patient have differed from fracture of ribs in the sane, the internal consequence—the pleurisy—goes on the same.

Another reason why the fractures have frequently not been detected during life—a peculiarity in these cases, which has led to some ugly inferences—is, that there has existed, in most of them, very little external bruise. I do not remember to have met with any instance in which no cutaneous mark existed, but, as a rule, certainly extensive bruises have not been present.

It has been suggested by some that the injury was caused, therefore, by an assailant's knee. The bent knees, "big bluntish bones, and clothed, can, it is suggested, be employed with terrible force, and yet leave no mark," though the writer of these words exonerates the Doctors, asserting that they have been duped by the attendants; yet we cannot admit any such assertion to go for proof without a little more examination. I think, from anatomical reasons alone, that the knee thus protected would not fracture nine ribs; the knee itself could not cause pressure on more than two or, at the outside, three ribs. To fracture nine ribs, the opposing force would have to be ten or eleven inches in length; and since, in some cases, ribs on both sides of the body have been found broken, it follows that the force applied must have been a very wide body, or it must have been applied to the sternum, in which case it would have to be of immense force or weight to overcome all the elasticity of the cartilages in ordinary individuals. This force could not, I think, be exerted by the pressure of a knee of one man.

We have still to account for the fact that there is usually a very small amount of integumental bruise. This leads me to the second general feature of these injuries, viz.:—

2. The fractures have been very extensive (much greater than is usually met after violent accidents in the sane), although the external bruising has been slight.

It has been suggested that this is to be accounted for by a kind of skill by which the wilful act has been performed, but not only skill must have been practised, but great secresy as well.

With respect to the first supposition, that the fractures have been caused by persons thoroughly conversant with the mode of effecting them without leaving marks, it is undoubtedly proved that these injuries have occurred in all parts of the kingdom, and not only in asylums, but elsewhere, for I have myself detected broken ribs in patients on their admission, and other instances of the same fact are on record, so that the skill must be very common.

How all these individuals should learn to produce such extensive fractures by such obscure means and be able to keep the process secret is not accounted for.

If there is nothing peculiar in the patients to render the bones more readily broken, there must, of course, be something special in the nature of the force used, or the mode of using it, to cause such extensive injuries, and which is kept secret. The difficulty of keeping such a secret, too, must be specially difficult; for in some of the cases in which as many as three ribs on one side and seven and eight on the other, and the sternum are broken, at least two persons must have been engaged in order to cover the extent of the injury or employ sufficient force.

I think there is sufficient evidence at hand which renders it almost certain that two persons could not very well fracture a man's ribs with their knees as suggested; for—

1. It is well known that in the murders that took place in Edinburgh some years ago by Hare and Burke, the victims were burked by pressure on the mouth and chest, and the deed was discovered by the bruises about the chest, but yet there were no ribs fractured in these cases.

2. Because to cause fracture of the rib it is pretty certain that a sudden unexpected application of force to the chest is necessary. Every Bartholomew man remembers the late Mr. Stanley's tale of Leather-coated Jack, who used, for a trifling reward, to lie on his back and allow a cart to pass over his chest. No doubt this man resisted the force applied by putting the muscles of his chest into action, and by inflating the lungs to the utmost. For two men to cause fracture of the ribs they would have to make sudden unexpected pressure, and to act in exact concert; and to suppose that two men are always ready to accomplish this, not only in every asylum, but in all other places where these injuries have occurred, is, to say the least, in the highest degree improbable.

It is scarcely necessary to pursue this, but there are other equally forcible reasons why the hypothesis of wilful concerted injury is untenable. For example, it is admitted that evidence of the fractures, and how and when they occurred, has always been most difficult to obtain. The best evidence at all on the

point is said to have been derived from insane persons in the wards. We here, I think, will admit that in some cases such evidence would be entirely reliable; but the evidence given has not been positive, as far as I can discover, nor in any case gone to show such an amount of force as would fracture the ribs of a healthy person: if the scuffles which these patients have witnessed and mentioned in their evidence have been the occasion when the injury actually occurred, which has never yet satisfied any jury, then there must be something peculiar in the patient's state, which does away with the theory of wilful injury, and also for the necessity of secresy.

Again, these wilful injuries could only be concealed by a complete understanding between all the *employés* of the asylum; and not only between these, but among persons outside of the asylum. Whereas the evidence of the writer in the *Pall-mall Gazette* shows how two workmen at Hanwell saw an attendant (Jones) ill-treat a patient, and reported the fact at once. Of course the hiring of such a brute as Jones must occasionally happen; but the magistrates—who are answerable alone for the selection of the attendants at Hanwell—surely could not select none but such men—men only actuated by sheer malice. It is curious, too, with respect to this very case, in which the ill-treatment was actually witnessed, and in which the attendant was seen to strike the patient with a shovel, and walk over his body, stepping on his belly and chest, that no fracture of the ribs occurred, but that there were external bruises.

There is still another point which may be mentioned, though this would scarcely seem worthy of repetition. The writer in the *Pall-mall Gazette*, Mr. Reade, appears to believe that the injuries are inflicted by the attendants with sufficient cunning to dupe the Doctors. These attendants must, therefore, be a singular mixture of cunning and obtuseness, for they must all know that the injuries they inflict must come to light, as the Doctors invariably make a post-mortem examination of the body; and all these cases have been brought forward by the Medical officers.

From these considerations I am of opinion that the force which causes these extensive fractures of the ribs is something of more sudden character than pressure, and something more extended than a knee or fist—the rapidity of the force appears to me to be essential—such accident as a violent fall or sudden blow, or injury by the contact of the sternum against a wide surface. But even such violence must be very great of its kind to produce so much injury in a healthy individual; the fall would have to be from a great height, or the pressure against the sternum of many hundred pounds in weight.

2. This leads me to the second part of my inquiry—viz., Is there anything peculiar in the patient to account for the severity of the injury? The consideration of other general points of resemblance in these cases—viz., the accident occurring in fresh cases, and in such only—I will defer till afterwards.

Is there anything of special character in the state of the patients' tissues?

First, with respect to the conditions of the bones themselves. It has been advanced that these cases are the subject of the disease called fragilitas ossium. Mr. Denne, of the Bedford County Asylum, exhibited to Dr. Nairne a rib which was readily broken by the slightest force. I have myself met with a similar condition of the osseous tissues in the insane. But my examples occurred in aged persons who had been insane many years. In one well-marked case of the kind the spinal canal could be laid open very readily with a common scalpel. No fracture, however, occurred in this individual. I have examined the bodies of several who died of fractured ribs. I do not remember observing that the bones were affected with fragility in any. It is true my attention was not specially directed to this point, but I think I should have detected it if it had existed to any marked degree. I do not therefore incline to the opinion that a state of fragilitas ossium is a cause of these fractures which we are considering.

Next, with respect to the condition of the soft parts, there is no doubt that, in the sane, falls cause broken ribs, but most frequently, I think, by the rib coming against a projection; and, if such extensive injuries as we are now considering occur in the sane, the accident would be a very notable one, and, moreover, would immediately be discovered by the symptoms. It is a feature in these cases under review that by no chance have the time and place at which they occurred been very certainly known. It is also certain, if these injuries occur by falls, that other patients are known to fall, as epileptics, yet rarely do they fracture even a single rib. There is little doubt that, in such cases, there is a protection from the results of the violence by an excited act of muscular contraction, which immediately occurs—that is, the muscles are thrown into tonic action, the ribs elevated, the lungs inflated, and thus the force of a blow considerably modified. If anything, therefore, intervened to prevent this muscular action, the ribs would be more readily fractured.

I have been led by other investigations to believe that such a condition of the muscular system does exist in certain cases of the insane. From other facts and observations I have come to the conclusion that, from a very early stage in the progress of a case of general paresis, every division of the nervous system, including the cerebral, the excito-motory, and the sympathetic system, is impaired in action; that the nervous current is sluggish and dull; and the very familiar facts of these cases, so well known to all of you, will readily bear out this conclusion. If the afferent and efferent nerve currents constituting an ordinary excito-motory act are tardy, the muscular contraction would not be in time to guard against the injury from a fall, or to modify the force of the blow; the injury would be in this way greatly increased, especially as the patient also would not ease his fall by extending his arms, etc.

To recapitulate, my solution of these occurrences is this:—

1. Paretic patients in a certain stage of their malady are known to be furiously excited. They throw themselves about with reckless violence. They frequently attack the bystanders, and they thus often become engaged in scuffles. They are consequently exposed to all kinds of blows and falls of a purely accidental character.

2. The state of their nervous system is such that the ordinary excited acts are not performed at all, or are not so rapidly executed as to ward off or modify these direct injuries.

3. There is in them such a dulness of sensibility or common sensation, that they do not feel the same amount of inconvenience or pain from injuries, so that the effects are masked, and there is nothing to indicate what has taken place, nor to note the exact period when the injury occurred.

It is thus that the injuries become (1) disproportionate in extent to the force applied in comparison to the effect produced in the sane, (2) unsuspected during life, and (3) obscure with respect to the exact time of their occurrence and the precise accident that caused them.

I will now allude to one or two other points which I think corroborate this view.

1. These accidents have occurred in freshly admitted patients—that is, in other words, at an early period of the attack of insanity.

Now, according to my experience, great violence occurs at such a period in two kinds of cases only—viz., in second attacks and in cases of general paresis. I am not absolutely sure whether these cases of fracture were all primary attacks; there is nothing in any of the published accounts to establish this, but in some that I have seen myself it was so.

I am aware that my opinion on this point—viz., that there is no such disease as acute primary mania—is not universally admitted, and there are, of course, difficulties in proving the question, and such cases as these, in which death occurs, at so early a period, and before the motor symptoms of general paresis are marked—tends to increase the difficulty, unless the mental symptoms are well marked and carefully observed.

2. Again, the patients have all been, as far as I can learn, males. This rather bears out the opinion as to the nature of the disease, as the frequency of general paresis is much greater among males than females.

I do not know whether I am just in saying that these accidents have occurred with more frequency in the metropolitan than in other asylums, and, if so, whether this may not arise somewhat out of the state of government of those huge institutions, so greatly under-officered, as Hanwell and Colney Hatch, but it is true undoubtedly that more cases of general paresis per cent. of the whole number of patients are to be found in those institutions.

The explanation which I offer appears, to my mind, to meet most of the difficulties with which these painful cases are surrounded—difficulties which have been the cause of great obscurity, and have given rise to many painful reflections. It must, I think, be admitted that the difficulties have been real, or surely they would not have evoked such an extreme hypothesis as that advanced in the *Pall-mall Gazette* by a well-known novelist—an hypothesis which seems to involve every element of the sensational novel.

I think I have shown, then, that the obscurity that exists arises not from there being anything to conceal, but from the actual and exceptional difficulties which are connected with these cases. In this difficulty I offer my explanation of this very untoward occurrence, and I will now allude to some mode of avoiding their recurrence.

It is well known that the patients affected with general

paresis are particularly liable to another form of accident—viz., suffocation from impaction of food in the pharynx; yet, from a knowledge of this liability, and by watchfulness, death from this cause is comparatively rare in asylums. What is chiefly required is a very early diagnosis of the cases of general paresis. I am of opinion, and have become more and more assured of the accuracy of my opinion, that general paresis may be distinguished at the very onset from all other cases of mental disease—before any tremor of lip can be detected, and, in fact, when the mental symptoms are the only phenomena present. By a close observation of these symptoms, they will be found to possess peculiar characters. I have alluded to this elsewhere, but since then I have pursued the inquiry with care, and I state the result that I have arrived at as briefly as possible. I would say that you may distinguish general paresis from the first by the following facts:—

1. The outbreak is more sudden than in insanity proper.
2. It follows very frequently upon some great mental emotion.
3. It is wholly free from, or is very rarely indeed preceded by a short stage of, melancholic symptoms.
4. That the delirium is of a peculiar character, and this is quickly, if not immediately shown, by a great mental restlessness, as great loquacity, great eccentricity of behaviour, great desire to go from place to place, very frequent changes of purpose, projects of very unsettled character, a propensity to erotism, want of ordinary reticence, a good-natured interference, or joking with anybody, even strangers. These precede those well-known phenomena of great or Utopian schemes, or open thefts, of unmeaning character, and disregard to decency, or actual indecency. At first there is not much show of actual violence, but there is great impatience to interference, and to which the patients are much exposed by the bystanders. The patient, it is true, is not often admitted in this state into an asylum, for his condition being often that of a good-natured and somewhat merry person, his symptoms are not viewed with any apprehension by his friends.

The next stage in the disease is the occurrence of the most unbounded maniacal fury. I am inclined to believe this occurs in some form in every case; it varies in degree and as to the exact period when it takes place.

M. Jules Falret, whose description of general paresis is excellent, says—"Often one sees these patients, who have been a prey to an excessive activity only, pass, during the space of a single night, or even a few hours, into an extreme condition of maniacal excitement." He adds—"So sudden is this that it has given rise to a belief that the disease itself has been ushered in by a sudden accession of mania."

It is in this stage, and on account of it most frequently, that the patient is brought to the asylum. In some of the cases the fractures we are discussing have already taken place.

Now, besides the positive signs to distinguish general paresis in the earliest stage, there are some of what I may call a negative kind.

1. If the patient is very violent, and the disease is a second attack of insanity, the disease is not general paresis.
2. If the disease has been preceded by a long melancholic stage, and has been followed by illusion of any of the special senses, the disease is almost surely not general paresis.

With the insight thus afforded, of course very particular care and caution should be directed toward these violent paretic patients, and I think a padded waistcoat without confinement to the arms might be placed on them while the violence lasts, or they should be in the padded room with padded floor. This would perhaps spare them these injuries, and thus lengthen their days, but of course would not save them from the inevitable fatal result of the malady.

But the most important safeguard is undoubtedly the eye of a responsible officer.

When the buildings are too large for thorough supervision, or the staff of officers too few, these accidents are the most frequent, because care and precautions to prevent them will of course be less.

A PAUPER in the Bow Union Workhouse has been sentenced to twenty-one days' imprisonment, with hard labour, for an assault upon the Medical officer.

NEW MODE OF PURIFYING SUGAR.—Monosulphite of lime is now being employed in the manufacture of sugar. The salt, which is nearly insoluble in water, is added to the crude cane juice, and the effect is said to be that the nitrogenous matters become insoluble and can be removed in the scum. It is possible that this reagent may be found useful in the purification of other organic compounds.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

LARIBOISIÈRE HOSPITAL, PARIS.

GANGRÈNE FOUDROYANTE.(a)

(Under the care of M. VERNEUIL.)

A WOMAN, 54 years old, was brought into M. Verneuil's wards, Lariboisière Hospital, on the evening of April 6, 1869, with a complicated fracture of the right fore-arm. The accident, a fall upon the palm of the hand, had happened six hours ago. The interne on guard found the extremity moderately tumefied, placed it upon a cushion, applied water dressings, and closed the wound by means of baudruche and collodion. The patient complained of great pain and slept none that night. The following morning, April 7, at the visit, the local symptoms had greatly increased; temperature 38·8°. M. Verneuil on this occasion, speaking of traumatic fever, observed that Otto Weber and Billroth were perhaps too exclusive in their opinions when they asserted that fever following injuries is determined by the entrance of some septic substance into the blood. We know that severe pain alone can cause fever; proof certain neuralgic accesses. The reduction of the displaced fragments of bone, added M. Verneuil, and a prudent and moderate compression, methodically applied, to keep the bones in place, often, in fact, calms these febrile accidents. The fracture was reduced, and the bandage carefully adjusted by M. Verneuil himself. Water and alcohol dressings; the member is placed into a hammock slightly elevated.

The patient complained of violent pain; half a grain of opium for the night is ordered. She slept but little.

On the morning of the 8th, the hand was found infiltrated with gas and sonorous upon percussion. The fore-arm and part of the upper arm, six inches above the bandage, was blue, cold, and insensible. Œdema existed from this point upwards as far as the axilla and the omo-clavicular articulation. The skin here presented a bronzed colour, or rather a colour resembling the tint left upon the surface of the body from an application of a saturated solution of nitrate of silver. The pulse was 90, the temperature 38·9°.

What could be the cause of this gangrene? The bandage had been put with every precaution possible. M. Verneuil, while attending to this duty, had drawn the attention of the class to the advantages to be derived from a bandage if carefully placed, but also to the possible danger of an inconsiderate compression. The gangrene extended six inches above the bandage; we must therefore free the compression from all blame in this case. Besides, the intense phenomena of local fever and those of general fever (though at that time less developed), had evidently been the precursory signs of the evil. The violent pain, the high temperature of the body—wrongly attributed to nervousness—could find no other possible interpretation than the one given by O. Weber and Billroth. Moreover, the rapid march of the gangrene, and the production of gas in the hand in less than twenty-four hours, gave to the case great resemblance to other similar ones observed and described by M. Chassaignac and M. Maisonneuve under the name of *Gangrène foudroyante.*

The urine contained neither albumen nor sugar. *Bacteria* had possibly entered the economy by the wound of the fore-arm. We know that M. Davaine has described their presence in certain gangrenous affections. I immediately therefore examined the blood of the patient and found it to contain the *cristaux aciculaires* noted by Feltz of Strasbourg in septicæmia, crystals which that author has described under the name of *zone immobile.* He designates by this name masses of little corpuscles which collect and adhere to the glass of the instrument. This immovable zone, characteristic, according to Feltz, in septic affections, is also, in his opinion, the origin of the bactérides. I then drew a few grains of blood from the bronzed portion of the arm for M. Davaine to examine. He found nothing in the serum, but the fibrine was infiltrated by an innumerable number of elementary granulations.

What granulations are these? Are they the bacteria, or some other similar corpuscles imprisoned by the fibrine of the blood? This is what takes place in carbuncle. The fibrine there collects and holds the bactérides, so that in searching for

(a) This observation has been taken by M. Nepveu, interne of M. Verneuil's service.

these little bodies in the serum they are not found. Everything showed that the case before us was a very unusual one, and that a fatal issue seemed inevitable. Amputation was not even brought into question. Tonics and stimulants were administered, and antiseptics applied to the extremity. Temperature of the evening, the second after the injury, 40°. A minute account has been kept of the patient's condition, but, so as not to burden the observation, we shall pass from the 9th to the 15th, as nothing remarkable more than a continued dangerous state of the patient is noted. On the 16th, the dead hand and part of the bones of the fore-arm were removed at the point of fracture, four inches above the wrist. On the following day the radius and ulna were detached at the elbow, and some of the sloughed soft parts were removed from the upper arm, which left half of the humerus exposed. The temperature, which in the mean time had only been moderately high, suddenly rose on the 20th to 39·4°, with pulse 105, dry tongue, etc. A vast eschar was discovered over the sacrum. Air-cushions and the water-bed were now used, but in spite of these and other sanitary measures, other sloughs formed, and the patient died from exhaustion May 4.

Nothing remarkable in the autopsy, except the liver and kidneys presented the fatty granular degeneration signaled by Virchow in acute parenchymatous inflammations.

Reflections.—The rapid gangrene in this case cannot be explained by any of the ordinary causes. There existed no obliteration of vessels, no compression of the integuments—in fact, a mechanical cause cannot be thought of. The case is one of poisoning, of infection of the blood, or, to employ M. Chassaignac's definition, one of traumatic intoxication.

What proof do we find? Our patient was a badly nourished person of an extremely nervous temperament. The fracture was a comminuted one. The opening in the integuments leading to a small sanguineous collection, and which was only closed six hours after the accident, had doubtless permitted the blood to become altered in some form or other. Certain it is that the woman passed a very bad night, that the temperature marked 38·8° next morning, and that the following day, not forty-eight hours after the fracture, gangrene of nearly the whole extremity had declared itself.

Examining the blood the first day, I remarked that of a column of about 8 c. c., nearly every particle of the serum became coagulated in a most astonishingly short space of time. Besides the acicular crystals already mentioned, I also found, ten days previous to the death of the patient, little straight, sharp, movable bodies, evidently bacteria, and apparently belonging to the species "Bacterium Termo" of Müller.

We must conclude that the air has certainly played an important part while in contact with the tissues. It has been the cause of putrefaction, and probably also the cause of the development of these inferior organisms, the bactérides.

Core, Feltz, Tigri, Davaine, have long since established the fact of the existence of infusoria in the blood. May not a something similar exist in traumatic emphysema and sudden gangrene?

This interesting observation might lead to many suggestions relative to the conditions under which such accidents may be developed. The question of *gangrène foudroyante* in fractures produced under a septic influence has much occupied French Surgeons during the last twenty or thirty years.

Certainly, a fracture occurring in an individual in whom the blood is altered in quantity and in quality should not follow the course of simple fractures; yet it would be hazardous to state that in certain alterations of the blood gangrene will follow. It might, perhaps, be said that a fracture in a diabetic subject may have gangrene as a consequence. This is possible, for we know the danger of wounds in diabetic persons. However, I know of no case of fracture where such has been the result. Hæmatic gangrene is observed.

1. In some fractures where collections of blood have remained in contact with the air, the blood undergoes certain changes which may produce different inflammations, erysipelas or local gangrene. The action of the air upon the pus, transforming it into a putrid ichorous fluid, can bring about similar results.

2, Pirogoff, in his "Klinische Chirurgie," Leipzig, 1854, has described a particular state of the soft parts which follows wounds and operations, called "acute purulent œdema." This œdema, which rapidily extends to the whole member, comes up without inflammatory symptoms of any kind. The subcutaneous, the sub-aponeurotic, and the intermuscular cellular tissue presents a serous infiltration which spreads and becomes purulent in a very short time. This œdema generally ends in rapid death, but it also happens that its march is more tardy, and it is then that we observe gangrene of the skin and of the deeper tissue. Although the gangrene in these cases is secondary, it may, nevertheless, be mentioned here.

3. Velpeau was the first to call attention to the bronze-coloured erysipelas observed after certain complicated fractures. His observation is published in the *Union Médicale*, 1855. The case was that of a man who presented a comminuted fracture with emphysema. Bronze-coloured erysipelas showed itself the fifth day; phlyctænæ and gangrene of the wound appeared, gangrene soon extended to the entire limb, and the patient died the tenth day after the accident. This is the first case of *érysipèle bronzé* anywhere recorded. I have had occasion to observe three cases under Verneuil at the Lariboisière. I will mention but the one of which my notes are complete:—

A man 53 years old was brought into the Charité on the evening of May 1, 1869, with a fracture of the right thigh and the left leg. He had been run over by an omnibus. The fracture of the leg was a complicated one; the integuments around the wound were very much contused and lacerated; the limb was blue, and emphysema had already set in. A bandage, for the purpose of arresting the ascending march of the infiltration of gas, was applied. The operation was deferred until the morning visit.

May 2.—Pulse 106, temperature 37·6°; great prostration. The limb was amputated above the knee. The amputation could not be practised at the point of election, because the skin was cold, the soft parts detached and ground into a pulp. No loss of blood. The evening temperature of the three following days respectively, was 38·5°, 39·2°, 39·5°. The patient complained of great pain in the abdomen; the wound looked badly. The roots of the lower extremities presented a bronzed tint, with intervals of healthy skin here and there. These coloured patches extended to the abdomen. The stump became covered with vesicles, and bronzed erysipelas now declared itself. The patient died two days later (six days after the accident).

The autopsy showed a longitudinal fracture of the femur at two points. The cellular tissue of the limbs and of the muscles of the abdomen was found infiltrated by a brownish coloured fluid with fatty droplets swimming upon the surface. Patches of cellular tissue of these regions had sloughed away. The liquid, examined under the microscope, contained leucocytes, fat globules, and red blood corpuscles, denoting diffuse suppuration. The kidneys, the liver, and the heart presented evident signs of granular degeneration, such as have been described by Virchow in septic poisoning. The gangrene, though but little marked, existed nevertheless. It was more extensive in the case cited by Velpeau. The septic action of this lesion, and the production of gangrene by the same, can no longer be doubted.

4. Traumatic emphysema, says Velpeau, which sometimes comes up with other complications of a fracture, and from the first day before the appearance of any phenomena of inflammation or gangrene, is one of those accidents which most formally demand amputation ("Méd. Opér.," tome ii).

There is something startling in such a prognosis, especially if we consider that the emphysema produced by insufflation of the cellular tissue is far from having the same gravity. But we must not forget that in traumatic emphysema, the air in contact with the blood which has lost its vitality, and which is now in the midst of the tissues at the temperature of the body, and under the influence of fermentable germina, causes rapid decomposition.

This traumatic emphysema, signaled by Velpeau in 1830, and by Roux about the same time, can be observed in the extremities of the body, far from the natural reservoirs of air. The air seems to penetrate into the tissues through the wound by means of a kind of aspiration.

Velpeau gives the following example (*Gaz. des Hôp.*, 1844, p. 458):—

There existed a complicated fracture of the fore-arm; erysipelas, phlebitis, and emphysema appeared. The fifth day gangrene. Death the twelfth.

The danger of this emphysema is great; the blood and the pus, altered by the air, quickly produce septicæmia or other inflammatory lesions.

But there exists another variety of emphysema, the one produced by the alteration of the blood from the mortified tissues. These are alterations which are frequently observed in complicated fractures. The wound in these cases does not play the first part as it did in the first variety of traumatic emphysema. We now have it to do with a crushed limb, produced by the wheels of a wagon, by a fall from some con-

siderable height, etc.; and the result here is an instantaneous decomposition of the blood, the production of emphysema and of gangrene.

Malgaigne, who has made numerous researches upon spontaneous primitive emphysema, has well remarked the extreme gravity of this complication, following extensive injuries.

"As for myself," says he, "I think that, under the influence of the shock and the stupor, a certain change takes place, which attacks life like excessive cold destroys the germ in the egg, and the vitality in the blood clot, without leaving any visible alteration." The exhalation of more or less deleterious gas is the only indication of this change, and which nearly always announces that gangrene is imminent. Malgaigne and Geoffroy analysed these gases, and found that they were inflammable and composed of atmospheric air and protocarbonated hydrogen gas.

Chassaignac, in his thesis, "Sur les Opérations applicables aux Fractures compliquées" (1850), cites several cases of traumatic emphysema rapidly followed by gangrene. He says:

"I look at the question of traumatic emphysema from a different point of view. This phenomenon only seems to me the expression of a common fact, which I have long since designated by the name of poisoning or traumatic intoxication. I am of the opinion that a great mechanical violence can determine instantaneously, somehow or other, a state of putrid poisoning comparable to that produced by the direct penetration of putrid matter into the vascular system. It is in the autopsy room, from the prodigiously rapid decomposition of subjects dead in consequence of some great traumatic lesion, that I have deduced the existence of a poisoning brought about by a cause of this kind during life."

This theory bears close resemblance to the one of sudden spontaneous gangrene in fractures. The following is an example:—A man, falling from a height of twenty-five feet, sustained a wound of the tibio-tarsal articulation, fracture of the malleoli, with luxation of the foot inwards; on the right side, fracture of the internal malleolus, and luxation of the astragalus. The man was brought into the St. Louis Hospital with complete loss of consciousness. Amputation of the left leg was practised the following day. The patient died thirty-six hours afterwards. The autopsy showed a very advanced state of decomposition of the abdomen, of the scrotum, and the lower extremities. Emphysema had invaded the entire body; the thighs were nearly as large round as the trunk; the face could not be recognised.

A subject, therefore, placed in a room (the dead house) of which the temperature is about that of a cellar, had undergone a state of decomposition in the course of thirty hours, which fifteen days, a month even, in water or in the open air could not have advanced further.

Already in 1848, we find M. Chassaignac, at the Société de Chirurgie, holding the same theory *à propos* a patient who had had his foot crushed, and which had to be amputated because of the almost immediate development of gas in the extremity.

Violent traumatism, instantaneous decomposition of the blood, emphysema, gangrene, and rapid death—such is M. Chassaignac's opinion.

Maisonneuve confirmed these ideas in 1853. He had occasion to observe two such cases; and in a *mémoire* on the subject, presented to the French Institut, he designates these accidents as "pneumohémie putride de gangrène foudroyante." These are the opinions of the authors on the subject of *gangrène foudroyante*, an accident almost exclusively observed after fractures.

En résumé—

1. In a comminuted fracture, the action of the air upon the liquids and tissues of the economy produces, under particular conditions—narrowness of the outlet of the fluid, retention, penetration, and aspiration of the air—manifold changes. The air, moreover, brings to the focus around the fracture the germs described by Pasteur, which help to increase the putrid decomposition, favoured by the temperature of the body.

2. The wound may be insignificant, yet the tissues very much crushed. The disorganised elements are rapidly changed into a focus of putrid decomposition. The blood, killed upon the spot, as it were, furnishes gas which rapidly infiltrates the adjoining textures, causing spontaneous emphysema and *gangrène foudroyante*. The air, here, and the germina of Pasteur, have nothing to do with the case. These phenomena can come up with the skin intact, or nearly so. With what rapidity must these accidents then be developed if the air is allowed to penetrate into the focus of the fracture, into the midst of the crushed elements!

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Medical Times and Gazette.

SATURDAY, FEBRUARY 19, 1870.

THE CONJOINT EXAMINATION SCHEME.

Whilst negotiations are still pending, it would be inopportune to criticise the scheme for the formation of a conjoint Board of Examiners which the Royal Colleges of Physicians and Surgeons have presented for the acceptance of the other examining and licensing bodies. The antecedents of the royal colleges will afford sufficient assurance to their *alumni* that in that scheme their own interests and claims have neither been forgotten nor waived. The present situation, however, may lead us, as outsiders, to review the claims of other bodies which in conclave have perhaps less numerous, and it may be less busy, adherents. With regard to the Universities, we may safely affirm that unless the scheme encourage and favour, rather than hinder, University education for Medical men, it will inflict a great injury on the Medical Profession. The Medical Practitioner is, *cæteris paribus*, best educated and best fitted for success in his sphere in life who has mixed most with men intended for other professions, who has received the most liberal and varied training, and who, with all the special knowledge of his own profession that he can obtain, has the most varied knowledge of mankind. Such a training is not to be got in a Medical school. It is only to be obtained in a University, where young men are trained equally for the bar, the forum, the pulpit, and all other callings which are those of gentlemen. Any movement which should discourage or prevent Medical men obtaining University training will injure rather than improve the Medical Profession. On the other hand, no scheme for a conjoint board will satisfy the public sense of justice in which the claims of the Apothecaries' Society are in any degree overlooked or underrated. Of all the examining bodies in Schedule A of the Act of 1858, the Medical Profession—we say it advisedly—are most indebted to the Society of Blackfriars. Those who are old enough to remember the condition, as regards Medical education, of the great mass of country Medical Practitioners before the passing of the Act of 1815, will confirm us in our assertion. It is an old story that the task of educating and examining the general Practitioner of England and Wales was offered to and refused by the Royal College of Physicians. It was accepted by the Society of Apothecaries, and great indeed is the work which that Society has accomplished. When the College of Surgeons was introducing men into the Profession with a bare knowledge of anatomy and surgery, the Apothecaries' Society refused its diploma to all who had not proved the possession of some classical and mathematical learning, as well as a knowledge of medicine, midwifery, therapeutics, anatomy, physiology, the

microscope, chemistry, toxicology, botany, and pharmacy. The Parliamentary Act under which they exercised power gave them the right to examine in *the science of Medicine*, and well have they executed their trust. Up to the present time they have been fully abreast of the requirements of the day. Before the General Medical Council was thought of, they had instituted preliminary examinations in more branches of secular knowledge than are now by it required. Practical examinations in chemistry, toxicology, and the clinical examination of patients are all conducted at the Hall, and the examiners appointed by the Society have ever shown themselves foremost in carrying out the recommendations and behests of the General Medical Council. Their diploma stands high in the regard of the general public, as it does in the estimation of the Poor-law, Army, and Navy Medical Services. Whatever may have been the amiable weakness of other bodies, the Apothecaries' Society has never given a licence without examination. To its efforts in the cause of Medical education we owe it that at this moment the rank and file of the Medical Profession in England are equal, if not superior, to the rank and file of the Profession in any other country in Europe. If these facts do not give a licensing body a claim from the Profession and public for fair consideration, we should be glad to be informed what other of the Medical corporations can exhibit so honourable credentials.

BROKEN RIBS IN THE INSANE.

That recent revelations as to the occurrence of extensive fractures of the ribs in the insane is a matter to be lightly passed by, no one will, we think, affirm. To the public they are of interest, as they refer to relations or acquaintances, certainly to fellow creatures, confined for the public benefit; for the vast majority of the insane are in a hopeless condition as to recovery, and are kept in confinement partly for their own sake, but more for that of the public generally, as we point out elsewhere. To our own Profession there is the scientific interest which cannot be separated even from such miserable occurrences, whilst to that portion of our brethren to whose care the insane are intrusted, it is matter of moment not only that they should have a clear conscience, but that their reputation should be unspotted before the world. To these men as a class, the writings of Mr. Charles Reade have done much injury and grave injustice, and not the least has been done by his last communication to the *Pall-mall Gazette*. *Apropos* to that letter, Dr. Sankey has communicated to us a paper on the subject of broken ribs which has the merit of bringing matters to a definite issue, and on which, as on the subject generally, we shall make some comments.

The first point to be noted is the great extent of these fractures, and to account for this Mr. Charles Reade charitably suggests that they are produced by an attendant travelling on his hands and knees up and down the unfortunate individual's chest. Against such a solution we are bound to protest, in the first place, because the cause as pointed out by Dr. Sankey is inadequate, and, in the second, because there is not a tittle of evidence to support a charge of such exceeding gravity. Then, again, the fractures have only been discovered after death. The why and wherefore of this are well pointed out by Dr. Saukey, and we need do no more than corroborate his statement that many of the insane are utterly careless as to their bodily sensations, and will even give no information as to what they feel or suffer.

Again, these injuries have occurred in *men, soon after or before admission, and whilst they have been labouring under great excitement*. Dr. Sankey would seek to account for the first of these facts by a second—that the general paralysis of the insane, with which alone he appears to connect these accidents, is far more common in men than in women; but it appears to us that there is still another consideration. Female patients are more frequently mischievous than dangerous, and are perhaps more easily controlled by physical force than are men. Now, without accepting the doctrine that the bones of the paralysed or the insane generally are more fragile than are those of the majority of healthy individuals (that they are so in certain instances has been clearly shown), or even that advanced by Dr. Sankey—that it is the nervous element of muscular motion which is defective, we think something may be made out of the above three facts taken collectively. The unfortunate patients have been men labouring under strong excitement, ready to fight with their attendants on the slightest cause, or even no cause at all. Some control is absolutely necessary in these as in other kinds of cases, and moral control over men in such a state of mind is simply an absurdity. Accepting Dr. Sankey's view that such patients are general paralytics, at this stage of their complaint, their notions are of the most exalted kind, they fancy themselves infinitely superior to those by whom they are surrounded, and any attempt to impose the will of another upon them is resented as a deadly insult. Under such circumstances, a collision is inevitable; the *ultima ratio*, physical force, must be called in, and a struggle ensues, to be continued until the maniac is utterly overpowered or completely exhausted. As we take it, it is in such conflicts that ribs are broken, and that the accident does not depend on the inhumanity or insensibility of madhouse attendants is shown by the fact that patients are *brought* to asylums with ribs already fractured. It appears to us that the position of these men is not sufficiently taken into account. That their ranks do contain black sheep, it would be useless to deny; but, as a rule, they are carefully selected. But they are men, and a sudden blow in the face, a kick with a heavy boot, or even to have their face spat in, would rouse most people not being attendants. And what kind of patients have they under them? Some of them, knowing that they are insane, and that the law no longer takes cognisance of them, have sworn to commit murder on the first opportunity, and when they think that opportunity has come a struggle ensues, for life on the one part, for superiority on the other. This is no overdrawn picture, as those familiar with asylums know. These are not the class of cases above alluded to as recently admitted, it is true, but they are analogous.

It is useless to talk of such men as amenable to reason; they are amenable only to brute force, active or passive, and over some of them even drugs would seem to lose control. They may be held on the floor or on their beds, so as to be incapable of striking or kicking, and even then they will bite, as many a Physician and attendant know to their cost. Such men must be hindered from injuring themselves and others; the question is, How? Force of some kind must be used, active or passive. With six or eight attendants holding a man, and this number is sometimes necessary, it is impossible that he should escape bruising, even should he suffer no more serious injury. In such a case, the *argumentum ad hominem*, usually most unfair, becomes good logic, whether should we prefer to be so held by six or eight men, with their localised grips, or by a stout sheet of canvas uniformly resistent? For our own part, we should, being sane, choose the latter.

Now, it is equally absurd to call this the introduction of restraint as a system, as to call the present system that of absolute non-restraint. In exceptional cases force of some kind must be used; the only question is how best to apply it. We have as little desire to return to the condition of things so well described by Dr. Gardiner Hill,(a) in a recent work as to set open the doors of our gaols and lunatic asylums, and to let their inmates go free. Neither will we accept the position of advocates for a system of restraint. Force is now used, we contend, not in the best way; and this is not the opinion of men unacquainted with lunacy practice, but of some of those who have devoted most time and attention to the subject. We are in a similar position with regard to blood-letting. With a bound, practice leaped from one

(a) "Lunacy, its Past and Present." By Robert Gardner Hill, L.R.C.P., M.R.C.S.E., etc. London: Longmans. Pp. 109.

pole to the other, universal depletion gave way to universal stimulation, and we are now slowly and carefully trying back, so to speak, endeavouring to find out cases where blood-letting does good. We are constantly encountering papers in our journals where the one point of interest is that venesection was had recourse to with or without benefit. It has been the same in lunacy practice; from all the horrors of the old system, the step to non-restraint was sudden and complete. If there are men now who advocate mechanical appliances instead of living force in avowedly exceptional cases, are they to be called advocates of a *system* of restraint any more than are the Physicians above alluded to to be dubbed followers of the Sangrado school? In no instance ought restraint to be had recourse to, without the direct permission or instruction of the Medical superintendent; neither in any case ought the patient under restraint to be left to himself by the attendants. It is useless to argue, as does Dr. Gardiner Hill, that the application of a strait jacket implies a struggle. No doubt it does in certain cases, but it is not a struggle prolonged for hours, as under the existing system, and it is exactly for such cases that we claim the advantages of mechanical over active restraint. Restraint does exist now in the shape of padded rooms and attendants' hands; why no other forms should be used we are at a loss to see.

But there is another matter alluded to by Dr. Sankey of at least equal importance. The Medical staff of our large asylums is utterly inadequate to the harassing duties they have to perform, and further, those who have most of the work to do are underpaid. Until these matters are remedied reform is hopeless.

THE WEEK.

TOPICS OF THE DAY.

It is only recently that one of her Majesty's judges, whilst presiding in his court, was abused in the most outrageous language by a person holding the position of a country gentleman, but whose demeanour and conduct can only be explained or excused on the supposition of insanity. During the past week the newspapers have contained an account of a ferocious assault upon two unarmed and unoffending American gentlemen by a Captain Madden, in the coffee-room of the Queen's Hotel, Manchester. At the inquiry before the magistrates into the circumstances of the assault, the friends of Captain Madden offered evidence of his insanity, and stated that he had already been confined as a lunatic in London. Such examples are by no means uncommon. A lunatic at large may be met in the first railway carriage one rides in, or at the corner of the next street. This state of things depends, we believe, on the practical difficulty there is in establishing insanity to the satisfaction of law courts, and on the responsibilities which the law throws on Medical men who sign certificates for the seclusion of the insane. We freely acknowledge that many of the abuses of private lunatic asylums have been remedied by the present state of the law, and that a removal of any of the impediments which must be overcome before an individual can be proved out of his mind, might in rare cases permit wilful or accidental mistakes. But, on the other hand, the public, under the present system, are exposed to dangers of an opposite class. Some proportion of crime, at least, is due, in the present day, to unrestrained insanity, and we believe that our readers will support us in the assertion that in this country there are hundreds of persons who live to be the source of misery and ruin to their families and themselves, who would have been saved had their Medical adviser been allowed to prescribe temporary seclusion and restraint.

Until the provisions of Sir John Gray's Bill are made public, we reserve our criticisms. We have already stated that we are by no means sanguine as to the good which would be likely to accrue from the direct representation of the Profession in the General Medical Council. We believe that a reform in the Council might be easily effected by reducing it in number, and that the only mode of representation which is desirable is to give graduates of universities and members of corporations a voice in the election of the representatives of those bodies. With regard to the registration of Practitioners only "who possess a practical acquaintance with the duties of the several branches of their Profession," this end will be fully attained by conjoint examinations if these can be obtained. It is not, therefore, impossible that the forthcoming meeting of the Council may in this point forestall Sir J. Gray's measure.

It will be seen that Mr. Lowe has persisted in his intention of abolishing, as a scientific prize, the office of Master of the Mint. This miserable economy is of a piece with his refusal to expend a farthing of the public money on a memorial to Faraday. We commend Mr. Lowe's treatment of scientific men and scientific subjects since his tenure of office to the careful consideration of his constituency the University of London.

The *East London Observer* of February 12 has a long report, under the head of "Alleged Improper Treatment of a Patient at the London Hospital," of an inquest upon the illegitimate still-born child of a girl of eighteen, who was an out-patient, under Dr. Bathurst Woodman, of the London Hospital. Despite the asseverations of the girl, it was clearly proved by the production of her letter, marked "uterine tumour—physiological," that her condition had been diagnosed by Drs. Woodman and Fenwick, who had seen her at the Hospital. The inquest would have presented no point of interest had it not been for the evidence of a Dr. Maurice O'Connor, living in the Mile-end-road, the gentleman who had made the post-mortem examination of the baby, who said that the medicine prescribed at the Hospital for the mother was unfit for a woman in the pregnant condition, and intimated to the jury, as we are informed, that it was calculated to produce abortion. Now, as the medicine prescribed was the London Hospital effervescing mixture with ten grains of the ammonio-citrate of iron, to be taken three times a day, our readers will probably think that such evidence was mistaken and calculated to mislead the jury. It is quite true that certain writers have recommended that the stronger preparations of iron should not be given in the pregnant condition. But, on the other hand, their scruples are not supported by extended experience, when these preparations are given in medicinal doses. That the ammonio-citrate of iron in an effervescing form should produce any ill effect would be held by most Medical men a mere hallucination. As Dr. Fenwick, in his evidence, said, "almost every medicine in use has been taken for the purpose of producing abortion," but this by no means proves that they have the power.

Dr. Edward Smith has been commissioned by the Poor-law Board to inquire into the circumstances under which small-pox has lately been introduced into the Brentford Workhouse. It seems that a man named Halley, suffering from small-pox, was admitted at the workhouse, and immediately placed in a ward where healthy people are on admission put. He was thence removed to a ward in the infirmary, where there was no isolation, but constant communication with the other parts of the building. The consequence is that the disease has spread. The Poor-law Board very properly require the Brentford Board of Guardians to erect detached wards for the reception of infectious cases. The Brentford guardians do not seem as yet convinced of the necessity of this, and have referred the matter to a special board.

We have received a report of the annual meeting of the Royal Victoria Dispensary, Northampton. The institution, which is a self-supporting one, seems to be in flourishing circumstances. The annual report states that a testimonial, con-

sisting of a service of plate, value 150 guineas, has been presented to the secretary. The subscriptions, donations, and interest from capital, amount to between two and three hundred a year; but the main source of income is from the monthly payments of free members, which amount to no less a sum than £1728 16s. 1d. When all expenses have been paid, a sum of £1334 0s. 6d. remains to be divided amongst the three Medical officers of the institution—Dr. Barr, Mr. Moxon, and Mr. Evans. Now, no one who knows anything about the working of self-supporting dispensaries can doubt that many of the free members subscribing to the Northampton Victoria Dispensary could well afford to remunerate a Medical Practitioner at the ordinary rate of payment. It can scarcely be doubted, therefore, that such an institution must inflict some injury on local practice. On the other hand, no doubt many persons subscribe their pence to it who would otherwise get gratuitous advice, or cheat the Doctor. Under the system at least three Medical men receive decent remuneration. There are evils, as we have said, on both sides. The question is, on which are the greatest?

It seems, from Mr. Goschen's reply to Mr. Eykyn on Tuesday last, that the St. Pancras inquiry has not terminated; if it had, a great injury would have been inflicted on Dr. Ellis.

The Hon. Mr. Plunkett has been elected member for the University of Dublin.

By a recent ruling of the Court of Queen's Bench the term "medicine" in the Pharmacy Act is held to include applications for external use. The case was that of Reg. *v.* Berry, in which a druggist was charged with having sold a lotion containing prussic acid to a man who attempted to poison himself with it. The defence (which was successful) was, that the druggist supposed that the lotion was a "medicine," and entered the prescription and labelled the bottle in the way required by the Act.

Mr. Spencer Watson has been elected Surgeon to the Great Northern Hospital.

The subject of the amalgamation of the societies is about to be referred by the various delegates to the respective societies. We sincerely hope that the original scheme may be so modified as to permit the amalgamation to be brought about.

MR. FLOWER'S LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

There is in Mr. Flower's admirable lecture, elsewhere published in our columns, a brief reference to a subject which is worthy of more general attention. He points out the great importance of general morphology as an aid to the teaching of human anatomy. As matters now stand, the student is taught, and generally, we may say, well taught, the anatomy of the human subject; but it is rare to find this the most complicated kind of anatomy illustrated by reference to, and still more seldom by actual dissections of, the lower animals. From this it follows that our students are, generally speaking, ignorant of the import of the numerous rudimentary organs encountered in the human body, as well as of the mode in which the more complex organs are built up. If they are instructed in comparative anatomy, it is as something additional and having no relation to human anatomy. Illustrations of the fallaciousness of this system might be given *ad nauseam*, but a few will suffice. What student can properly understand the relations of the different centres constituting the brain who has not studied the simpler conditions seen in fishes, where the various lobes are in line instead of superimposed one on another? What student can tell which finger is retained in the horse's hoof, or what two in the cow—the relation of the crop of the bird to the paunch of the ruminant, and of both to the human stomach? And yet this is the simplest as well as most interesting mode of acquiring a knowledge of anthropotomy.

ARMY MEDICAL DEPARTMENT.

We regret to hear that Deputy Inspector-General of Hospitals R. G. D. Banon has been compelled, by ill-health, to leave his station at Ceylon. Mr. Banon is, we believe, at present at Malta, where he will remain until the weather at home becomes more seasonable. We understand that Deputy-Inspector-General of Hospitals A. Gibb, M.D., Principal Medical Officer at Colchester, is likely soon to retire from the service on account of ill-health.

POOR CHLOROFORM!

If we may parody the famous exclamation of Madame Roland, we may say—"O, chloroform! what follies are wrought in thy name!" The police reports in the *Times* of Wednesday give us a capital example. An elderly country solicitor is accosted late at night by two women near Leicester-square, who, as he says, beg of him. A veteran man of the law, one would think, would be able to deal with such assailants; he might have given sixpence, or he might have simply buttoned up his coat and trudged on. But one of these women, he says, held up a bottle to his nose, and from it a vapour exhaled which produced wonderful results. The attorney, in a fit of ecstasy, accompanied the women to a coffee-house, and there he regaled them with chops; nay, he even had a chop with them, from motives of the purest philanthropy. Then, as he said, another whiff from the bottle was surreptitiously administered, and lo! one of the girls took him to a bedroom, where he went to bed and slept, and, awaking early, found that his friend had vanished with his watch and purse. We would put it to our classically learned readers that, if it was chloroform which produced such funny effects in this case, it must be that chloroform which was lent by Venus to Juno, in order that the latter goddess might bewitch her august spouse, as Homer tells us. Seriously speaking, what a very old fool a man must be to tell such fibs about chloroform at this time of day! just as if a rapid whiff from a bottle in the open air could produce any effect, much less a pure paralysis of the moral faculties!

THE SALE OF PETROLEUM.

Parliament will shortly be called upon to supply more stringent regulations for the sale of paraffin and petroleum oils. In spite of the Acts of 1862 and 1868, a large proportion of the oils sold in the shops is still dangerous. The test prescribed by the Act of 1868 is founded upon an entire fallacy, for, instead of directing the employment of an apparatus similar in construction to a lamp, it directs that the igniting or "flash" point shall be determined in an open vessel. Of course the most volatile and explosive portion of the oil is dissipated in such apparatus during the heating, whereas, in a lamp, it is liable to remain mixed with air in the upper portion of the oil chamber. As a rule, the oils obtained by distillation from bog-head and other minerals are safe, while the natural oils imported from America are often highly dangerous.

DEATH-RATES AND BIRTH-RATES.

Dr. Letheby, in his lately published Annual Report on the Sanitary Condition of the City of London, draws attention to the fact that "the death-rate alone can afford no reliable indication of the salubrity of a place," and that "great differences in the death-rate are always associated with corresponding differences in the birth-rate, for where the one is large the other is large also. This is in accordance with natural law; for the death-rate of children contributes largely to the total mortality—there is nothing, in fact, which influences it so much, for, all other circumstances being equal, the death-rate is directly proportional to the birth-rate. The mortality of children is excessively large compared with that of adults. It amounts, indeed, during the first year of their age to about 160 per 1000 of all that are born, while in the

rest of the population the mortality is only about 20 per 1000." We have often said the same thing. We have protested against calling one part of St. Marylebone healthier than another, because fewer babies were born and died there. The Registrar-General, it is true, publishes "death-rates," but he is not responsible for the foolish use which some people make of those rates. The death-rate is a solid figure, the product of several factors; a high birth-rate is one.

SULPHO-CYANIDES IN SALIVA, BLOOD, AND URINE.

A RECENT number of the *Proceedings of the Royal Society* contains an interesting paper on this subject by Dr. Leared. He finds that these salts, which, by the bye, are more properly called sulpho-cyanates, are generally, but not always, found in the saliva, and that the quantity, though always small, was greatest in persons of sound health. He next proceeded to test for the same salts in the urine and blood, and although the difficulties of the research were very serious, he satisfied himself of their presence in both liquids. We cannot say that the author's experiments produce entire conviction in our minds, though the fact is probable enough. Still less are we satisfied with the opinion which he appears to hold that the colour of the red corpuscles may be due to sulpho-cyanate of iron, which is well known to have almost exactly the tint of blood. Dr. Leared produces no evidence at all in support of this hypothesis, and it is in direct opposition to more than one well-known fact.

COMPENSATION FOR RAILWAY INJURIES.

THE proceedings in the courts of law during the past three weeks have afforded abundant evidence of the very unsatisfactory manner in which the amount of compensation for railway injuries is determined. Trial after trial has shown that great injustice has been done to one or other of the parties. Damages of a large amount have occasionally been awarded in trivial cases, whilst in some instances the plaintiffs have been nonsuited, or very inadequate compensation been given by special or common juries. The law expenses in some cases must have far exceeded the amount of damages. Motions for new trials have occasionally been successful in reducing the sums awarded by a jury, whilst in other cases the rule for a new trial has been refused, on the ground that the damages were not excessive. Many cases were "settled" by a conference between the Medical advisers of the plaintiff and those of the Company; and those cases have, we may assume, been satisfactory to both parties. At all events, it seems the most rational, as well as the most equitable, mode of settling the matter. The reason for this is obvious. In such a conference the Medical gentlemen engaged are really in a position to estimate justly the extent of injury sustained, and its probable duration. If any difference of opinion exist, it can be arranged, and justice done to both parties. This offers a striking and wholesome contrast to the unseemly display of Medical evidence in the witness-box. And how can a jury be expected to arrive at a proper verdict in the face of such opposite and often perplexing evidence? The judge, however able and astute, is in a difficulty; and hence verdicts are given that, as a rule, are most unsatisfactory. We have occasionally pointed out the remedy for this state of things, and it is probable that some action may be taken by the Legislature this session to carry out some such plan as we have recommended. Any way, it is certain that the present system cannot be allowed to go unchallenged. We have advised that the award of compensation should be intrusted to an able and impartial Medical tribunal, and that the decision arrived at by them should be final. Cases of injury would then be taken out of the hands of speculative attorneys, the companies be saved an enormous amount of legal expenses, and the members of our Profession would not be exposed to the ridicule and obloquy to which they are occasionally subjected in consequence of the sadly conflicting evidence which they give. Objections have been raised to this scheme by lawyers, plaintiffs, and the companies; but they are founded on a misapprehension of the real action of such a tribunal. The Medical referees would represent neither party, but act independently and, no doubt, justly. They would not be liable, as is a jury, to be influenced by exaggerated statements, or misled by mere appearances. They would examine the patient for themselves, and call the Medical attendants of the injured persons before them, whose evidence would be sifted and scanned in a Professional spirit, and with Professional knowledge to aid the investigation. We are satisfied that some such plan as this must eventually be carried out. The sooner it is, the better for plaintiff, defendant, and, above all, for Medical witnesses.

STARVATION IN THE NAVY.

IN connexion with the paper read by Dr. Stone, R.N., on the 2nd inst., before the Army Medico-Chirurgical Society of Portsmouth, of which we give an abstract elsewhere, it may serve a good purpose, so far as the victualling of H.M.'s ships on the south-east coast of Africa is concerned, to publish the following extract from a letter lately received from an officer serving in one of the ships at present on that station, and kindly placed at our disposal:—

"Zanzibar, November 29.

"We have been very hard up for food for the last fortnight, but, thank God, I am in good health and spirits. We have had bad biscuits supplied at Madras, fat pork, and salt beef, and this in broiling weather was not luxurious fare, I can tell you. We all enjoyed a few stale eggs last evening, and hailed fruit and bread with joy to-day. So now, at least, we are not absolutely hungry, as we all were from really insufficient food for some time past."

As an independent corroboration of Dr. Stone's statements, the above extract is extremely valuable. The establishment of a naval depôt at Zanzibar or Seychelles, as suggested in Dr. Stone's paper, should no longer be delayed. While H.M.'s vessels are employed as cruisers on slave stations, it is simply inexcusable, if, as we have been informed, jealousy on the part of the Indian authorities, based on a lingering hope of the re-establishment of the Indian Navy, should hitherto have prevented the organisation of a system of supplying proper food, liquors, and medicines for the crews of such vessels. The attempted suppression of the slave trade is by many considered to have conferred very questionable benefits on the wretched slaves themselves; but if, in its present form, it involves actual starvation of British sailors, it becomes a matter of imperial importance that such defects be promptly and thoroughly remedied. The subject appears to us to demand the immediate and serious attention of the Admiralty or of Parliament.

HUNTERIAN SOCIETY.

ON Wednesday evening, the 9th inst., the annual oration in connexion with the above Society was delivered by Mr. Bryant at the London Institution. This being the fifty-first anniversary of the Society, Mr. Bryant selected for his subject the progress which Surgical science and art had undergone during the preceding half-century, taking his illustrations from the records of the Society. An interesting account was also given of the improvements in Surgical practice due to the introduction of chloroform. The annual meeting for the election of officers was held on the same evening, when the following list recommended by the Council was unanimously adopted:—*President:* Mr. Hutchinson (re-elected). *Vice-Presidents:* Mr. Allingham, Dr. Braxton Hicks, Mr. Bryant, and Dr. Hughlings-Jackson. *Treasurers:* Dr. Daldy and Mr. Brown. *Librarian:* Dr. Fowler. *For the Oration of* 1871: Dr. Crosby. *Secretaries:* Dr. Phillips and Mr. Adams. *Council:* Mr. Bader, Dr. J. N. Bright, Mr. Gordon Brown, Mr. Brownfield, Dr. Burchell, Dr. Clapton, Mr. Clapton, Mr. Humphreys, Dr. Lichtenberg, Mr. Rivington, Mr. Wallace, and Mr. Wright.

About fifty members and friends of the Society dined together on the following Friday evening at the London Tavern, Professor Richard Owen, F.R.S., in the chair. An interesting speech was made on the occasion by Dr. William Cooke, one of the founders of the Society, who this year resigns the office of treasurer after an official connexion with the Society for fifty-one years.

CHOLERA IN RUSSIA AND POLAND.

A RECENT number of the *Pall-mall Gazette* quotes from the *Exchange Gazette* of St. Petersburg that—

"Asiatic cholera now rages at Moscow in its worst form. People are suddenly attacked by the epidemic while walking in the streets, and there have been several cases in which death was instantaneous. According to the *Official Messenger*, there were twenty-six cases of cholera at Orel on January 13, and twenty-seven more were added in the following week. Of these fourteen are dead, and seventeen have recovered. In the government of Minsk (Russian Poland) there were nine cases of cholera between December 29 and January 6, six of which have ended fatally. At Kursk, three persons were attacked on January 20, all of whom have since died. The cholera has also appeared in the government of Smolensk, in Western Russia.

This is very much the route by which former epidemics of cholera have advanced towards Western Europe; so that if the information be correct it is by no means improbable that during the ensuing autumn or in the spring of next year we may have cholera amongst us. The great Hurdwar epidemic which swept over North-Western India in 1867 has ever since been steadily extending northward, and the cases now reported from Russia and Poland probably merely denote the advance of the skirmishers covering the main body. With such warning before us, it would be most desirable that our Government should ascertain the truth of the above statements, as it would be well that we should not be taken entirely unawares.

WINE MAKING IN AMERICA.

THE Americans seem turning their attention in good earnest to wine-making, and evidently have all the materials in their hands—climate, soil, and vines. "The time is not far distant," says one writer, "when *every* American citizen can indulge in a daily glass of that glorious gift of God to man—pure light wine—and the Americans shall become a really temperate people."(a) Plenty of scientific observers have gone out from the States to visit the most celebrated European wine districts with the view of teaching their own countrymen how to "*drink* wine, *take* brandy, and *use* water" after the manner of the French. Wine, they say, and with truth, will effect a great moral and physical reform in America. "Drink wine," says Mr. Flagg to his countrymen, after describing European wine culture; "drink it, you and your wife and little ones; drink it for breakfast; drink it for dinner; drink it for supper—drink it, in short, whenever you are dry, or wet, or cold, or tired. It will cost less than the sugar you now mix with your tea or coffee. It will reduce your grocer's bill, and nearly abolish your Doctor's. It will give you healthy children, and not only purify their blood, but mend their manners. Your wife will gradually reform her ice-water drinking, abandon her dyspepsy, put flesh upon her bones, be seen to smile and sometimes laugh, and glow with the warmth of health and love. You will gradually become less uneasy, and more fond of amusement than excitement; will grow more plump, and have better strength to carry your flesh. Wine is a purer drink than water, a cheaper drink than sugared water, and a healthier drink than any." The Briton, he says, has an excuse for drinking strong muddy port and sherry and other forms of ardent spirits—they are *fog medicines*. The Americans have no excuse. "We live," says Mr. Flagg, "in a dry climate and under conditions exciting and exhausting to body, brain, and nerve." These conditions have already created a morbid national temperament. "The pale bony woman who paralyses her inside with unstinting draughts of liquid ice, and the restless nervous man who consumes his with draughts, equally unstinted, of liquid fire, are types alike of our wretched condition as a people." All these evils, say our genial prophets, may be remedied by substituting wine for the burning, drying, innutritious, blood-impoverishing whisky, iced water, and tea. Then in America every farmer can make his own wine, and, according to all accounts, he will make it. Two millions of acres are now said to be devoted to vine culture, and there are plenty of indigenous grapes on the Continent which do well under cultivation. It is a great mistake to suppose that any one kind of vine will suit all districts; diseases there are which thin off vines planted in unsuitable places, just as surely as diseases thin out European settlers in Sierra Leone. Let us hope that the American cultivators will beware of the sin of greediness; and we are sorry that one book, that of a German-American, named Husmann, is filled with details of methods of adulterating grape must by water and grape-sugar.

(a) The Cultivation of the Native Grape, and Manufacture of American Wines. By George Husmann, of Hermann, Missouri. New York. Woodward. 1868.
The Champagne Country. By Robert Tomes. London: Routledge. 1867.
Three Seasons in European Vineyards, treating of Vine Culture, Vine Disease and its Cure, Wine-making and Wines, Red and White, Wine-drinking as affecting Health and Morals. By Mr. Flagg. New York and London: Trübner.

THE THREE VACCINE LYMPHS.

DR. CONSTANTIN PAUL, Director of Vaccination at the Paris Bureau Central, has recently laid the following proposal before this same useful Society. He observes that vaccination has entered upon a critical period of its history, seeing that the Jennerian lymph is accused of degeneration, and has been convicted as the medium of transmitting syphilitic poison. The new heifer vaccination, too, even before it has had time to prove its power over variola, is already charged with a capability of communicating other virus, such as that of *charbon*, glanders, and farcy. And, lastly, a third form, the "mixed vaccination"—*i.e.*, virus transmitted from arm to arm, being first derived from the heifer—is in considerable favour with some vaccinators. M. Paul believes it incumbent upon him to give facilities for the employment of each of these modes, and to take steps to test their relative efficacy, so that all who apply at the Bureau have the choice given them of the source of the virus. Nothing is easier than to compare the immediate results, but this is not sufficient; and their true comparative merits can only be established after the vaccinated subjects have been submitted for many years to the ordinary conditions of variolous contagion. But how, at the end of many years, is it to be ascertained which of the modes of vaccination has been employed? It is evident, except, perhaps, in some cases of revaccination, no information is be derived on this point from the subjects themselves, and the examination of the vaccination registers would prove a difficult and very often an impracticable task.

M. Paul suggests, as the best means for preventing the confusion that otherwise would ensue, that the punctures should be grouped in such a manner that the simple inspection of the arm should indicate the source whence the vaccine virus has been derived. He would leave the Jennerian vaccination to be performed as it is at present—viz., three punctures in each arm, practised in a straight line parallel to the axis of the arm. For heifer-vaccination he would also make three punctures in each arm, disposing them in a triangular form, with its base below and apex upwards; while in mixed vaccination the apex of the triangle should be downwards, and its base upwards. For the last six months, indeed, he has had the vaccinations performed in this way at the bureau, so that the easy recognition of the kind of virus employed has been demonstrated; and he appeals to his Hospital colleagues for their assistance in carrying the plan out, as, if they consent to practise it and teach it to their pupils, it will soon become general.

PARLIAMENTARY.—POOR RELIEF IN THE METROPOLIS—THE GENERAL MEDICAL COUNCIL—EPPING FOREST—HYGIENIC SERVICES OF THE STATE—THE INQUIRY AT ST. PANCRAS.

In the House of Commons, on Monday, February 14,

Mr. Goschen gave notice that he would on Friday next ask leave to introduce a Bill to provide for the equal distribution over the metropolis of a further portion of the charge for the relief of the poor; and that on Monday next he would move for the appointment of a Select Committee to inquire whether it be expedient that certain charges now imposed on occupiers for various local purposes should be divided between owners and occupiers. To avoid misconception he might be allowed to add that the appointment of this committee would not interfere with the progress of the Bill, announced in the Speech from the Throne, with regard to extending the incidence of rating, which he hoped to introduce at an early day.

Sir J. Gray gave notice that on an early day he would move for leave to bring in a Bill to amend the Medical Act of 1858 and the Acts amending same, so as to secure a more direct representation of the Profession on the Medical Council, and to so increase the powers of the Council as to insure that no person can be enrolled on the Register of Practitioners who does not demonstrate that he possesses a practical acquaintance with the duties of the several branches of the Profession.

Mr. Fawcett moved an address to the Queen, praying that the rights of the Crown over Epping Forest may be defended, so that it may be preserved as an open space for the recreation of the people.

Mr. C. Buxton seconded the resolution, and after a debate in which Mr. Beresford Hope, Mr. Cowper-Temple, Mr. Samuda, and Mr. A. Kinnaird supported the resolution,

Mr. Gladstone said he did not believe that the assertion of the Crown's rights would prevent the enclosure of the forest, but he admitted it was the duty of the Government to carry out the often expressed opinion of the House on this subject, and to do everything possible to preserve for the people of London whatever of this kind could be preserved. He suggested an amendment in the form of the motion, which would leave the Government more at liberty as to the means to be employed—that, instead of asking the Queen "to defend her forestal rights," she should be asked "to take such measures as she may deem most expedient for the preservation of the forest."

Mr. Fawcett assented to this, and the motion, as amended, was agreed to.

On Tuesday,

Dr. Playfair asked the right hon. member for North Staffordshire whether the Royal Commission on Public Health, of which he is the President, have inquired into the want of connexion and defective organisation of the various hygienic services of the State; and, if so, when their report on the subject is likely to be presented.

Mr. Adderley: The Sanitary Commissioners have inquired into the defective organisation of authorities and confusion of the laws relating to health; but their inquiry is not yet complete. They have reported their evidence taken last year, which has just been laid on the table. They hope to make a report of their recommendations, including a sketch of consolidated law and plan of complete sanitary administration for all England and Wales, except the metropolis, during this session, so that public opinion may be expressed on it preparatory to legislation next year. Scientific inquiry as to the best modes of carrying out various sanitary works they postpone for the present, and entertain doubts whether public opinion is yet ripe for legislative prescription in such details.

Mr. Eykyn asked the President of the Poor-law Board under what circumstances was the inquiry held at St. Pancras Workhouse by the special inspector, Mr. Bere, Q.C., brought to an abrupt termination before all the matters in question had been fully investigated.

Mr. Goschen said his hon. friend was misinformed if he thought that inquiry connected with St. Pancras Workhouse had been brought to a termination—(laughter)—abrupt or otherwise. Two inquiries were suggested, one of which had been concluded, and the other had not yet commenced, being suspended on account of the sudden disappearance of an important witness. But on the day on which the hon. gentleman might have seen in the newspapers the alleged extraordinary termination of the St. Pancras inquiry, the inquiry had not terminated, and the notion that it had done so resulted from a misunderstanding.

ANIMAL LIFE IN THE DEEP SEA.

DR. CARPENTER'S LECTURE AT THE ROYAL INSTITUTION.

Dr. Carpenter's lecture at the Royal Institution on deep-sea temperatures and life on the evening of Friday, the 11th inst., was attended by a numerous and distinguished audience.

The subject presents so many points of absorbing interest that it would have been simply impossible to have noticed each in even the most cursory manner; and, by confining himself in great measure to the explanation of the system of deep-sea currents, so far as they have yet been explored, and to a description of the various forms of animal life which the hitherto dark unfathomed caves of ocean contain, Dr. Carpenter probably made the most judicious selection of subjects for a lecture before a mixed audience.

The explorations—some of the results of which Dr. Carpenter detailed—were made within the last two years by Dr. Carpenter and Professor Wyvill Thomson, of Belfast, during their different cruises along the North and North-west coast of Scotland, in the deep channel between the mainland and the Faroe Islands, also along the West coasts of Scotland and Ireland, as far south as the margin of the Bay of Biscay to about the latitude of Ushant. The vessels were the *Lightning* and the *Porcupine*, both being the property of Government—in the former one cruise only was made, in the latter two, the second being over the same ground between North of Scotland and the Faroe Islands, as had been traversed in the *Lightning*.

It has now been satisfactorily established that there are two distinct submarine climates with very marked differences of temperature; that, with the same surface temperature, there can be distinguished a warm and a cold area, whose respective temperatures, for the first 150 or 200 fathoms, pretty nearly correspond, but, in the cold area, the decrease of temperature with increasing depth is very sudden as compared with the gradual diminution of temperature in the warm area. Each of these climates has its own peculiar forms of animal life, and the character of the bottom varies; in the warm area the tropical characters prevail, and the bottom is formed of *globigerina* mud; while in the cold, which was formerly thought to be devoid of animal life, are found mollusca and crustacea of Arctic families, and the bottom is composed of sand, small stones, and volcanic particles. Dr. Carpenter only cursorily alluded to the very important bearing which the demonstration of these facts is likely to have upon the science of geology. The discovery, in active life and amazing numbers, of certain rhizopods formerly considered extinct, being found only in fossils in the tertiary chalk or oolite formations, fulfilling their destiny of life and death contemporaneously and almost alongside with other animals of such distinctly different formation and habits as to appear actually to belong to another epoch in the earth's history, can hardly fail to modify very materially the views hitherto entertained by geologists on the order of appearance and periods occupied in the formation of the various layers of the earth's surface.

Dr. Carpenter described the warm and cold areas as the results of a general slow oceanic circulation to which the term current cannot be correctly applied; the warm and lighter equatorial stream overlies the cold, dense, arctic or antarctic water, and moves in the opposite direction. This was illustrated by an ingenious apparatus devised by Dr. Odling. It is believed that, owing to the more free communication between the antarctic and equatorial waters, the former extend across the line, and that their influence has been detected in the Indian Ocean between Aden and Bombay, where at deep soundings a temperature of 37° has been found, and probably the correct temperature would have been a few degrees lower. Dr. Carpenter even hinted his suspicion that in some cases the underlying cold area in northern regions may be the result of the diffusion of antarctic water.

It is temperature, not depth, which determines the character of animal life in deep soundings. The deepest sounding taken was 2435 fathoms, or nearly 15,000 feet, or more than two and a half miles, about the height of Mont Blanc. At this depth the pressure is estimated at three tons to the square inch, notwithstanding which various mollusca and crustacea with eyes were discovered. At first no animal life was found at these enormous depths, but at the suggestion of Captain Calvert, of the *Porcupine*, fresh hemp tangle or unused ship swabs were employed to sweep the bottom, and in their meshes several specimens were discovered. It was found that it was only the

new rough swabs which succeeded in bringing up animals from such depths.

The question as to how creatures at these immense depths are supported in such numbers, is supposed to have been answered by the fact that sea-water has been found to contain very large quantities of disengaged, but not decomposed, protoplasm, or nitrogenous material—the proceeds of the vegetable and animal life along the coast and nearer the surface—and that this affords the means of subsistence to the various forms of animal life at greater depths. The agitation of the surface, and to a certain extent of the whole mass of sea-water, by storms, by removing the carbonic acid, is considered to be an important means of providing for the respiration of animals at great ocean depths. It has been discovered by Dr. Carpenter's son that sea-water taken from behind the paddles of a steamer contains notably less carbonic acid than that taken at the bow; the influence of surface-agitation is thereby demonstrated.

We have given merely a few of the salient points of Dr. Carpenter's lecture; the subjects presented an *embarras de richesses* which rendered it impossible to treat it fully in the time at his disposal. The fact that similar series of observations are being carried on in West Indian waters, under the auspices of the Government of the United States, leads to the hope that most important results will be attained by the combined exertions of the two sets of explorers.

We should have felt much interest in a description of the various instruments and apparatus employed, particularly of the construction and mode of action of the thermometers, which supported the enormous pressure of three tons to the square inch.

BRITISH ASSOCIATION FOR THE PROTECTION, ETC., OF GENERAL PRACTITIONERS.

The following points are offered for the further consideration of the Profession at large in connexion with the above association:—

1. Society perpetrates great injustice towards the working general Practitioner in that, whilst it is continually requiring a higher degree of professional proficiency, the attainment of which alone tends to deteriorate the health of those engaged in Medical study, it, and especially the middle class of society, expects more favours unpaid from the general Practitioner than from any other class of the community.

2. Society scruples little to bring actions at law against Practitioners for any failure in success or error in judgment in cases under their care, and yet the aid of the qualified Practitioner is seldom sought until all personal efforts have failed in treatment, and often only when dangerous symptoms have set in, and death appears to be impending. Hence it is also that

3. Society has little or no regard for reasonable hours in summoning the Practitioner, but expects that he should be ever ready at the inconsiderate call of the friends of the invalid, though the case be neither accidental nor serious; and all this under the mistaken notion that all ends are served by a hurried call made for a Practitioner.

4. Society, whereas it encourages the establishment of village Hospitals, cares little about the adequate remuneration of the general Practitioner, but leaves this question to the public at large, who in supporting such measures, never think of providing to him that pay which is justly his due.

5. Society, immediately on recovering from painful and dangerous diseases, but too often loses all idea of personal obligation to the general Practitioner. It unjustly allows the payment of Medical accounts to be a matter of indifference and secondary interest, and at all times takes pains to stave off the day of reckoning, although the greatest care and attention during illness were devotedly paid by the Practitioner.

In a future paper will be considered the causes which have led to the present position of affairs, and the share which the Profession itself has had in producing it.

W. J. Treutler, Hon. Secretary.

Burlington-house, Piccadilly, W.

Carious Teeth.—M. Magitot recommends the following formula:—Chloroform 5, laudanum 2, and tinct. benzoin 10 parts. Cotton-wool imbibed in this to be inserted in the cavity, and renewed until insensibility of the part is produced, when the cavity may be definitively obturated.—*Rev. Méd.* December 15.

REVIEWS.

Die Kaltwasserbehandlung des Typhus abdominalis. Nach Beobachtungen aus der medicinischen Klinik zu Erlangen. Von Dr. Hugo Ziemssen und Dr. Hermann Immermann. Leipzig: Verlag von F. C. W. Vogel. 1870. Pp. 172.

The Cold-water Treatment of Typhoid (Enteric) Fever. From observations made in the Medical Clinic at Erlangen. By Professor H. Ziemssen, M.D., and H. Immermann, M.D.

Scarcely any attention has of late been paid in this country to the systematic use in febrile diseases of so powerful a remedy as water of various temperatures externally applied, whilst on the Continent numbers of observers have been hard at work to place hydropathy on a really scientific basis. This has not always been so. On the contrary, it may be said that it was England where questions relating to hydropathy were first treated in a truly scientific manner. But this is a long time since, and Dr. James Currie seems now to be quite forgotten in his own country, so that we may well be surprised when we now take up his works and read in them such passages as these—"There seems no doubt of this method of cure extending here and everywhere." (Medical Reports, vol. ii. p. 283.) Indeed, in Currie's time the conviction of the great utility of the treatment of fevers by the "cold affusion" seems to have been very widespread, but afterwards to have gradually died out again. In Germany, where the Hahns had already broken the ground, Currie's influence was of somewhat longer duration, but there, as here, he was gradually forgotten.

How is it, then, we may well ask, that a remedy which by competent judges has been found really efficacious could altogether fall into disuse? We believe there are chiefly two reasons to account for it. The first and most important one is this, that Currie was undoubtedly much in advance of his time—in fact, many passages in his work read as if they had been written within the last fifteen years instead of at the end of the last century. He took a thoroughly physiological view of pyrexia, giving the *calor præter naturam* its due prominence, and valuing accordingly its exact observation by means of the thermometer. Thus, he says (*l.c.* vol. ii. p. 26)—"The strictest attention was paid to the heat of the patients, without which he who undertakes the treatment of fevers seems to me *to walk in darkness.*" How can it be explained that all the important suggestions contained in Currie's work had no lasting effect on his contemporaries except by assuming that their minds were not prepared to understand him, because but few of them had grasped the method which is required for the investigation and understanding of physical phenomena? The same has occurred over and over again in the history of science. To quote but one other instance, had not De Haën already in the middle of the last century fully realised the great value of the thermometer in the study and treatment of disease, and was not all he had done for a long time entirely forgotten?

Now, for the last twenty years, De Haën's method of studying pyrexia has been revived, and not only De Haën, but also Currie, was, in due course, brought to light again. It is principally due to Dr. E. Brand,(a) of Stettin, to have, in recent times, again called attention to the great value of the cold-water treatment of fever. The energy with which Dr. Brand, who is not only a hydropath, but a Physician well trained in the modern school of Clinical Medicine, went to work, and the manner in which he surmounted the difficulties which, in private practice, stand in the way of accurate observations, do him the greatest credit. In this country a very creditable attempt had been made by Dr. Armitage,(b) who had worked with Professor Traube, at Berlin, to introduce hydropathic proceedings into the treatment of fevers, but with apparently very little effect.

Dr. Brand, unlike Currie, found the field prepared by the great attention which was being paid at this time to the study of pyrexia, and a number of Physicians in different clinical establishments in Germany set at once to work to test his enthusiastic recommendations of the cold-water treatment of fever. Reports have already appeared from Kiel and from Bâle, as well as from other places, of which we may here only mention the valuable works of Dr. Jürgensen,(c) and of Pro-

(a) Dr. E. Brand, "Die Hydrotherapie des Typhus." Stettin. 1861.

(b) Dr. T. R. Armitage, "Hydropathy as applied to Acute Disease." London: Churchill and Son. 1852.

(c) Dr. Th. Jürgensen, "Klinische Studien über die Behandlung des Abdominal-Typhus mittelst des kalten Wassers." Leipzig: F. C. W. Vogel. 1866.

fessor Liebermeister and Dr. Hagenbach,(d) which, together with the volume before us, may be said to have brought the question to a preliminary conclusion in all its principal, and more especially in its practical, bearings. All observers agree as to the very great value of this method in reducing the mortality from fever, and in favourably influencing, or preventing altogether, certain symptoms, especially those of the nervous system. As to mortality, it may, perhaps, not be out of place to quote here some statistics.

I. Cases under the cold water treatment systematically carried out:—

At Kiel . .	160, of whom died .	5	
„ Bâle . .	478 „ .	42	
„ Erlangen .	40 „ .	3	
Total . .	678 „	50	=7·37 per cent.

II. Cases treated in the usual (expectant) method:—

At Kiel . .	330, of whom died .	51	
„ Bâle . .	973 „ .	157	
„ Erlangen .	63 „ .	19	
Total . .	1366 „ .	227	=16·6 per cent.

Not only in all the clinical, but also in a great many of the other large Hospitals all over Germany, this method is now extensively used in the treatment of fevers.

That Currie's practice, or even its principle, however successful, should have fallen into complete disuse for so long an interval, may also have had another reason. It is a practice which is not in all cases agreeable to the patient, in many cases much less even to his friends to whom a cold affusion appears a hazardous and cruel proceeding—a practice, further, which entails some trouble and requires trained assistance. Any one, therefore, who removes any of these objections is doing good service. We believe that Professor Ziemssen has removed a very great obstacle which stood against the free use of the cold-water treatment, especially in private practice. In preference to the cold affusion as practised by Currie, or the cold bath as used by Jürgensen, or the cold wet sheet and other more complex proceedings as used by Brand, he recommends warm baths of a temperature a little below that of the patient, and which are further gradually lowered by adding cold water. We shall better describe the Professor's method of giving the bath in his own words:—"The patient is placed into a full bath, the temperature of which is about 5°—6° C. (9°—10·8° Fahr.) below the temperature of the patient, so that, with a temperature of 40°—41° C. (104°—105·8° Fahr.), that of the bath is to be about 35° C. (95° Fahr.) Colder water is now added gradually and with intermissions, which is best done with an india-ruber tube reaching far below the surface of the water. This is continued until, after ten to fifteen minutes, the temperature of the bath has been lowered to about 20° C. (68° Fahr.), two assistants continually but gently rubbing the skin of the trunk and the extremities of the patient all the while. It is seldom necessary to lower it still more. Altogether the patient remains in the bath for about twenty to thirty minutes—that is, until, in spite of the rubbing, more or less violent shivering supervenes. He is then quickly transferred to his bed, which, in the mean time, has been warmed, and is well covered up. Immediately or, at the latest, an hour after the bath the temperature of the patient (as measured in the rectum) is found to have been lowered by 1° to 4° C. (1·8° to 7·2° Fahr.). As soon as it rises again to 40° C. (104° Fahr.), and later on to 39·5° C. (103·6° Fahr.), the bath is repeated, no matter whether it be day or night. In the first days of the fever generally four to five, in the following days two to three baths are necessary." (Pp. 2, 3.)

This method implies, of course, the constant use of the thermometer, but Professor Ziemssen does not go so far as to make the cold-water treatment of fever absolutely dependent thereon, taking into consideration exceptional circumstances, such as very extensive epidemics, etc., and he endeavours to draw up directions for exceptional cases in which the guidance by the thermometer must unavoidably be dispensed with. "Within the first fortnight of the fever the baths are given at 6 and 10 a.m. and at 1 and 6 p.m., in severe cases also at 9 p.m. and at 1 a.m., if the restlessness should increase after midnight. According to the severity of the case the night and the morning bath are omitted in the third or fourth week, and later on also that at 10 a.m." Such a rough-and-ready method cannot be dispensed with under some exceptional circumstances, but whenever the Physician can see his patient several times daily, and can either himself measure the temperature or can have it done by assistants or trained nurses, the exhibition of the baths must mainly depend on the indications of the mercury. Our space does not permit us to quote further from this exceedingly practical chapter, in which also those circumstances and symptoms which contraindicate the use of the baths are fully considered.

The second chapter, which is written by Dr. Immermann, treats of the natural course of the pyrexia in typhoid fever. The author's observations agree in the main points with those of other observers who have specially studied this question. As a point of great practical importance, we may here allude to the observation made by the authors that even excessively high evening temperatures in the first period of the fever do not by themselves give so unfavourable a prognosis as the want of well-marked morning remissions. Cases with this last-named peculiarity, and which the authors designate as "severe cases with high sub-continuous pyrexia," to distinguish them from "severe cases with remittent pyrexia," offer much greater resistance to the influence of the baths, and require the most energetic method in order to obtain a cooling effect. The following chapter of this first part of the book contains the statistics of the cases on which the observations of the authors were made:—"Altogether, 199 cases had come under observation; out of these, 62 were treated with baths, 40 after Ziemssen's and 22 after Brand's method. The mortality of the 40 cases systematically treated with baths was three, or 7·5 per cent., or, not including 8 mild cases, equal to 9·4 per cent.; whereas the mortality in 63 cases which had not been treated with water at all had been equal to 30·2 per cent."

Of the succeeding three parts of the book, the first treats of the "Influence of the Baths on the Temperature of the Body," and is divided into four chapters, considering the influence of the following circumstances on the amount and duration of the antipyretic effect:—(1) Of age and severity of the case, (2) of the stage of the disease, (3) of the period of the day when the bath is given, and (4) of the intensity of the process by which heat is abstracted. From their own experience, and taking into account the careful investigations on some of the cooling methods by the above-named observers, the authors come to the conclusion that the effect of the following four methods:—cold affusion, cold wet packing, Ziemssen's bath, and simple cold bath—stand, as regards their antipyretic effect, to each other in the relation of 1 : 2 : 3 : 4. The simple cold bath, as the most effectual proceeding, must sometimes be used in exceptionally severe cases, especially those with an almost continuous high temperature.

The third part considers "The Influence of the Baths on the General Course of the Disease," as regards the duration of the disease, convalescence, relapses, stay of the patients in Hospital, and mortality; and the last part, "The Influence of the Baths on the Symptoms of Typhoid Fever severally."

It will thus be seen that the volume before us comprises within a small compass a very wide range of subjects. Histories of cases are only given in very short abstracts, and where they are really illustrative of some theoretical point. Diagrams and curves have been extensively introduced to demonstrate numeric relations, and five large plates containing the temperature-curves of a number of cases are appended, presenting at a glance the whole history of these cases in a much more complete and appreciable form than would have been possible by ever so minute a description, which, besides, from the overwhelming mass of figures it would have had to contain, but very few would have ventured to study.

Throughout the book we find evidence of the thoroughly practical aim which the authors have proposed to themselves, and we believe that, by the introduction of Prof. Ziemssen's plan, the cooling treatment of fevers will rapidly gain adherents in the Profession, as well as it will be sure, from its striking effects, to find favour with the public. We conclude with the expression of a hope that an extensive trial of this method will soon be made in the different fever Hospitals of this country, more especially with regard to typhus, on which, since Currie, it has never been tried on a larger scale, but whenever it had been tried, as at Groningen and at Greifswald, and some other places, the results were as encouraging as those obtained in typhoid fever.

(d) Dr. C. Liebermeister und Dr. E. Hagenbach, "Beobachtungen und Versuche über die Anwendung des kalten Wassers bei fieberhaften Krankheiten." Leipzig: F. C. W. Vogel. 1868.

A Fossil Serpent.—The remains of a fossil serpent, about thirty feet long, and of a species new to science, have been found in the Eocene greensand of New Jersey, United States.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 25, 1870.

Dr. BURROWS, F.R.S., President, in the chair.

DR. WILLIAM OGLE, Hon. Sec., read a paper on

ANOSMIA; CASES ILLUSTRATING THE PHYSIOLOGY AND PATHOLOGY OF THE SENSE OF SMELL.

This paper begins with an account of three cases which have fallen under the author's observation, in which total loss of smell was produced by a blow on the head. The author attributes the anosmia to rupture of the olfactory nerves, and points out how these nerves are especially liable to injury from blows on the occiput, which was the part struck in each case. Each patient complained not only of loss of smell, but also of loss of taste. True taste, however, was really unimpaired; what was lost was the power of recognising "flavours," which are sensations compounded of smell and taste. These cases afford an opportunity of drawing a clear line between taste and smell, and show that taste is limited to the perception of acid, salt, sweet, and bitter. These simple tastes compounded with smells form "flavours." Various cases are then considered which seem in contradiction with this opinion — cases, namely, in which smell is apparently lost, and yet the perception of flavours remains. These cases are explained, and the contradiction shown to be only apparent. A second group of cases follows, in which anosmia resulted from lesion of the nerve centres. It is shown that anosmia is a frequent accompaniment of aphasia, and it is argued that the explanation of this is to be found in the proximity of the so-called external root of the olfactory nerve to the part of the brain usually affected in aphasia, a proximity which renders the two parts very liable to be involved in one common lesion. The relative importance of the external and of the other roots of the olfactory bulb is considered, and it is held that the latter have little, if anything, to do in the perception of olfactory sensations. Lastly, a case of anosmia, recorded many years ago by Dr. Hutchinson, is discussed at length. A negro began, in his twelfth year, to lose his colour, and, in course of time, became perfectly white. The loss of colour was accompanied by loss of the sense of smell, almost, if not quite complete. This seems to have been hitherto considered a fortuitous coincidence. The author argues that such is in the highest degree improbable, and accounts for the anosmia by the destruction of the pigment of the olfactory region. Numerous arguments are used to show that this pigment plays an important part in olfaction, and that the keenness of this sense in man and mammals depends, in great part, on the intensity and extent of nasal pigmentation. Reasons are also adduced for believing that pigment is of use in the reception of auditory impressions, so that there would be a certain similarity in this respect between the three main organs of special sense, the eye, the ear, and the nose. Finally, an hypothesis is advanced as to the manner in which the pigment operates, and especially as to the manner in which it operates in olfaction.

The PRESIDENT said the paper contained many most novel facts and much ingenious reasoning. As it would be impossible to discuss properly the theory brought forward, he would ask the Fellows for similar cases to illustrate the subject.

Dr. ALTHAUS said the injury to the patient was generally insufficient to cause uneasiness at the time. Generally the condition of anosmia was discovered accidentally. The condition was not unpleasant, as in a patient of his who lived in Westminster, when the river was so bad some years ago, and who then congratulated himself on his loss of smell. He thought the condition more likely to depend on injury to the bloodvessels than on injury to the bone. In most cases aphasia was associated with this condition. A case related by Claude Bernard contradicted Dr. Ogle's theory. A woman died of consumption; her brain was healthy, but she had no olfactory nerves, yet she had liked flowers and disliked tobacco smoke. He had an anosmic patient who was very fond of the bouquet of moselle. This also contradicted Dr. Ogle's view. He had seen associated with epilepsy a bad smell as an aura days before the fit.

Dr. BROADBENT had seen two or three cases which confirmed Dr. Ogle, and therefore contradicted Dr. Althaus. One gentleman fell from his horse, fractured the ethmoid bone, and became anosmic. Two other cases came about much in the same way. There was no smell, and little taste. Salts, sours, and bitters could be appreciated. He had experimented on the case reported by Dr. Ogle, where the soft palate adhered to the pharynx. As the woman lost smell, so did she, *pari passu*, taste. In Bernard's case it was inferred merely that she had smell, as it was the motion of putting them to her lips which made them believe the woman was fond of flowers. He thought the injury to the olfactory to be most likely intracranial. He thought the external root of the olfactory of less importance than the middle and internal.

Dr. WEBSTER said the condition evidently depended on injuries, etc., to the brain. He believed such were common with insanity. (Dr. Begley confirmed this view.) He was struck with the remarks as to colour and smell. It would be interesting to know whether animals which changed their colour annually lost the power of smell or hearing.

Dr. LEARED thought some were cases of functional disturbance, as in a gentleman under his care, in whom he suspected gout as the cause. His taste was gone. In an epileptic the attack was preceded by a smell of peach blossom.

Mr. BRUDENELL CARTER said he knew a gentleman who had lost both taste and smell, but that he still liked putrescent meat. He also enjoyed a singular incapacity for getting drunk.

Mr. BROOKE said the theory confirmed a generalisation he had ventured to make in physics—that the universal medium of intercommunication was vibratory motion. Black, he said, merely implied total absorption, and pigment might absorb sound as it did light and heat.

Mr. GASCOYEN had seen two other cases where the soft palate adhered to the pharynx. The patients came for operation, but, as there was a small opening, he advised them to wait. They were both anosmic. A lady twenty-five years ago had syphilis; she lost the bones of her nose, and now she had no taste or smell beyond the appreciation of bitters and suchlike.

Mr. SAVORY remarked on the statement that colour affected the plants an animal could eat. This was not exactly true, as different animals differed in their capacity for eating poisonous plants. He pointed out that holding the nose lessened the repugnance to a nauseous draught.

In his reply, Dr. W. OGLE chiefly confined himself to the statement that injury to the nerve fibres was the true cause of anosmia, to a criticism of Bernard's case, and to a reiteration of his opinion as to the importance of the external root of the olfactory nerve.

CLINICAL SOCIETY.

FRIDAY, JANUARY 28, 1870.

Mr. PAGET, President, in the Chair.

DR. OPPERT related a case of Syphilitic Laryngitis in a girl, aged 24, a patient of the Margaret-street Infirmary, who came under his care on January 8, 1870. Was previously treated for consumption, but had a maculo-papulous eruption, ulcers of the throat, and affection of the larynx. Next day the symptoms were alarming—pulse 130; respirations 40; temperature 102° Fahr.; patient was scarcely able to breathe; rough barking; the epiglottis much swollen, nearly closing the upper aperture of the larynx; this was ascertained by the introduced finger. Tracheotomy was performed by Dr. Oppert, and no canula used afterwards. Patient could at once breathe comfortably. Subjected to the hypodermic injections of sublimate. When presented to the Society, the symptoms of syphilis had almost completely disappeared. The wound was healed. The diagnosis from consumption was based on the syphilitic symptoms, the absence of physical signs, and the character of the fever and temperature, as ascertained by the clinical thermometer. It was noteworthy that there was no nightly exacerbation of the fever, as in consumption, the heat of the body being generally not over 97° Fahr. The drawbacks of the treatment by injections could not for a moment form an objection to their use in this case.

Mr. BERKELEY HILL said that in his experience rather less than a grain caused the gums to become tender.

Dr. BUZZARD asked as to the after-discomfort of the operation, and Dr. Anstie remarked that one injection had produced considerable ulceration—was this common?

Mr. PAGET said ulcers were formed and still existed, as did the laryngeal voice.

Mr. Croft noticed the feverish symptoms as associated with low temperature.

In reply, Dr. Oppert said the gums were often affected with half a grain, that ulcers not unusually formed, and that the pain was considerable.

Mr. Berkeley Hill brought forward the notes of three cases of thoracentesis with the object of eliciting the opinion of the members respecting the value of this operation when applied to the cure of the varieties of pleuritic effusions—a method which he ventured to think had not received sufficient attention as a means of cure for serous and purulent effusions. The points which Mr. Hill thought most particularly demanded consideration were:—1. The removal of fluid from the pleura need hardly ever cause much danger or suffering. 2. Whenever effusion is copious, it is prudent to withdraw it to relieve dyspnœa and ward off a sudden fatal termination. 3. The usual mode of leaving chronic effusions to natural resorption may be advantageously replaced by tapping whenever the condition of the patient is stationary, and the pyrexia abated; the longer the fluid has existed the more urgent becomes the need for tapping, to enable the lung to expand before it has lost its power of doing so. 4. After tapping serous effusions, the wound should always be closed, at least until repetition of the evacuations had shown that cure would not be so effected; then to tapping injection of iodine or other irritants should be added, but in these cases the admission of air should be scrupulously avoided. 5. Where the fluid is purulent, the admission of air is immaterial, provided a free and continuous exit is maintained for the pus, and that this free drainage is a cardinal point in the cure. One case illustrated the benefit from continued drainage by a tube passed across the chest through two openings; the second, the benefit which even cases of long-standing empyema, where the cavity will not contract, may obtain from frequent washing out with tepid water or other injections. The third showed how readily a serous effusion may be absorbed even during the progress of rapid pulmonary phthisis, and in this case evacuation gave temporary relief of a considerable amount, though it did not cure the effusion.

Dr. Douglas Powell read a paper entitled "Notes on Paracentesis Thoracis," in which he related two cases illustrating the use of an instrument consisting of a branched trochar connected with tubing so as to form a siphon, to which is attached, by means of a T-tube, a mercurial pressure gauge.(a) The objects of this addition he stated to be, to ascertain the fluid pressure within the chest, and to inform the operator as to the degree of negative pressure obtained at different stages of the operation, and its effects upon the respiratory movements. Dr. Powell strongly advocated early operation, and the steady treatment of cases of effusion into the pleura from the first. He thought that repeated tappings, with the employment of an amount of siphon power adapted to the case, also injections of iodine or other fluids, if necessary, should be adopted in cases of chronic empyema. He greatly deprecated the admission of air during the operation, (1) as having a dangerous tendency to set up suppurative pleurisy, (2) as, on mechanical grounds, rendering expansion of the lung impossible during its presence.

Mr. Croft had found Lister's plan of opening abscesses good as applied to empyemas.

Dr. Burdon Sanderson said it was desirable to have a free opening for two reasons—to prevent pressure and septic poisoning. As to pressure, two openings did not matter if the one was *free;* but it was also necessary that the pressure in the pleura should be less than that of the atmosphere, to allow of lung expansion. Here the syphon-power did good, but it should not be too great. Infection might occur in two ways; one was prevented by the ordinary operation, but there was a risk of another kind of infection in the air introduced—perhaps tubercular virus might be so. It was quite possible to have one opening with irrigation by means of a double canula.

Dr. Silver said he had seen the principle worked two or three years ago, by Dr. Roberts, of Manchester; the only new feature in the present apparatus was the pressure-gauge. Dr. Roberts had further used it not for empyemas alone, but also for other collections of fluid.

Dr. Anstie asked if everything did not point to immediate tapping; and he would further ask if any good was ever done by any application to the walls of the chest, such as blisters.

Mr. Callender said an instrument had been introduced into St. Bartholomew's in some respects similar to that now proposed. That was fifteen years ago. It was still used.

(a) Mr. Hawksley, of Blenheim-street, Bond-street, has made this instrument in a compact form.

ARMY MEDICO-CHIRURGICAL SOCIETY OF PORTSMOUTH.

DR. MOFFITT ON TRANSPORT OF SICK AND WOUNDED—DR. STONE'S MEDICAL VIEW OF THE EAST AFRICAN SLAVE TRADE—BAYONET WOUND OF CHEST—HYDATID CYSTS IN BEEF IN INDIA.

At the monthly meeting of this Society, held on Wednesday, Febrnary 2, Depnty-Inspector-General Dr. Gordon, C.B., in the chair, Dr. O'Leary, honorary secretary, read a report by Staff-Assistant-Surgeon Moffitt, of the Royal Victoria Hospital, Netley, on the best and most practicable method of transporting sick and wonnded by railway and in the recumbent position. Several sketches of Mr. Moffitt's contrivances were exhibited, and it was stated that the stretcher which he devised was for the first time taken into use on the occasion of the invalids recently arrived in H.M.S. *Serapis* being conveyed from Portsmouth to Netley.

Dr. Stone, R.N., next read a paper on Slave Cruising on the South-Eastern Coast of Africa from a Medical point of view. The principal slave merchants are Arabs from the Persian Gulf, and their chief market is at Zanzibar, to which port they sail early in the year and make their way back by the south-west monsoon. The slaves are chiefly captured in Central Africa, being prisoners of war taken by the more powerful tribes. On their way down country they are not treated with much cruelty, but are made to carry elephants' tusks and other merchandise for their captors; their miseries commence when closely packed on board the dhows, which are small vessels averaging from seventy to 150 tons, and carrying from 150 to 250 slaves. There is a sort of half-deck running round the dhow, below which the slaves are stowed in a sitting posture, each one closely squeezed between the legs of the slave behind. During the voyage their diet consists of millet seed pulped and water, and this, coupled with their miserable condition on board the dhows, reduces them to a wretched plight in a few days. They suffer much from sluggish ulcers on the more prominent parts of their bodies. They are also liable to anthrax, low fever, and pulmonary affections. From having to perform all natural functions in close contact with one another, they are in a most disgusting state of filth. The smell from a slave dhow even at a mile distance is very offensive, and is, of course, very conclusive evidence as to the nature of the cargo before boarding, as the slaves cannot be seen, being below the gunwale. Cargoes free from small-pox, cholera, or other epidemic, are considered fortunate exceptions when rescued by our cruisers. Among one cargo rescued by the ship on which Dr. Stone was serving, choleraic diarrhœa broke out and caused a large mortality; the outbreak was attributed to omitting to remove the husks of the millet seed which they used for food before pounding it. The husk, by irritating the intestinal canal, brought on violent diarrhœa. Small-pox also sometimes occurs among liberated slaves on board a man-of-war, from which fact we derive another argument in addition to those we have elsewhere advanced as to the necessity of a systematic revaccination of all men and boys on entering the naval service. On the victualling and supply of medicines for ships engaged on this service, we must let Dr. Stone speak for himself. Nothing we could say could put in a clearer light the urgent necessity of prompt and complete reform in this respect. "From the foregoing account it will be observed that the greater part of the first half of the year is spent by cruisers on the cruising ground, so that vessels thus engaged are prevented from getting regular supplies of provisions and necessaries for lengthened periods. Aden and Zanzibar are the two places where vessels chiefly get supplies, and at neither of these two places is there a regular naval dépôt; the result is that provisions, soups, tobacco, lime-juice, rum, biscuit, and even medicines, have to be purchased from Parsee dealers, who charge exorbitant prices, and supply inferior articles. The rum is simply modified arrack, a not very wholesome stimulant; the lime-juice is generally execrable stuff, the basis of which is some mineral acid; it is quite useless as a remedial agent, having quite failed to arrest the tendency to scurvy, which sometimes developed itself on board. All the other things supplied are likewise of inferior quality. Notwithstanding this the health of ships' crews employed there is tolerably fair. However, there can be little doubt but that the health standard, to say nothing of the comfort of the men, might be considerably raised by a good supply of the necessaries mentioned above, particularly lime-juice, so much required owing to the difficulty of having a constant supply of vegetables whilst cruising. Medicines are often much wanted. Even at Aden they can only be procured at considerable expense from the

Parsee merchants, or from the army Medical authorities, who kindly oblige us occasionally. A naval dépôt at Zanzibar or Seychelles, from the central position of either of these places, would obviate all this; a sick quarter, too, in so healthy a place as Seychelles, might not be out of place." Dr. Stone next details the ailments which are the direct results of deficient tone of constitution induced by a want of a uniformly nutritious diet. "Moon-blindness," Dr. Stone remarks, "is probably another manifestation of deficient nutrition. A good proof of the direct influence of good diet is evidenced here, as the disease usually disappears after a few days' generous living. Dr. Mansfield, serving in her Majesty's ship *Racoon*, first drew my attention to this fact, which he told me he had seen verified in several instances while serving on the Cape station and south-east coast of Africa." Our endeavours to suppress the slave trade are believed by many to have increased its horrors without causing a commensurate degree of amelioration in the circumstances even of those who are liberated by our cruisers. The close packing of cargoes, the avoidance of the shore during the voyage, and, consequently, the scanty supply of water and provisions allowed to the slaves, have all arisen since we sent ships to suppress the slave trade. Formerly it used to be the interest of the slave dealers to pay attention to the health and comfort of their cargoes, so as to land them in good condition. The dhows used frequently to go close in shore and touch at various points for water and provisions, but now the risk of capture is too great for them to do so. The numbers liberated by the cruisers are few in comparison to those annually embarked. "Moreover, it is a question whether the condition of the released is much better than that of those who continue in slavery. If one might judge from the demeanour of liberated slaves, I should be inclined to think that it is almost a matter of indifference to them, particularly as their Arab masters are reputed to treat them tolerably well, once they get them on shore—in fact, their position as slaves is said to bear a fair comparison with the compulsory servitude which awaits them in the event of our capturing them."

The Honorary Secretary read a report by Surgeon-Major Leitch, 46th Regiment, of a case of Bayonet Wound of the Chest which terminated favourably, and

The Chairman read a paper, by Assistant-Surgeon Maunsell, on the Hydatid Cysts found in Beef used as Soldiers' Rations in India.

OBITUARY.

ROBERT GROWSE

Was born at Bildeston, in Suffolk, and educated at the Grammar School, Dedham, Essex, under Dr. Taylor, where he rapidly rose to the highest position. In his career at Guy's he gained the esteem and respect of both teachers and students. He took honours and gold medals at the University of London, the degree in Medicine of which he obtained in 1851. He was a great personal friend of the late Mr. Aston Key, upon whom he was in attendance during his last illness. Mr. Key presented him with a choice of his instruments. He joined Mr. Cornelius Butler, of Brentwood, some years since, in practice, in the active pursuit of which he continued for a considerable time. Symptoms of brain affection began to develope themselves three or four years since; these gradually increased in severity, and he died of softening of that organ in his 41st year. Dr. Growse was an amiable man, of great energy of purpose, but with a frame not capable of contending against the labour which he imposed upon it. We cannot help thinking that he was, to some extent at least, the victim of overwork—in fact, of the prize system, that fatal apple of the Dead Sea, "fair to the view, but ashes and soot to the taste." How many have fallen victims to that vicious system! Take one school alone, that of University College: the gigantic frame and powers of mind of Bradshaw sank under it—he died paralysed. The fragile form of John Taylor was consigned to the tomb in the prime of manhood, another of its victims. Thomas Morton and William Mackenzie are in the same list. Some few prize men attain eminence and die in harness; others sink by the way in the days of studentship, and are never heard of beyond the walls of Alma Mater.

Mr. John McK. Taylor, L.R.C.S. Edin., has been presented with a handsome testimonial on the occasion of his departure from Loudoun, Ayrshire.

NEW BOOKS, WITH SHORT CRITIQUES.

Disease in St. Marylebone and Manchester 1860-65. By Arthur Ransome, B.M., M.A., etc.

*** This is a pamphlet published under the authority of the Manchester and Salford Sanitary Association. It consists chiefly of charts of disease to show the relative prevalence of epidemic and climatic diseases under different conditions; and to represent the mode in which they rise and fall in London and Manchester. The results show that, notwithstanding the differing influences of position, climate, manufactures, occupations, etc., bearing upon the inhabitants of these two places, there is a remarkable correspondence between the undulations of several of the diseases, especially of measles, scarlatina, hooping-cough, diarrhœa, bronchitis, and catarrh, and to these may now be added small-pox.

Report of the Health of Manchester and Salford. By Dr. A. Ransome and Mr. W. Royston.

*** Published by the same Association as the preceding pamphlet. After giving an elaborate account of the causes of disease, the authors sum up the proposed remedies which have an important local bearing, and, if carried out, would undoubtedly be attended with great benefit. Dr. Ransome has earned the blue riband of voluntary sanitary statistical efforts.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, February 10, 1870:—

Holroyd, William Stephen, Hugh-street, Pimlico.
Slaughter, William Budd, Farningham, Kent.
Stone, George, Newton-le-Willows, Lancashire.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Browne, Edgar A.—Assistant-Surgeon to the Liverpool Eye and Ear Infirmary

White, Frederick.—Assistant-Surgeon to the Liverpool Eye and Ear Infirmary.

NAVAL APPOINTMENTS.

The following appointments have been made at the Admiralty:—Thomas H. Taylor, Surgeon, to the *Black Prince;* Dr. Thomas St. J. Clerke, Assistant-Surgeon, to the *Aboukir;* Thomas C. Hickey, Assistant-Surgeon, to the *Buzzard;* Dr. Frederick A. P. Hains, Assistant-Surgeon, to the *Excellent;* Arthur V. Smyth, Acting Assistant-Surgeon, to the *Royal Alfred;* and Dr. Joseph Wood, Acting Assistant-Surgeon, to the *Rapid.*

BIRTHS.

Brown.—On February 7, at Trinity-square, S.E., the wife of A. Gardiner Brown, Esq., St. Thomas's-street, London-bridge, of a son.

Dalton.—On February 14, at the Royal Dockyard, Pembroke Dock, South Wales, the wife of Staff Surgeon W. Ruffell Dalton, R.N., of a daughter.

Stanley.—At Southsea, Hants, on February 11, the wife of St. John Stanley, Surgeon 1st Battalion 25th, the King's Own Borderers, of a daughter.

Thorowgood.—On February 13, at 61, Welbeck-street, Cavendish-square, the wife of John C. Thorowgood, M.D., of a daughter.

Whicher.—On February 12, at the Royal Naval Hospital, Yarmouth, the wife of Dr. Whicher, Staff Surgeon, R.N., of a daughter.

MARRIAGES.

Black—Robertson.—On January 13, at Sholapore, Bombay, William Campbell Black, Esq., Indian Staff Corps, eldest son of Francis Black, M.D., Clifton, to Charlotte Henrietta, eldest daughter of the late Major Robertson, Bengal Army.

Boulton—Rose.—On February 9, at the parish church of St. Michael, New Malton, in the county of York, Frederick Conyers Boulton, third son of R. G. Boulton, M.D., of Beverley, to Alice, fourth surviving daughter of Edward Rose, Esq., The Hill, Malton.

Cornish—Lang.—On February 9, at Ugborough, Alfred Cornish, Surgeon, Modbury, to Amelia, youngest daughter of the late J. Z. S. Lang, Esq., of Keaton House, Ugborough, South Devon.

Gardner—Rownson.—On February 10, at St. Mary's Church, Henley-on-Thames, Christopher S. Gardner, F.R.G.S., F.E.S., of H.M.'s Consular Service, China, fourth son of John Gardner, M.D., to Sophia Mary, daughter of J. Rownson, Esq., Henley-on-Thames.

Hunt—Fremlin.—On February 9, at St. Mary's, Wateringbury, Kent, George Greenway, third surviving son of Thomas Hunt, F.R.C.S., of Hinde-street, Manchester-square, to Elizabeth Jude, third daughter of James Fremlin, Esq., of Wateringbury, Kent.

HUNT—RIVAS.—On February 10, at Westminster Abbey, the Rev. Henry Warwick Hunt, rector of Steppingley, Bedfordshire, only son of Henry Hunt, M.D., of 3, Brook-street, Hanover-square, and Shermanbury-place, Sussex, to Adele De Havilland, daughter of Francis Rivas, Esq., of 19, Cowley-street, Westminster.

MIERS—PAOAYN.—On February 12, at St. Stephen's Church, Paddington, Henry N. Miers, Esq., of Ynispenllwch, in the county of Glamorgan, to Lydia Kate, daughter of the late John Mills Probyn, M.D.

REES—JONNSON.—On January 29, at Bocking Congregational Church, Carey Rees, M.B., of Melbourne, Australia, to Mary Anne Shaw, eldest daughter of W. Johnson, Esq., Braintree.

TROTTER—CHALK.—On February 15, at Trinity Church, Sloane-street, Adam Kenmuir Trotter, M.D., of Amble, Northumberland, to Adeline Jane, younger daughter of the late Edward Henry Chalk, Esq.

DEATHS.

BELL, JANE, wife of R. C. Bell, M.D., late of Chile, S.A., at 3, Lonsdale-terrace, Edinburgh, on January 25.

GOUGH, AGNES, wife of Thomas Gough, M.R.C.S., in Stricklandgate, Kendal, on Monday, February 14, aged 68 years.

GRAY, DUNDAS MCQUEEN, M.D., late of the H.E.I.C.S. Bengal, at the Great Western Hotel, London, on February 14.

LEWIS, CAROLINE, widow of D. Lewis, M.D., at her residence, in Ludlow, on February 13, aged 83.

LLOYD, WILLIAM, M.D., late of the 36th Regiment, at Norfolk Cottage, Lee-road, Lee, Kent, on February 13, in the 80th year of his age.

PROUDFOOT, ELIZABETH, the relict of the late Thomas Proudfoot, M.D., at Laburnam House, Milnthorpe, Westmoreland, on February 13, aged 72.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRISTOL ROYAL INFIRMARY.—Assistant House-Surgeon; must be M.R.C.S. Lond., Edin., or Dub., and be registered. Applications and testimonials to the Secretary on or before the 21st inst.

BUCKINGHAM GENERAL INFIRMARY, AYLESBURY.—Resident Surgeon and Apothecary; must be M.R.C.S. and L.S.A., and be registered. Applications and original testimonials to the Secretary, on or before March 8.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST.—Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to P. Rose, Esq., Hon. Sec., at the Institution, Brompton, S.W., and before March 5. Candidates to attend the Medical Committee on March 7, at 4 p.m.

LITTLEMORE PAUPER LUNATIC ASYLUM.—Resident Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to John M. Davenport, Esq., County Hall, Oxford, on or before the 19th inst. The duties will commence early in March.

LONDON FEVER HOSPITAL.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, Islington, N., on or before February 22.

METROPOLITAN FREE HOSPITAL.—Honorary Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, at the Hospital, Devonshire-square, City, on or before February 24.

NEWPORT INFIRMARY AND DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before March 1.

NOTTINGHAM DISPENSARY.—Assistant Resident-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before February 21.

ROSS UNION.—Medical Officer for the Third District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Mr. H. Minett, clerk to the Union, on or before February 20, election on the 24th.

ROYAL ALBERT ASYLUM FOR IDIOTS AND IMBECILES OF THE NORTHERN COUNTIES, LANCASTER.—Medical Superintendent; must have Medical and Surgical qualifications. Applications and testimonials to the Secretary, on or before March 11.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL, ST. GEORGE'S-CIRCUS, S.E.—Honorary Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary on or before February 28.

ST. MARYLEBONE PROVIDENT DISPENSARY, 16A, DUKE-STREET, PORTLAND-PLACE.—Medical officer; must have either a Medical or Surgical qualification and be L.S.A. Applications and testimonials to the Secretary on or before the 26th inst. Further particulars at the Dispensary between 10 and 2 o'clock.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Resident Medical and Surgical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Board of Management on or before February 19.

UNIVERSITY OF LONDON.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

WESTERN OPHTHALMIC HOSPITAL.—Assistant-Surgeon; must be M.R.C.S. Eng. Applications and testimonials to the Secretary at the Hospital on or before February 22.

POOR-LAW MEDICAL SERVICE.

*** The area of the district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Kirkby Moorside Union.—Dr. Lightbody has resigned; area of Union, 58,631; population 5739; salary £46 per annum for District and £11 per annum for Workhouse.

APPOINTMENTS.

Alcester Union.—John H. Hiron, M.R.C.S. Eng., L.S.A., to the Studley District.

Bridport Union.—Wm. Le Gros Denziloe, M.R.C.S. Eng., L.S.A., L.R.C.P. Edin., to the Fourth District.

Croydon Union.—John S. Turner, M.R.C.S. Eng., L.S.A., to the First District.

Keynsham Union.—Richard Colthurst, M.D. Edin., M.R.C.S.E., L.S.A., to the Keynsham District.

Merthyr Tydfil Union.—Joseph Jones Gabe, L.K. and Q. Coll. Phys. Ire. and L.M., M.R.C.S. Eng., to the Town District and the Workhouse. Henry Purdon, L.F.P. and S. Glas., L.M. Coombe Hospital, Ire., to the Penderyn District.

Newport Pagnell Union.—William C. Daniell, M.R.C.S.E., L.S.A., to the Third District.

North Bierley Union.—Edwin Rawson, M.R.C.S. Eng., L.S.A., L.R.C.P. Edin., to the Eighth District.

West Ham Union.—Ellis Jones Morris, L.F.P. and S., and L.S.A., to the St. Mark's District.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW. At an adjourned meeting of this corporation held on the 14th inst., Dr. John Gibson Fleming was elected President in room of Dr. Andrew Anderson, deceased.

ARTS EXAMINATION.—In addition to the names of those gentlemen who passed the recent preliminary examination for the Membership of the Royal College of Surgeons, and published in this journal last week, we have to add Messrs. W. F. Elliott, A. B. Kelly, J. H. Kyan, and B. Schlesinger.

THE Council of the Royal College of Surgeons, at their meeting on January 13, and just suspended in the hall, affirmed the propriety of clinical examinations. They affirm that the examinations for the Fellowship should include zoology; they are adverse to too rigid an order of Professional study: they think that three winter and two summer sessions should be spent at recognised Medical schools, and the remainder of the four years of study in Hospital practice; and they affirm the principle of a single examining board for each division of the United Kingdom. They considered a careful report of the Court of Examiners on Professional Education, dated December 16, 1869, and adopted it; of this we may say more next week.

MR. F. R. FISHER, M.R.C.S. ENG.—The following resolution was passed at the Special Court of the Governors of the Salisbury Infirmary:—"That the thanks of this Court be given to Mr. F. R. Fisher for his past services as House-Surgeon to the Infirmary, and the Court regret that he should, on account of his health, have considered it advisable to resign that appointment."

A MEETING of the Association of Medical Officers of Health will be held at 7.30 p.m. on Saturday, February 19 (to-day), at the Scottish Corporation Hall, Crane-court, Fleet-street, when the following communications will be made:—"Observations on Suggestions by Mr. Jas. Lewis for National Sickness Returns," by Dr. E. Ballard; and "On Prof. von Pettenkofer's Views of the Relation of Subsoil Water to Enteric Fever," by Dr. G. Buchanan.

ADDRESS TO DR. M'DOWEL.—A numerously attended meeting of the present and former pupils of the School of Physic in Ireland was held on Tuesday last in the anatomical theatre of Trinity College, Dublin. The chair was taken by Dr. Bennett, as the senior of those present. The following resolution was passed unanimously, and a committee was appointed to carry out its objects:—"That an address and a suitable testimonial be presented by the students, past and present, of the School of Physic, to Dr. B. G. M'Dowel, on the occasion of the termination of his clinical connexion with Sir Patrick Dun's Hospital."

PAUPERISM.—The last return of the Poor-law Commissioners shows that the total number of persons relieved on July 1 last was 977,700, being 1 in 20, or 4·9 per cent. on the actual population according to the last census. The increase, as compared with the corresponding day of 1868, is 6132, or 0·6 per cent.

THE Kingston-upon-Hull Board of Guardians, upon applications from their three Medical officers, have increased Mr. Macmillan's salary from £70 to £100 per annum, Dr. Kitching's from £60 to £80 per annum, and Mr. Day's application to have his increased from £100 to £150 was ordered to be entered on the minutes.

COUNTY AND CITY OF CORK MEDICAL PROTECTIVE ASSOCIATION.—At a meeting of the Committee, held February 8, 1870, the President, Dr. Harvey, in the chair, it was unanimously resolved—"That, having attentively considered a statement recently issued by Dr. MacDowel, by which it would appear that the Board of Trinity College, Dublin, on the representation of an opinion by the Governors of Sir Patrick Dun's Hospital, dismissed him from his post as Surgeon to the Hospital, without investigation or inquiry, notwithstanding his having repeatedly and respectfully demanded it, we cannot but look upon this extraordinary proceeding, on the

part of both these Boards, as a denial of simple justice; and further, as an indignity offered to the Profession, of which Dr. MacDowel has always been an honourable and, until now, an unimpeached member. And we feel called upon, in addition, to express our conviction that the gradual disappearance of the mutual gentlemanly confidence which used to subsist between Hospital boards and their Medical officers, and the growing spirit of discourtesy which has latterly been creeping into even the higher governing bodies, are by no means calculated to advance the interests of these institutions, or of the poor whom they are intended to serve."

THE HUNTERIAN MUSEUM.—At a meeting of the trustees of this collection on Saturday last, the Bishop of Winchester in the chair, the Right Hon. the Marquis of Salisbury was unanimously elected a trustee in the vacancy occasioned by the decease of the Earl of Derby. All who are interested in the science of ethnology in this country, and their number is daily on the increase, will be glad to learn that the Council of the Royal College of Surgeons are in treaty with Dr. Nicolucci, of Isola di Sova, for the purchase of his fine collection of Italian and Greek skulls. This collection, comprising 165 specimens of ancient and modern crania, selected with great care by the celebrated Italian ethnologist, and upon which his well-known researches into the history of the races of Southern Europe have been mainly founded, will prove a valuable acquisition to the already extensive series in the Hunterian Museum; and perhaps there is no locality in which they will be more readily available for the purposes of study and comparison. In the concluding observations at his first lecture, on Monday last, Professor Flower expressed the obligation which men of science generally were under to the Council of the College of Surgeons for the immense aid they had given to the progress of philosophical biology by the maintenance and augmentation of John Hunter's Museum, and added that an epoch of revolution appears to be at hand in the Medical Profession, which may lead to a material alteration in the respective positions and opportunities of the various corporate bodies. Whatever changes may take place, the College of Surgeons will always look back with satisfaction to the fact that, for the first seventy years of this century, when these studies were less appreciated than they are now, or will be hereafter, it has, with scanty aid from the national resources, cherished the growth of a truly national institution, the benefits of which are not confined to any one class or profession, but are freely open to the whole community.

ADDRESS TO SIR JAMES ALDERSON FROM THE MEDICAL PRACTITIONERS OF HULL AND ITS NEIGHBOURHOOD:—

"To Sir James Alderson, Knight, M.D., F.R.S.,

"President of the Royal College of Physicians of London.

"The members of the Medical Profession, practising in Hull and its neighbourhood, desire to express to you their congratulations on the honour which her Majesty has just been pleased to confer upon you.

"They look upon this distinction as a fitting and graceful tribute to your high social and Professional position, to the manner in which you have discharged the duties of the dignified office you now hold as the head of the Profession, and to the valuable services you have for many years rendered to the Profession, and, through it, to the public at large.

"They pray that your life may be prolonged to enjoy in health and happiness the distinction which you have so fairly earned and which is especially gratifying to the Practitioners of your native town, and of the district in which you attained eminence and honour in the earlier part of your career.

"Hull, November, 1869."

This address, engrossed on parchment and illuminated, was signed by fifty-eight Medical men, and presented to Sir James by F. B. Anderson, Esq., of Hessle, and the following reply has since been received:—

"17, Berkeley-square, London, December 27, 1869.

"Dear Sir Henry Cooper,—Whilst thanking you heartily for the kind part you have taken in presiding at a meeting to do me honour, I must beg you to convey to every one of the gentlemen, my kind friends, then present, my heartfelt thanks for the address they have voted to me, and to tell them that it contains expressions of their good opinion and regard which far outweigh, with me, the occasion which has called it forth.

"To be remembered and so thought of after so many years of absence from my native town, and to be so held and esteemed by my own Profession, affords me happiness before any of those events of my life for which I have to be grateful.

"You must allow me to add that the subscribers to the address have enhanced their favour by conveying it by the hands of nearly, if not quite, the oldest Practitioner in the district, who has always been my firm friend.

"I remain, with sincere regard, yours most faithfully,

"JAMES ALDERSON.

"To Sir Henry Cooper and the other gentlemen who signed the address."

LIST of thirty-eight candidates for H.M.'s Indian Medical Service who were successful at the competitive examinations at Chelsea in August, 1869, and at Netley in February, 1870, after having passed through a course at the Army Medical School:—

Order of merit.	Names.	Studied at	Total No. of marks. (max. 6900).
1.	Duke, O. T.	London	5518*
2.	Nicholson, F. C.	Edinburgh	5440
3.	Gunn, J. S.	Aberdeen	5005
4.	Hendley, T. H.	London	4915
5.	Gregg, W. H.	Dublin	4600
6.	Seaman, A. B.	London	4508
7.	Ghose, F. C.	Calcutta and Edinburgh	4451
8.	Smyth, F. A.	Dublin	4370
9.	Sinclair, D.	Aberdeen	4250
10.	Salaman, S. M.	Dublin	4230
11.	Boyd, H.	Boston and London	4025
12.	Lloyd, J.	Cork	3975
13.	Barker, F. C.	Dublin	3913
14.	Courtney, W. M.	Dublin	3860
15.	Ruttledge, E. B.	London	3736
16.	Robinson, T.	Dublin	3715
17.	Caldecott, R.	London	3694
18.	Martin, D. N.	Cork	3648
19.	Strahan, A. B.	Aberdeen	3612
20.	Roe, W. A. C.	Dublin	3607
21.	Kelly, A. H.	Dublin	3575
22.	Meadows, C. J. W.	London	3555
23.	Waters, G.	Glasgow	3478
24.	Keefer, W. N.	Montreal	3460
25.	Deane, A.	Dublin	3392
26.	Murphy, P.	Cork and Dublin	3365
27.	Murray, W. F.	Dublin	3196
28.	Carswell, J. S.	Glasgow	3166
29.	M'Conaghy, W.	Dublin	3046
30.	Hughes, A. H.	Toronto and London	3027
31.	Wall, R. M.	Dublin	2940
32.	North, J.	London	2770
33.	Fawcett, E.	Dublin	2703
34.	Paterson, F. R.	Dublin	2697
35.	Hastings, W.	Dublin	2683
36.	Spencer, T. C. H.	London	2679
37.	Hall, H. G.	Dublin	2435
38.	Jones, H. J.	Glasgow	2431

* Awarded the Herbert Prize.

IRON RUST.—Dr. Crace Calvert has recently communicated to the Chemical Society the results of some curious experiments upon iron-rust. Two samples analysed by him were found to contain over 6 per cent. of protoxide, so that we must no longer consider the substance as consisting entirely of sesquioxide. His experiments seem, moreover, to contradict the current belief that the rusting of iron is entirely due to moist oxygen. Neither dry nor moist oxygen appears to have any action, and the only experiments in which the ordinary rapid oxidation of the iron was observed were those in which the metal was exposed to the joint action of water, oxygen, and carbonic acid. The same results were obtained whether the iron was immersed in air or water.

POISONS ORDERED IN PRESCRIPTIONS.—On Monday last, in the Court of Queen's Bench, an important appeal, arising under the Pharmacy Act of 1868, came on for argument before Mr. Justice Hannen. One Johnson had attempted to commit suicide. He had obtained a mixture consisting of prussic acid and rose-water from a chemist at Worthing by producing what purported to be a prescription for a Mrs. Newton for a lotion. The chemist did not know him; but the chemist copied the prescription in his prescription-book, but did not label the bottle with the word "Poison." Being summoned before justices for selling poison to a person unknown to him, and without the label required by the Pharmacy Act, he now maintains that the lotion was a "medicine" dispensed by him, and within the proviso in section 17 of the Pharmacy Act of 1870. The justices convicted him, but granted a case for the opinion of the Court of Queen's Bench. After argument, the Court gave judgment for the appellant, being of

opinion that the word "medicine" in the Pharmacy Act included applications for external use, and that if the appellant *bonâ fide* believed that the lotion was ordered for Mrs. Newton as a medicine, he came within the proviso in the Act, and that it was sufficient for him to enter the name of Mrs. Newton, with a copy of the prescription, in his prescription-book. Undoubtedly the appellant was legally right, but we think, in the interests of the public, that dispensing druggists would act wisely, in sending out poisonous "medicine" for external use, by putting a label upon the bottle, indicating that it was "poison."

Small-pox and Vaccination Hospital.—At the annual meeting of the Governors of this Hospital, the report of the Medical officers (Dr. W. Munk and Mr. F. Marson) stated that during the last year the monthly admissions of patients had been as follows:—In January 56, February 28, March 43, April 42, May 48, June 34, July 47, August 28, September 31, October 34, November 51, and December 52. Of the 493 patients thus admitted, 460 were suffering from small-pox, and 33 from various forms of eruptive or febrile disease, not small-pox. This latter class comprised chicken-pock 10, measles 9, scarlatina 1, lichen 3, febricula 5, syphilis 2, pustular eruption of doubtful character, but not small-pox, 3. Of the 460 cases of small-pox, 100 were unvaccinated, and 357 had been vaccinated, 1 was said to have had small-pox previously, and one to have been vaccinated and also to have had small-pox. There were 53 deaths during the year, giving a general mortality of 10·7 per cent. Of the 101 unvaccinated cases, 28 died, or a mortality of 27·1 per cent., while of the 357 vaccinated cases, 25 died, or 7 per cent. only, and even from this low mortality a reduction has to be made, 5 out of the 25 deaths in this the vaccinated class having been caused not by small-pox, but by previously existing, coincident, or superadded disease. The cause of death in these 5 cases, thus excluded from calculation, was disease of liver and dropsy 1, hooping-cough and convulsions 1, gangrene of arm 1, erysipelas 1, parturition followed by peritonitis 1. Deducting these 5 deaths, the mortality in the vaccinated cases has been only 5·6 per cent. 357 persons were vaccinated at the Hospital during the year, and 540 charges of vaccine lymph were supplied to 90 Medical Practitioners. The Medical officers conclude their report as follows:—"The events of the past year present no facts calling for special remarks from us. They go to confirm the conclusions to which prior experience had conducted us—conclusions which, in former reports, we have repeatedly submitted to the consideration of the governors of the Hospital. Considering, however, the prejudices which exist against vaccination and the efforts which are now being made to foster them, it seems a duty incumbent on us, the Medical officers of the Small-pox Hospital, placed as we are in *the* position the best adapted of any in this kingdom to test the prophylactic value of vaccination, to state emphatically that our confidence in vaccination is undiminished, and that each succeeding year supplies us with additional proof of its marvellous power in preventing, modifying, and ameliorating small-pox, and this without any proof of those injurious effects, either proximate or remote, about which so much has recently been said."

Ergot of Rye in Galactorrhœa.—M. Legendre refers to three cases of excessive and persistent lacteal secretions, which, after having resisted all general means and local astringents, yielded promptly to the employment of the following mixture:—Vehicle 32 drams, Bonjean's ergotine half a dram, and simple syrup 12 drams. A tablespoonful three times daily.—*Rev. Méd.* November 15.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. J. M. Drake, Montreal.—Your letter (with enclosure) has come to hand.

Dr. F. Montizambert, Quebec.—Your letter (with enclosure) has come to hand.

A Peg too Low.—White wines are reckoned more stimulating than red, and their effects more transient. These are points that it is of no use to argue about or try to explain, and that can only be learned from experience. The French say that white wines are exciting, and keep people awake. If you desire a strong white wine of moderate price and free from alcoholic mixture, try the *St. Elie*. We have had some for four or five years in the cellar, and it turns out perfectly soft, smooth, and light, with a good deal of vinosity; it keeps thoroughly well in a decanter for a few days, and, as a little of it suffices, it has other kinds of cheapness besides mere low price.

Spirans.—It is not easy to give our correspondent the exact information he requires. We should say that Flint's or Tanner's "Practice of Medicine" would be most suitable to his wants.

Medical Etiquette.—It would serve no good purpose to publish the correspondence between Dr. Hislop and Mr. Stack. Professional quarrels, as a rule, are better kept from public comment, unless, indeed, something very unusual demands publicity for the general good. Medical Practitioners are often misled as to facts by their patients; it would appear that the misunderstanding in the present case was due to some reticence on the part of the patient or her friends.

Royal College of Physicians of Edinburgh.—The Council of the College have reissued their pamphlet in respect to their licences, which was published in 1859. It is not necessary now to repeat the arguments for and against the course which was pursued by the College in the "year of Grace." At all events it may be said that it was in accordance with those principles of union which we have always advocated.

Fissures of the Anus.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by receiving from such of your readers as have had experience in these cases their opinions as to their cause, together with symptoms and treatment. I am, &c. M.R.C.S.

February 10.

A Metropolitan Student.—There will not be any examinations at the College until April next.

Chloroformist.—The clinical lecture by the late Mr. Stanley at St. Bartholomew's Hospital on an operation upon the cheek and lower jaw where the inhalation of chloroform was nearly fatal, with comments on the use of chloroform in Surgical operations, will be found in the *Medical Times*, vol. xxiv. p. 529.

Donations to the British Medical Benevolent Fund.

The Treasurer and the Honorary Secretaries of the British Medical Benevolent Fund beg to acknowledge, with thanks, the receipt of the following additional donations and annual subscriptions as the result of the appeal published in the Medical journals:—

Donations.

Baker, W. Morrant, Esq., F.R.C.S., the College, St. Bartholomew's Hospital, E.C.	£2	2	0
Chapman, W., Esq., F.R.C.S., Lower Tooting, S.W.	2	2	0
Clifton, N., Esq., 20, Cross-street, Islington, N.	3	3	0
Gray, Mrs., 168, Brompton-road, per J. T. Mould, Esq.	1	0	0
Griffith, Thos. T., Esq., F.R.C.S., Wrexham	30	0	0
Herbert, W. A., Esq., Markyate, Beds...	1	1	0
Jenner, Sir W., Bart., Brook-street, W.	5	0	0
Liddle, John, Esq., 8, Campbell-terrace, Bow, E.	2	2	0

Annual Subscriptions.

Hackney, John, Esq., 31, Myddelton-square, E.C.	1	1	0
Taplin, Thos., Esq., St. James-square, S.W....	5	5	0

Further contributions will be thankfully received by Dr. Thorne Thorne, 42, Seymour-street, Portman-square, W., Hon. Financial Secretary.

Army Assistant-Surgeons.—"An Ex-Assistant-Surgeon" has again addressed a statement to the members of the House of Commons, on the present unsatisfactory position of the Army Assistant-Surgeons. He shows, in a forcible manner, by facts and statistics, that the promised promotion is merely nominal—at all events, it falls very far short of reality, and it behoves all who intend entering the service to make careful inquiries into the truth of the statements put forward by the authorities.

Glasgow.—Dr. Gairdner gave a lecture last week at the Philosophical Society of Glasgow on "Defects of House Construction in Glasgow as a Cause of Mortality." In this able and eloquent oration, the author gives a graphic and striking account of the miserable condition of a vast number of houses in Glasgow, and shows that it is almost impossible for moral and physical health to be preserved under such circumstances. We should be glad to see the scheme for improving Glasgow, advocated by Dr. Gairdner some years since, carried out.

Consumption in Iceland.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—So long as we ignore the ordinary facts of physiology, the physiology of the living organism, and of animal chemistry, we cannot possibly arrive at correct conclusions on the subject of the momentous topic, of which the title heads these few remarks. Is it true, or is it not true, that eight ounces, more or less, of effete carbon is, or ought to be, oxidised by congress with the oxygen of the atmosphere, and discharged, principally from the lungs, in twenty-four hours? Is it or is it not true that the natural proportion of carbonic acid gas in the atmosphere is about 0·10 per cent., be it more or less, and that when this natural atmosphere is but once respired, it becomes loaded with from 4 to 5 per cent. of carbonic acid gas? Is it or is it not further true that when air thus tainted with the products of respiration, as accruing from the waste of the animal economy, is habitually respired, the carbonaceous effete tissue is *pro rata* no longer oxidised, but remains within the organism, I affirm under the form of what we term tubercle, and finally consummates its destruction? It seems to me, then, so very strange that "S. W.,"(a) or indeed any one, can contend directly or by implication for the immunity of the Icelanders under circumstances which, unless we deny the (as it seems to me) incontrovertible data which I have just laid down, must needs induce tubercular deposits and disease. I cannot tell, I am sure, why so absurd a popular prejudice as that the Icelanders are exempt from tubercle—a prejudice to which MM. Carpenter and Power, it appears, have yielded the respectable sanction of their names—should ever have obtained currency. All we are

(a) *Medical Times and Gazette*, January 22, 1870.

concerned to know, however, is that it has no foundation; in fact, Schleisner, who was sent to Iceland by the Danish government as a Medical commissioner and investigator, remained a year on the island. In his book, in the Norse or Danish tongue, which I possess, and will show to anyone who cares to look at it, he states that 10·2 per cent. die annually of phthisis in Iceland. I have no doubt myself that the mortality, as from tubercle, is much in excess of this, but this at least. And, with this evidence extant, and in the face of the physiological facts already recited, I cannot see how we are to deny that Iceland lies under the very same relations, in respect of the disastrous prevalence of phthisis, as does the rest of the world. Until the Profession accept the data which I have laid down, and act upon them unreservedly, I do not see how the disastrous prevalence of tubercular disease can be abated now or ever.

Belfast, February 3. I am, &c. HENRY MACCORMAC.

COMMUNICATIONS have been received from—

Dr. COBBOLD; Dr. MERCER; Dr. STOKES; M.R.C.S.; Dr. W. B. WOODMAN; Mr. H. GREENWOOD; Dr. J. WHITMORE; Mr. W. J. MARSH; SPIRANS; Mr. J. D. KELLY; Dr. THORNE THORNE; Colonel LANE FOX; Mr. N. F. HORNE; Mr. E. A. BROWNE; Mr. G. BARNBY; Mr. W. R. DALTON; Mr. J. HORDAY: Mr. BECKE; Dr. RANSOME; Dr. PHILLIPS; Dr. J. G. RICHARDSON; Mr. SEQUEIRA; Dr. OSBORN; Sir HENRY COOPER; Dr. SYMES THOMPSON; Dr. PETER CAMPBELL; Professor FLOWER; Dr. BAEUMLER; Dr. PLAYFAIR; Mr. J. CHATTO.

BOOKS RECEIVED—

Monthly Homœopathic Review, Feb.—Bidie's Report on the Ravages of the Borer in Coffee Estates—Dr. Gardiner Hill on Lunacy—Clinical Report of the Rotunda Lying-in Hospital, by Dr. G. Johnston—Inman on the Restoration of Health—The Contagious Diseases Act, considered with reference to the Sexes and the Inequality of their Condition—Report of the Dental Hospital of London—New York Medical Journal, February—Report of St. Luke's Hospital—Report of Sanitary Condition of City of London—Tuke on the Cottage System of Management of Lunatics.

NEWSPAPERS RECEIVED—

North British Daily Mail—Nature—The Merthyr Telegraph—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

February 19. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH, 7½ p.m. Dr. E. Ballard, "Observations on Suggestions by Mr. James Lewis for National Sickness Returns." Dr. G. Buchanan, "On Prof. von Pettenkofer's Views of the Relation of Subsoil Water to Enteric Fever."

ROYAL INSTITUTION, 3 p.m. Prof. Max Muller, "Science of Religion."

21. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

KING'S COLLEGE, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 4.

MEDICAL SOCIETY OF LONDON, 8 p.m. Mr. Henry Hancock, "A Case of Removal of Bony Tumour with Half of the Radius and a Portion of the Ulna." Dr. B. W. Richardson, "Nature, Cause, and Treatment."

22. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ETHNOLOGICAL SOCIETY, 8 p.m. Mr. C. Monkman, "On Recent Archæological Discoveries in Yorkshire." Dr. Jagor, "On the Natives of Naga in the Philippine Islands."

ROYAL INSTITUTION, 3 p.m. Prof. Humphry, "Architecture of the Human Body."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Special Meeting, to consider Resolutions on the Amalgamation of the Medical Societies.

23. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

HUNTERIAN SOCIETY. 7½ p.m.: Council Meeting. 8 p.m.: Mr. Hovell, "On the Different Therapeutic Relations of Rheumatism and Neuralgia, together with some Remarks on the Pathology of Chorea."

SOCIETY OF ARTS, 8 p.m. Meeting.

24. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

25. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

CLINICAL SOCIETY, 8½ p.m. Mr. C. H. Moore, "On Expansion of the Antrum of Highmore." Dr. Bristowe, "Aphasia successfully treated by Education." Mr. H. A. Reeves, "Treatment of Urethral Stricture by Laminaria." Dr. Headlam Greenhow, "Case of Atrophy of Brain with great Depression of Temperature."

ROYAL INSTITUTION, 8 p.m. Captain Wilson, "Results of Ordnance Survey of Sinai."

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 12, 1870.

BIRTHS.

Births of Boys, 1185; Girls, 1104; Total, 2289.
Average of 10 corresponding weeks, 1860-69, 2197·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	763	805	1568
Average of the ten years 1860-69	738·4	715·0	1453·4
Average corrected to increased population	...	...	1598
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	...	12	...	10	2	4	2	3
North ...	618210	3	3	27	1	9	2	5	...	1
Central ...	383321	...	3	9	...	6	...	2	...	1
East	571158	1	5	20	...	15	1	5	1	2
South	773175	...	12	35	2	25	1	6	2	4
Total	2803989	4	23	103	3	65	6	22	5	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·800 in.
Mean temperature	32·4
Highest point of thermometer	47·9
Lowest point of thermometer	19·4
Mean dew-point temperature	24·5
General direction of wind	N.E.
Whole amount of rain in the week	0·25

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 12, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Feb. 12.	Deaths Registered during the week ending Feb. 12.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2289	1568	47·9	19·4	32·4	0·22	0·25	0·64
Portsmouth ...	122084	32	74	56	55·1	19 8	34·8	1·56	1·31	3·33
Norwich	81087	27	55	43	44·0	21·0	30·8	−0·66	0·49	1·24
Bristol	171382	90	104	108	48·3	19·6	33·0	0·56	1·07	2·72
Wolverhampton ...	72990	53	48	29	46·2	17·9	31·9	−0·06	1·24	3·15
Birmingham ...	369604	117	232	174	46·4	18·1	32·3	0·17	1·39	3·53
Leicester	97427	75	75	44	45·2	20·0	31·0	−0·56	1·33	3·38
Nottingham ...	88888	110	44	37	48·9	20·8	33·8	1·01	0·74	1·88
Liverpool	517567	250	342	276	47·5	22·5	32·8	0·45	0·48	1·22
Manchester ...	374993	207	269	232	...	...	...	...	...	...
Salford	121580	58	88	52	48·0	20·2	33·9	1·06	0·16	0·40
Bradford	143197	54	94	78	47·6	21·4	32·0	0·00	0·55	1·40
Leeds	259527	30	178	152	48·0	21·0	33·9	1·06	0·68	1·72
Sheffield	247378	27	192	128	46·0	18·7	31·9	−0·06	1 03	2·62
Hull	130869	91	76	48	44·0	15·0	30·6	−0·77	1·17	2·97
Sunderland ...	94257	52	75	54	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	97	75	44·0	25·0	31·9	−0·06	0·93	2·37
Edinburgh	178970	100	105	107	48·0	24·0	34·6	1·45	0·40	1·02
Glasgow	468189	228	348	325	46·5	24·5	35·0	1·67	0·92	2·34
Dublin (City, etc.*)	321540	82	128	162	57·0	28·0	37·0	2·78	0·66	1·67
Total of 20 Towns in United Kingd'm	7209603	83	4913	3748	57·0	15·0	33·0	0·56	0·82	2·08
Week ending Feb. 12 Paris	1889842	242	...	1139	...	...	...	...	...	...
Week ending Feb. 5 Vienna	605200	162	...	...	...	...	...	...	...	...
Week ending Feb. 10 Berlin	702437	112	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·800 in. The barometrical reading increased from 29·37 in. on Tuesday, Feb. 8, to 30·20 in. on Saturday, Feb. 12.

The general direction of the wind was N.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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SYRINGES FOR SUBCUTANEOUS INJECTIONS.

FIG. 1.

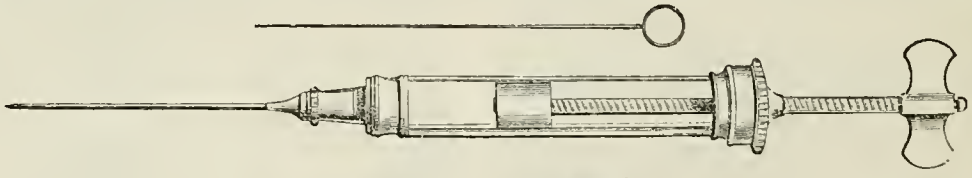


FIG. 2.

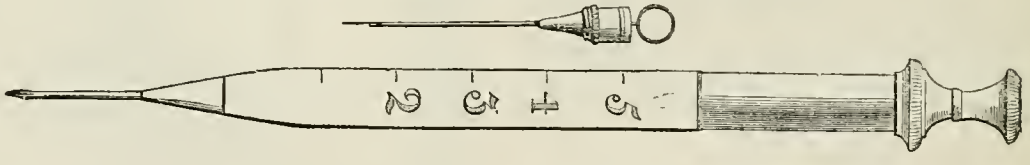
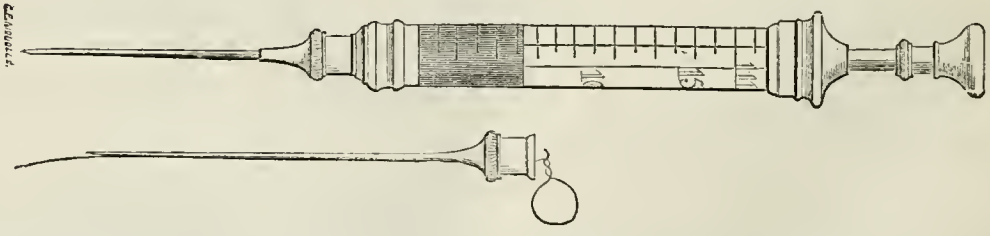


FIG. 3.



As Fig. 1, with Screw Piston and Glass Stoppered Bottle, in morocco case, silver	..	..	..	£1	7	0	
Ditto, ditto, ditto, electro-plated	..	..	..	0	13	6	
As Fig. 2, electro-plated, in morocco case	..	..					£0 10 0
As Fig. 3, ditto, ditto	..	..					
As Fig. 2, with Trocar Point (Dr. Buzzard's)	..						

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ORIGINAL LECTURES.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon to the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 144.)

Capsular cataracts after the removal of the lens by operation, or by accident.—There is, I believe, always capsular cataract, or secondary, after the loss of the lens. Investigation by the various means at my disposal, including the ophthalmoscope, and oblique illumination, has always detected it. Only when the pupil is occupied in part, or in whole, does its presence become of practical importance. In the slightest recognisable form, there is just opacity enough to be detected. It may be so limited as not to interfere much with the reading of larger type, although the smallest cannot be seen. It is always, as I believe, actual opacity that thus intercepts the light.

Mr. Bowman, in writing on capsular obstructions in the *Ophthalmic Hospital Reports*, says that there may be obstruction to sight by the capsule not being rendered opaque, but from being simply wrinkled and folded in such a way as to refract the light unequally in its passage, and consequently to confuse the image. The ophthalmoscope detects this state. Neither a sharp image of the fundus of the eye can be seen, nor of the optic disc. "The situation of the disc is detected by its whiteness, and perhaps, according to the degree of the capsular fault, its general shape, or even its vessels may be observed, but irregularly distorted as though seen through very finely wavy glass." When the capsule is focussed the wrinklings are seen.

The form in question, in a marked degree, is sometimes the effect of some of the softer portion of the atrophied lens being incarcerated in the contracted capsule, especially cretaceous degenerations of it; or it may be from the atrophy of transparent lens tissue which has been left. Probably the capsule always retains portions of such tissue or of cataract material; most likely the hexagonal cells are always retained. According to Dr. Schweigger, cells, regarded by him as "intra-capsular cells," the hexagonal lens cells, may still be adherent to the capsule after it has been freely broken up and exposed to the action of the aqueous humour. It is said that they may be the seat of an imperfect process of growth.

Mr. Bowman in commenting on this says, no doubt that the cell growth does not go on interminably, and that it seems apt to occur where the torn capsule rolls up; also where the anterior capsule and posterior have fallen together with or without adherent lens substance, and that it may be the source of new lens growth of very appreciable thickness, usually opaque.

Occasionally he thinks he has seen in some degree and for some time, the transparency of natural lens substance. The growth adds toughness.

Capsular cataract always remains in the area of the pupil, and gives much trouble, when operations of all kinds have been performed on immature cataracts, those in which there have yet been portions of transparent lens.

The commonest cause of secondary cataract obscuring the pupil is inflammation. No matter how transparent the anterior capsule may have been at the time of an operation of any kind, if inflammation of the eye ensue, dense capsule will appear in the pupil. The capsule participates in the general disease marked by inflammation.

There must be a morbid deposit arising out of such inflammation, in addition to the general causes of capsular opacity, whereby this special state is brought about.

Acquired density is always an early effect of the inflammation. If, however, the vascular action be long continued, in the end, the capsule may degenerate and get as it were rotten, so that it is most readily torn.

This late effect is most apparent when there is on it external deposits with adhesion of the pupil. It is now, too, that calcareous deposits are common.

The posterior capsule may become opaque when the eye inflames. There may be added, deposits from the hyaloid membrane.

These capsule changes should be understood, because it matters materially whether a natural thin and delicate tissue is to be cut, or torn, or removed; or a membrane that has acquired the opposite qualities of thickness and inelasticity.

The soft superficies of lenticular cataract may remain a long time enclosed in opaque capsule, after the operation for extraction, and that for solution. I suspect that in all such instances, the capsule has contracted completely around it, or perhaps uniting, has sealed it in.

I have observed it after the most successful cases of extraction. Three and a half months after I had extracted a cataract from a lady fifty years of age, the pupil was very much obscured by what seemed to be merely capsule. In using the needle to clear the pupil, there fell from the capsule, into the anterior chamber, an amount of lenticular matter that quite surprised me. The chamber was cleared of it by absorption in ten days.

Capsulo-lenticular Cataract.

This is used merely as a convenient term, to express co-existing opacity of the capsule, as well as that of the lens, or double cataract.

There may be a deposit on the outside of the capsule without any lens atrophy, but any capsular opacity arising from a deposit within, must, as I have shown, be associated with some lens change, however slight, in correspondence. There may be but a mere dot of capsule opacity, over a large spot of lenticular. If this be a universal truth, there is never capsular cataract, be it but very limited, alone. It is always capsulo-lenticular. However the term is scarcely used except the whole of the anterior capsule is very opaque.

Capsulo-lenticular cataract is almost confined to the early years of life, those under manhood, and, therefore, it is generically soft cataract.

It has been already pointed out, under the head of capsular cataract, that capsule changes are intimately associated with inflammatory diseases of the eyeball. All those remarks apply here.

Some authors use the term, inflammatory capsular cataract, rather than capsulo-lenticular.

There are often deposits on the outside of the capsule, sufficiently dense to influence the use of instruments on it, a matter of practical moment. These may be rendered more apparent by oblique illumination.

Congenital Anomalies of the Crystalline Lens.

Absence of the Lens.—It is doubtful whether this condition has ever been met with, except in monstrosities. The same may be said about two lenses existing in the one eye.

Malposition of the lens has been recognised many times; more will be said on this point under the head of spontaneous dislocation of the lens.

Irregularity in the equator of the lens has been met with in hypermetropic eyes, and with the otherwise congenital defective condition of coloboma iridis.

Grooves in the lens have been discovered.

Depressions have also been met with.

Those who are interested in the malformations of the organs of sight, and in the congenital diseases of the same, should consult the very able papers, in the *Dublin Quarterly Journal*, by Sir William Wilde. They extend over many years.

Progress of Cataract.—The less complicated the cataract with other disease of the eyeball, the slower does it proceed. Inflammatory complications cause the quickest development.

When the entire lens tissue is invaded by opacity, there is always a continuation of atrophy, however slow.

When the opacity commences in the nucleus, several years frequently elapse before the whole lens becomes opaque.

Opacity of the cortex, primary or secondary to that of the nucleus, is quickly followed by full formed cataract. Small striæ of opacity in the lens, although very numerous, precedes slow formation of cataract. Broad striæ precede the quicker development.

Soft cataract quickly gets matured. In a few months, or at least a year or two, is the entire lens opaque. The secondary changes follow in proportion. Inflammatory complications seem to have a more rapid effect here than in the hard.

Hard cataract is the slower in passing through its stages.

There are exceptions to the progressive quick development of the cataract in both varieties which cannot be accounted for, and this, with those instances in which the cataract appears to be stationary for years, together with the irregular ratio of increase in most cataracts, renders it impossible for a Surgeon to give any decided prognosis respecting progress, and obliges him to speak generally and to talk of probabilities. There may be a marked difference in this respect in the eyes of the same person.

Partial cataract occurring at birth generally remains stationary. An exception is rare, but that it does occur I am fully aware from actual observation.

Partial cataract occurring in infancy may not increase for years, but it is likely to become general. When it has remained long unchanged, it is apt to take on activity about the period of puberty.

Primary and secondary degenerations do not proceed in the partial cataracts as in the complete. The secondary do not follow so quickly or so certainly. When it does proceed and some absorption occurs, there may be shrinking of the cataractous portion, and of the corresponding part of the capsule of the lens

The transparent lens tissue remains unaltered, and the lens, therefore, is changed in shape accordingly. The capsule is involved in opacity in these cases and gets wrinkled, and sometimes otherwise altered from various deposits.

Traumatic cataract is always rapid in its formation. A few days or even hours may suffice for dense opacity of the entire lens and its capsule.

Single and Double Cataract.

When cataract is produced in the one eye by any palpable intra-ocular cause, which is limited to that eye, or when it is traumatic, the other eye does not become implicated. When it proceeds without any palpable cause in an eye of the young or in the old, both eyes are tolerably sure to be affected. In the double affection the one eye is generally in advance of the other.

In hard cataract the right eye is nearly always the first affected.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

SUDDEN DEATH IN OVARIOTOMY WHILE THE PATIENT WAS UNDER THE INFLUENCE OF CHLOROFORM.

By Sir J. Y. SIMPSON, Bart., M.D., D.C.L.,
Professor of Medicine and Midwifery in the University of Edinburgh.

A FEW weeks ago, Dr. Brotherston, of Alloa, sent into Edinburgh a patient who was the subject of an ovarian tumour. She brought a note from him asking if I thought the case a fit one for ovariotomy. I wrote back that it seemed to me to be so. The patient was married, about 22 years of age, thin and emaciated, and I thought the tumour, which was as large as the pregnant uterus at the sixth or seventh month, felt more solid than multilocular ovarian tumours of this size usually do; yet it seemed free from adhesions.

Dr. Brotherston took the patient into the small village Hospital at Alloa, and urgently requested me to be present when he operated. Accordingly, on the morning of February 5 I went up to him. Drs. Duncanson and Wilson, of Alloa, were also to be present, but Dr. Duncanson did not arrive till after the patient was laid upon the table and the operation begun. With the view of allowing Dr. Wilson to give full assistance to Dr. Brotherston at the operation, I chloroformed the patient. In doing so I placed a single layer of towel over the nose and mouth, leaving the eyes exposed, and dropped the chloroform upon the towel. When Dr. Brotherston made his first cutaneous incision, the patient moved so much that he stopped for a brief time till I put the patient more deeply under the effects of the anæsthetic. The tumour was rapidly reached, and was then attempted to be diminished in size by tapping, but only a comparatively small quantity of fluid escaped. Dr. Brotherston then extended the opening upwards for an inch or more above the umbilicus, and was introducing and using his hand with the view of turning out the ovarian mass, when the patient vomited suddenly and profusely. Immediately the eyes opened, the pupils were preternaturally dilated, the face looked pallid, and the respiration, which had never been affected by the chloroform so as to have the least noise or stertor in it, seemed arrested. Instantly artificial respiration was set on foot, and the tongue pulled forward. Deep spontaneous respiration then occurred several times in succession, and I deemed at the moment that the patient was hence out of danger; but a second collapse occurred, which terminated in death, all means of resuscitation proving unavailing.

On a post-mortem examination of the body ordered by the legal authorities, no diseased conditions could be found in the head, chest, or elsewhere. The ovarian tumour was free from any peritoneal adhesions. On examining its structure, Dr. Pettigrew, the esteemed Pathologist of the Royal Infirmary of Edinburgh, found it to be cancerous in its character.

REMARKS.

Cases of Sudden Death during Surgical Operations without Anæsthetics.

In the first paper which I published on chloroform in the *Edinburgh Monthly Journal of Medical Science* for December, 1847, I stated that this drug, if given in too great or too long-continued doses, "would doubtless produce serious consequences, and even death;" and at the same time I expressed the hope that "its great potency would be one great safeguard against its abuse." Since that period I have exhibited it myself, or been present when it was exhibited, in several thousands of instances, but have not seen its employment terminate in death before the occurrence of the preceding unhappy case.

According to all the experimental and clinical observations which have been made, chloroform appears capable of destroying life in two ways—namely, (1) by asphyxia and (2) by syncope. Death by asphyxia can generally, if not always, be averted by at once arresting the inhalation of the drug whenever the breathing becomes noisy or stertorous—states which, as already mentioned, never occurred with the preceding patient. Death by syncope or sudden stoppage of the action of the heart is, doubtless, far less under control, and has apparently formed the principal cause of the fatal issues in almost all the cases in which patients have perished when under the use of chloroform. Perhaps fewer cases of syncope actually do occur under operations since the introduction of anæsthetics, because the nervous and sensory systems of the patients are so far obtunded by their employment that a patient is, I believe, in greater jeopardy, if syncope do happen, when he is under the influence of chloroform than when he is not under it, because the irritability and action of the heart are diminished by the free use of it, as shown by the lowering and slowing of the pulse. Yet when syncope does occur in chloroformed persons, artificial respiration and its accompaniments usually are sufficient to rally and restore the patient. When the preceding case was described by me at a late meeting of the Edinburgh Obstetrical Society, Dr. Gordon and Dr. Angus Macdonald each mentioned an instance in which sudden fainting took place, with pallor of the face, open eyes, and very dilated pupils, at the first commencement of the incisions in two slight operations—the one for the removal of a small tumour, the other for the incision of a carbuncle, and in neither case had the patient taken any unusual dose of chloroform. They both recovered under artificial respiration. Various analogous cases have been recorded.

But are all such cases of syncope that take place during operations, and which end or do not end in death, the result of the action of the chloroform which happens to be used at the time? The question is one which has never, perhaps, sufficiently attracted the attention of the Profession; for doubtless it is true that antecedently to the introduction of anæsthetics, patients sometimes died from syncope upon the operating table, both immediately before and after the operation was commenced, and under conditions and circumstances which in modern times, when anæsthetics are almost universally employed in operations, would be not unnaturally described and regarded as deaths from chloroform. Formerly, such sudden deaths under Surgical operations do not seem to have been looked upon as matters of moment, because, in fact, no special pathological or practical interest was attached to their occurrence. They were simply regarded as inevitable accidents, and are usually only incidentally alluded to, when alluded to at all by Surgical authors, provided they illustrate some special observation or opinion on the part of the writer. Thus, as showing how "violence alone without the loss of blood may often produce immediate fatal effects," John Hunter makes the following observation:—

Case 1.—"I have seen," writes Mr. Hunter, "a man thrown into such convulsions from the operation of the hydrocele being performed upon him that I began to despair of his recovery." I have known," he adds, "a man die immediately of castration." (See his works, vol. iii. p. 431.)

In the first volume of his work on Constitutional Irritation Mr. Travers cites several cases of sudden death in Surgical patients to illustrate different pathological principles to which he points. For example he gives the following:—

Case 2.—A robust middle-aged man, the subject of a moderate-sized aneurism in the femoral artery, was received into the London Hospital, and readily assented to the usual operation for that disease. On entering the theatre, however, he fainted

and had some wine and water given to him. The operation was then proceeded with; the artery was exposed, and the ligature applied, but not tightened. During the operation it was observed that no pulsation could be felt in the tumour, and on examining the patient more minutely it was found that he was quite dead. On dissection both sides of the heart were found empty, and the lungs turgid with blood. No other particular appearance was observable.

Case 3.—"I saw," again writes Mr. Travers, "a man who was the subject of strangulated hernia. He expired suddenly on the table during the steps preliminary to the operation, which, from the state of the symptoms and of the bowel as ascertained by examination after death, might be said to afford the fairest prospect of relief."

Case 4.—A man, who had been bitten in the finger by a cat, and in whom symptoms resembling those of hydrophobia had been present for twelve hours, submitted to the excision of the bitten part and died in three minutes.

Case 5.—A brewer's servant, a man of middle age and robust frame, suffered much agony for several days from a thecal abscess, occasioned by a splinter of wood penetrating beneath the nail of the thumb. A few seconds after the matter was discharged by a deep incision he raised himself by a convulsive effort from his bed and instantly expired. (See Travers "On Constitutional Irritation," vol. i. p. 25.)

These several cases are, as I have said, stated by Mr. Travers each to illustrate some special pathological principle; but they do not necessarily include all the cases of sudden death upon the operating-table which he may have seen or heard of, and which were not calculated in his opinion to point to any special Surgical fact. In former years, in talking with Surgeons who had seen many operations before the time of anæsthetics, I heard of various instances in which patients had been removed dead from the operating table. It is, perhaps, impossible now to collect adequate data to fix the probable frequency with which such accidents formerly happened. We may, perhaps, fairly infer, however, that they were not very rare, for, when attending specially to this question in the first six or eight years of anæsthesia in Surgery, the following cases occurred in Edinburgh and its neighbourhood.

Case 6.—Shortly before the introduction of anæsthetics into Surgical practice in 1846, my late friend, Dr. John Argyll Robertson, lecturer on Surgery, was asked to see a case of strangulated inguinal hernia in the practice of Dr. Thomson. The gentleman was removed from bed, and placed upon a table to facilitate the required operation. Dr. Robertson, before proceeding to use his scalpel, was employed in removing the hairs from the groin with a razor, when the patient suddenly complained of faintness, gasped, and died.

Case 7.—After discovering the anæsthetic effects of chloroform in November, 1847, I tested it in a case of tooth-pulling, but required to wait eight days before I had an opportunity of using it in the Hospital or elsewhere in any Surgical operations. A few days, however, after its discovery, a hernia, which had been strangulated for a few hours, was brought into the Infirmary, and Professor Miller thought it a case demanding operative interference, and one on which chloroform should be tried. But I could not be found in time for the purpose of giving it, and the patient was operated on without any anæsthetic. Professor Miller had only proceeded the length of dividing the skin, when the patient fainted, and died with the operation unfinished. If the chloroform had happened to be used and this fatal syncope had occurred while the patient was under its action, the whole career of the new anæsthetic would have been at once arrested.

Case 8.—Within a year or two afterwards, I saw, at my own house, a child with a large abscess in the neck, and I wrote to Dr. Pattison, the Medical attendant, to the effect that I thought it was sufficiently advanced to be opened. Next day, when about to open the collection of pus, the mother suggested that the child should first have some chloroform exhibited to it. Dr. Pattison had none with him, explained that the walls of the abscess were so thin that the operation would not give much pain, and put his lancet into the purulent swelling. The child immediately fainted, and died without any hæmorrhage or any other complication to account for the fatal syncope.

Case 9.—In a case belonging to Dr. Gilchrist, of Leith, I saw a Surgeon try to treat a sacculated aneurism at the root of the neck by a small quantity of hæmostatic injection. As the operation involved no cutting, no chloroform was used. The patient's respiration speedily became stertorous, and he died in a few minutes.

Case 10.—In 1853 Dr. Richard Mackenzie was called to see a patient who had shortly before fallen and fractured the radius. After examining the case, Dr. Mackenzie felt his pocket for his chloroform bottle, but found he had it not with him. Anxious not to lose time by sending for it, he forthwith adjusted the displaced ends of the bone, and applied splints and a bandage. A few minutes after leaving the patient's house, Dr. Mackenzie was suddenly recalled, and found the patient dead.

If in the preceding cases chloroform had happened to be employed, the fatal results would naturally by most minds have been attributed to the anæsthetic, and not to the operation or the condition of mind or body connected with the operation. Such cases, however, teach us at least that caution is required in our reasoning and inferences, seeing death may occur, and has occurred, in operations without chloroform and with phenomena quite similar to those ascribed to the action of chloroform. Most of the stronger drugs in the Pharmacopœia, as opium, elaterium, antimony, mercury, etc., are, proportionally to the number of cases in which they are used in full doses, as fatal as, or more fatal than, chloroform, but they are not so sudden, and hence not so terribly appalling in their dangerous and fatal effects. The number, for example, of lives lost yearly by the poisonous effects of opium, etc., is much greater than that lost by chloroform.(a) At our different drug manufactories in Edinburgh we have upwards of two million doses of chloroform manufactured annually, yet how rarely does a fatal result follow its use! Is there any other common or potent drug which could be given in full doses in two millions of instances per annum with greater impunity?

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

Part IV.

ON DISEASES OF THE KNEE THAT HAVE RECOVERED WITH ANCHYLOSIS AT A BAD ANGLE; WITH THEIR TREATMENT.

(*Continued from page* 177.)

The following cases illustrate what is by far of too common occurrence in Hospital practice, the natural recovery of a diseased knee-joint unguided by Surgical art—the anchylosis of a joint which, from neglect or incompetence on the part of the Surgeon, has been allowed to assume a position which renders the limb useless, if not an incumbrance; and which might have been prevented by Surgical skill.

Such cases as these we have here alluded to are too common. They unquestionably form a large proportion of the joint cases that apply for admission at a metropolitan Hospital. They are certainly not creditable to the Profession as a body, for it is a truth all will admit, that it is always in the power of the Surgeon to determine the position of a limb in early joint disease, although it may not be to direct the course of the disease. He can always, by Surgical appliances, fix the joint in a position that will render the limb useful, and thus, when a natural cure takes place, have nothing to undo or to regret.

I never see a case of joint disease in which, by natural processes, a cure has partially or completely taken place with the limb at a bad angle without feeling the case to be a standing reproach to the Surgical art; for it is too clear that such a result might have been prevented had due care been taken at an early period of the disease.

I shall give but two examples of this condition, although it would be easy to quote many from the number I possess.

Case 39.—*Dislocation of Tibia and Fibula backwards from Disease—Extension of the Limb, and Recovery with a Stiff Joint.*

Alfred B., aged 3½ years, came under my care at Guy's Hospital on February 16, 1863, for a knee-joint which had been the subject of disease for two and a half years, and had become

(a) In 1840, out of every 1,000,000 living in England and Wales 24 were poisoned by opium and 22 by other medicines improperly given to children below the age of five years (see "Seventh Annual Report of the Registrar-General," p. 82). In England and Wales, in the five years from 1863-67 there were poisoned by preparations of opium 632 individuals; by salts of lead, 242; by overdoses of medicine, 52; by strychnine, 41, etc. There were drowned during the same period, while bathing, 707 persons, while sliding or skating, 116; burned to death by clothes taking fire, 2194; killed by falls in walking, 194; suffocated by bedclothes, 2332 children; suffocated by overlaying, 682; died from "navel hæmorrhage," 572, etc. (see "Thirtieth Report of the Registrar-General," pp. 176-8).

fixed at a right angle. The joint had clearly been disorganised and dislocated backwards. Some little movement was present in the part. No progressive disease existed in the articulation, much natural repair having taken place.

On February 25, under the influence of chloroform, gradual extension was applied, the soft parts yielding gradually, with crepitation. The dislocation was reduced, and the limb placed on a posterior splint, nearly straight. Cold was applied and kept on.

No bad symptoms followed, and in three months he left, wearing a splint, with the joint fixed nearly straight.

Six months subsequently this patient's limb was quite sound. He could walk and run with it without more inconvenience than that caused by the stiffness of the articulation.

Case 40.—*Disease of both Knee-joints—Contraction of Limbs—Subsequent Extension.*

James P., aged 5½ years, was brought to me at Guy's Hospital on July 29, 1861, for disease of both knees. It appeared that when the child was only seven months old he fell off a table, and injured both his knees. Swelling appeared subsequently, and at a later date both joints became contracted, and as these symptoms did not improve, the child was brought to me.

When I saw him, both knees were swollen, and flexed upon the thighs at a right angle. Some little movement existed, and the joints moved smoothly, but any attempt at forcible extension caused pain. There was no effusion into the joint or thickening of the soft parts. The bones appeared to be somewhat expanded. Chloroform was given, and gradual extension was applied to both limbs, the legs in both instances being gradually brought down. They were subsequently fixed in splints. No inflammation followed this practice, as cold was applied, and in three months the child left the Hospital with stiff joints. He could walk on crutches, and bear the weight of his body on his limbs. But the stiffness was permanent.

This child was seen one year afterwards, and was in the same condition. He could then walk with one crutch and a stick.

Remarks.—These two cases well illustrate what I would wish in this paper to point out, for in both the cases a natural cure had taken place from disease of the knee, although in both, from neglect somewhere, the joints had been allowed to assume the bent position.

Had the joints been kept straight at an early period of the case when the natural repair was progressing, good and useful limbs in both instances would have been secured, and no further Surgical treatment would have been called for, but, as it was, an operation, not unattended with danger, had to be performed, although fortunately with a good result.

In both cases, with the patients under the influence of chloroform, extension of the limbs was performed, and a splint applied. In neither did any undue inflammation show itself, and in both a recovery with anchylosis took place. Such a form of practice is undoubtedly the right one to adopt in like cases, and in the majority the same good result may be looked for.

It has, however, fallen to my lot to see fresh inflammatory action frequently set up in a knee by the attempt of the Surgeon to bring the limb down to a better angle; and in certain cases the fresh inflammation went on to cause complete disorganisation and subsequent amputation.

In other cases the anchylosis is too firm, or the tendons too tense, to allow of extension; where the latter cause exists tenotomy may be performed with a good result, for it is better to divide a tendon than to lacerate it. I have the notes of a good many cases in which this practice was adopted with a good result.

Where the anchylosis is too firm, nothing can be done—that is, where the bones have united by bone, and synostosis has taken place.

Case 41.

I have had within the last three years two cases of complete bony anchylosis of the knee-joint under my care, with the leg fixed at a right angle to the thigh. One was in a young gentleman, aged 19, who consulted me in 1866. He had had disease in his knee ten years previously, which had suppurated and had been cured for years. No amount of extension or force that could be applied would have brought the limb down into a straight line without fracturing the bone, and the patient did not like to submit to resection of the part. He consequently is now going about wearing an iron fixed to the heel of his boot, with a limb that is a poor support and a source of sorrow, when by proper treatment at the first a splendid limb would doubtless have been secured; for natural processes would undoubtedly have acted as favourably for repair with the limb straight as they had clearly acted with the limb bent, and such an aid Surgical art could have supplied.

Case 42.—*Anchylosis, or rather Synostosis, of the Knee-joint—Leg Fixed at a Right Angle—Excision.*

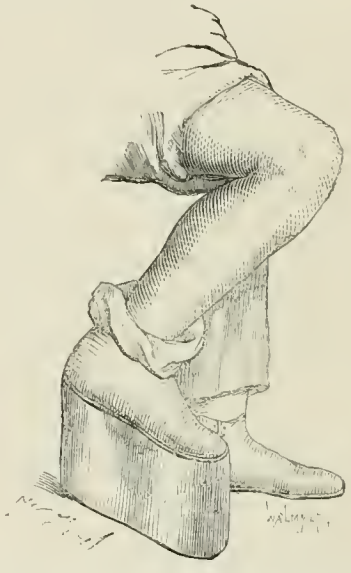
Dora C., aged 25, came under my care in 1866, and was admitted into Guy's Hospital in February, 1867, for a knee-joint that had been diseased many years previously, and had become fixed at a right angle. The position was so inconvenient that it rendered her incompetent to earn her living, and she requested relief.

The disease had appeared in the joint eighteen years previously, and had been attended with suppuration. The leg had been fixed in its present position for four or five years. It appeared immovable.

Nothing but the removal of a wedge of bone appeared feasible.

On April 2 the operation was performed, and the parts brought together. Pyæmia, however, subsequently occurred, and death on the tenth day.

The annexed drawing illustrates the position of the limb and the apparatus upon which she walked.



On the Treatment of Cases in which Malposition of the Knee-joint ensued as a Result of Disease.

In knee-joint disease it is a familiar fact that there is always a strong disposition for the leg to become flexed upon the thigh; and where this tendency is not neutralised by mechanical appliances and a natural cure with anchylosis takes place the leg may become permanently fixed at an obtuse or an acute angle with the femur.

In cases in which complete disorganisation of the joint has taken place, the tibia and fibula may become displaced backwards off the condyles of the femur, wholly or in part; whilst in others there will be a dislocation outwards and twisting of the leg with eversion of the foot.

The Surgeon, recognising these special tendencies of the diseased part, ought, in his treatment of every case of disease of the knee, to contrive to prevent them, for when they occur he has to remedy them.

It is this latter object we have now to consider; for there are some points of practice which merit close attention in the treatment of these cases of malplaced limbs.

In the first place it may be asserted with some confidence that where the knee-joint can be extended with gentleness no force should be used, and that, as a rule, gradual extension is to be preferred to that which is rapid and forcible.

In all cases chloroform should be given to the patient, for under such an influence all reflex or involuntary spasm of the muscles and all voluntary spasm are completely neutralised; the Surgeon being well able to estimate the amount of resistence he experiences, and to calculate the force that is required to bring down the limb.

When he finds the parts yield quietly without the sensation of laceration, he may confidently continue his extension, even to its completion, without much risk to the patient, and then

fix the limb in some immovable apparatus to complete the cure.

When he finds that, with all spasmodic muscular resistance neutralised, his efforts at extension are attended with an evident laceration of the parts by which the bones are united, and much force is needed, it is a wiser course to do a little at a time and to watch its effects than to break down and forcibly separate all uniting media, and complete at once the object he has in view. It is true good results at times follow these physical successes, but, at others, bad results ensue, and experience seems to indicate that the gentler method is the safer and, in the end, the best.

Where the flexor tendons are clearly so contracted as to prevent extension, they may be subcutaneously divided, for it is better to divide these parts than use such force as is needed to lacerate them, but this should not be done without an absolute necessity.

The operation requires care, for the peroneal nerve may be divided. I have seen this happen even in skilful hands.

When the limb has been brought down completely to the desired point, a splint must be adjusted to the back part of the limb and firmly secured, ice in a loose bag being applied over the joint to prevent or allay inflammatory action.

As soon as anchylosis is proceeding and all chances of inflammation have disappeared, a good leather casing may be applied, or any other light splint that will answer the purpose, the patient having to wear such an apparatus for many months during the perfecting of the cure.

When partial extension only has been carried out, a different sort of splint should be used—a splint with a hinge and screw behind the joint—the gradual extension being then made by means of this screw (a few turns daily), rapidly completing what the Surgeon has commenced, care being taken not to cause pain to the patient. Ice should be employed locally as before.

When the joint is so firmly fixed that no amount of extension will bring it down without causing a fracture, other measures may have to be adopted. In Case 42, already quoted, one form of practice has been illustrated. When the tibia and fibula are dislocated backwards, there is no room for entertaining any solid hope of restoring the limb to a good position. By care, and the accurate adjustment of a posterior screw-splint, or some one or other of the many ingenious instruments now used by Surgeons for the restoration of deformities, that of Mr. Biggs being the best, the bones may sometimes be restored to their normal position (*vide* Case 40); but such a result is far from common. It depends much upon the amount of repair the joint has undergone, and the strength of the uniting medium between the bones.

In a lateral dislocation I know of nothing that will be of use.

SCIATICA: ITS IMMEDIATE RELIEF AND RAPID CURE BY HYPODERMIC INJECTION OF MORPHIA.(a)

By HENRY LAWSON, M.D.,
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(*Continued from page* 31.)

Treatment.

Sciatica being, like cholera, one of those affections in which despairing therapeutists have ransacked the Pharmacopœia in an almost random and haphazard fashion, hoping from the mere doctrine of chances to stumble eventually on a cure, one has to deal with an unpleasantly wide range of facts in giving an account of its treatment. Perhaps, then, for convenience' sake, it may be advisable to group the methods of treatment under the four empirical heads of remedies administered—*a*, by the stomach; *b*, upon the skin; *c*, (1) underneath the skin (hypodermically or subcutaneously), or (2) into the substance of the skin (endermically), and (*d*) of hygiemic measures. Of these I need not say, for the title of the paper expresses it already, that the hypodermic method is the only one that I hold to have much real value in the therapeutics of sciatica. Nevertheless I will endeavour as briefly as I can to indicate my own experience of all these plans of attempting a cure of this affection, and firstly of medicines given by the mouth.

Of course there are "specifics" for sciatica. Thus we have turpentine, camphor, sulphur, iodide of potassium, arsenic, and the famous hypophosphites. There are many other favourites, but these are "sheet-anchors." Yet, I can honestly say, I never saw relief from pain follow the use of any of them; though, no doubt, each is of value in cases of special complications. Turpentine in minute doses, ♏x. ter die, is useful enough in certain cases of sciatica, where the general health is impaired by a condition of almost chronic tympanitis; under other circumstances my experience of it is not favourable, even in the negative sense of doing no harm. As I have already said, sciatica is not uncommonly coexistent with piles, and in such instances I have known even such small doses of turpentine as these productive of grave distress, and we all know that the system, at all events of private patients, cannot with impunity be regarded as a *corpus vile* for experimentation. Camphor is practically inert, so far as I have seen; it has indeed a very decided therapeutic effect, but in general sciatic pain it is simply a useless drug. Sulphur in bolus or emulsion I have tried often without the least result, save to give the patient some annoyance, from the fact—explain it how we may—that it is in some form, and that an offensive one, evolved by the skin for days after its administration. In the shape of sulphurous acid it is, as I have shown elsewhere, a most active remedy in water-brash, and hence in cases of sciatica accompanied by pyrosis—not an uncommon complication—it may be given in ʒj. doses ter die, with the best consequences.(b) For reasons already given I am opposed to the employment of iodide of potassium on the *à priori* grounds on which it is recommended. Where a syphilitic taint is suspected, it may for very just empirical reasons be given, and in whatever mysterious way it operates its effects will be certainly good; but so far as sciatic pain goes, my individual experience of the iodide is that it leaves the sufferer just as badly off as he was before, and in these cases, explained(?) by that convenient expression "idiosyncrasy," it is productive of much annoyance.

Arsenic, in my hand, has not redeemed its reputation. I have seen its use followed sometimes by gastric irritation, but I have not noticed that it gave rise to any improvement in the general condition of the body such as to justify the high encomium of those who laud it as a "nervine," and I am quite sure it has no influence over sciatic pain to warrant its prolonged use.(c)

As to the hypophosphites, I almost fear to offer my individual opinion, seeing that it is in opposition to those "having authority." But I must confess I have grave doubts of the active therapeutic virtues of a drug which declines to exhibit its powers save when it happens to be administered with cod-liver oil and other well-known nutrients. I have never found, either in my own case or in that of others, that it was really of any benefit in sciatica.

Of general remedies—such, for instance, as acids and alkalies—I have not much to say. I have never given them a very extended trial in ordinary cases, because their administration, so far as it had been carried, did not leave a favourable impression on my mind. Where there has been reason to assume that the pyrotic condition often met with in sciatica has been due to some state of the liver in which the biliary elements were distributed through the system, I have of course used nitric acid, and with good effect. Indeed, I know of no medicine whose therapeutic properties are so marked as those of nitric acid in the forms of gastric catarrh where the sclerotic is jaundiced. Its effects in such cases are decided and quick, but it must be given in doses ranging from ♏xxx. to ʒj. ter die. As a means of treating sciatica I have no faith in it whatever.

Alkalics are not infrequently given in sciatica, especially when, as in the complication above mentioned, acidity of

(a) It may be as well to state that in advocating the method of treatment described in the following article I lay no claim whatever to originality. I merely give the results of my experience of a remedy which is as simple as it is effective. The application of the syringe to the hypodermic method we owe, I suppose, to Hunter and Wood. The hypodermic administration of morphia in sciatica was urged by Dr. Blakiston in these pages nearly fifteen years ago. It is too much the custom now-a-days to father upon a writer the discovery of a remedy or plan which he has merely taken secondhand from another, but which he may have been more successful than his predecessor in popularising; and writers themselves too frequently encourage the mistaken inference. This has happened so often of late that one almost despairs of that moral regeneration in Medical writers which leads to the discrimination between reticence and candour.

(b) I am convinced, as I propose to show in a future paper, that water-brash is not connected with the development of *sarcina*, but with the presence of a large quantity of a fungus of the genus *Leptothrix* (?) which perforates the epithelial lining of the stomach, and by reason of its irritation causes increased secretion of watery matter. To this conclusion I am led by the microscopic examination of the epithelium deposited from many samples of water-brash exudation. In these the cells are covered with *leptothrix*, just as stones are covered with tufts of moss, and are perforated by what I suppose may be regarded as the mycelium of the fungus. *Sarcina* is very rare, but *bacteria* and *vibriones* are extremely abundant.

(c) I have tried Fowler's solution only. Possibly other preparations might be found more efficacious.

stomach prevails. This, I cannot help thinking, is a profound mistake. I should not object simply because it is the principle of treating a symptom, if it really did treat the symptom. But it does not do so. The acidity is in the stomach, and though a dose of sodæ bicarb. may relieve this for an hour or so, its effects are not more prolonged, and the source of the acidity—abnormal fermentation—remains, unless we would saturate the body with alkali. Because of this, then, I object to the use of alkali as a method of treating sciatica. It may do harm by interrupting the digestive functions, not to mention more serious accidents, and it can do no good that I know of. Under the head of alkalies I must be understood to include the mineral waters, at least provisionally. I have tried but a few of them, and though some of them are unquestionably refreshing, and in that way perhaps beneficial, I have not seen any result of import from their use, and I can see no theoretical grounds for their employment. Of the cases in which French hydropathists tell us that mineral waters have worked marvels, I am disposed to imagine that the writers have not very satisfactorily excluded the chances of their having cured rheumatic disorders rather than pure sciatica. But I am free to admit that more light is wanted on this particular branch of my subject.

In the group of nutrient tonics—cod-liver oil, iron, and quinine—we find a series of remedies which, as we might have imagined, are very valuable in sciatica, not because they arrest or diminish the pain, nor because, if employed alone or in combination with each other, they cure the disease, but from the fact that they help to maintain the nutrition of the body, which the agonising pain of the malady so greatly interrupts. In mild cases of sciatica, taken "in the bud," the administration of quinine and iron—say as the agreeable double citrate—or of either with cod-liver oil (d) will occasionally arrest the progress of the disease; and of all three, the oil, where it can be taken, is the most efficient. But in severe cases it is simply torturing a patient unnecessarily to confine our treatment to the giving of tonics, and we may be assured that, even though their administration will prevent that serious loss of flesh so common in aggravated sciatica, it will not give the patient that blessed rest and ease for which he cries so urgently.

Strychnia would not be termed a tonic, perhaps; but be that as it may, it has more claim to tonic virtues than many so-called tonics. It has little value in true sciatica, and in those cases in which it has been held to have produced good results there is a probability that the affection included more than I understand by the term sciatica. I would venture to suggest that in such cases the injured parts were not solely peripheral ones.

Next in order of importance to tonics in the treatment of sciatica come stimulants. Under this head I include alcoholic (not ordinary malt) liquors, ether, ammonia, opium or its preparations, Indian hemp, tea, coffee, and perhaps belladonna and hyoscyamus. Wines of all kinds, and especially the weaker forms and those that contain much sugar and extractive matter, I reject unequivocally as liquors to be distinctly avoided in the treatment of sciatica. I desire to express my opinion very decidedly in favour of the liberal administration of alcohol—whether as brandy or whisky—in severe sciatica. I was first led to this view of the matter by the advice of my friend Dr. Charles B. Radcliffe, and every day's experience teaches me its great value. Whether alcohol be a food or not I shall not take upon myself to determine, for I admit that the point is one which has yet to be demonstrated. I should be very sorry to conclude that because alcohol is eliminated as alcohol it is therefore either a poison or useless as a force-generator; as, likewise, I should not care to allege that because alcohol is oxidised in the body it is therefore a food.(e) But in the present phase of therapeutics I think we must be disciples of Mr. Gradgrind, and ask for facts; and I am confident that the facts demonstrated by the administration of alcohol in sciatica are facts most favourable to that administration. It is simply astonishing to find the quantity of alcohol that can be ingested in this disease, not only without damage to the system, so far as can be ascertained, but certainly without influencing injuriously the mental faculties of the patient. In one case I know that the patient, who had previously been most temperate, used to drink at least three-quarters of a bottle of proof brandy daily without being intoxicated or even "muddled," and stated that it diminished the pain. This course was persisted in for many weeks without any bad result. I by no means wish to quote it as a precedent, but I am as certain of this as I am of anything in therapeutics—the employment of alcohol in some pure form is to be uniformly insisted on in the treatment of sciatica. The dose must be proportionate to the patient's age, sex, and previous habit, but it should be a liberal daily allowance, and it should be given in divided doses frequently. Beer of all kinds I have found extremely objectionable, and wines, save those of high strength (not fortified, but natural strength), are to be avoided as far as possible.

Next to alcohol as an important stimulant comes ordinary sulphuric ether.(f) This, of course, does not either cure the disease or arrest the pain, but it makes it more bearable, if I may so express it. A great deal of the suffering in chronic sciatica is due to the mental irritability of the patient, who is continually brooding over his sufferings. Ether given in mxxx. doses three or four times a day (or in some cases in double this quantity) is a stimulant of some certainty, and is most comforting to the patient. I have not tried it very often, but it has seldom failed to give comfort to the patient, and, with the exception of occasionally producing excessive perspiration, it has had no unsatisfactory action.

(To be continued.)

(d) I used to give the potassio-tartrate with the oil, but I think the liquor ferri perchloridi a far more active preparation, and one which may be combined in emulsion with the oil.

(e) Those who insist that alcohol must undergo chemical change in order to produce force forget the fact—too much forgotten generally—that molecular changes may be very important factors in therapeutics. Very slight changes of temperature effect very great systemic changes, and it is a curious fact that the mere commixture of alcohol and water is attended by a considerable elevation of temperature.

ON RECURRENT INSANITY OF THE MORAL FACULTY.

By N. G. MERCER, M.D. Edinburgh,
Senior Assistant Medical Officer, County Lunatic Asylum, Lancaster.

Since the attention of students of Medical psychology was first called to moral insanity, the facts which go to prove its existence as a well-marked and distinct affection of mind have always been accumulating, so that no one is now disposed to doubt that the moral faculties of man may be, separately or in combination, distempered without any appreciable implication of the power of reasoning. If we consider the diversities existing in the dispositions of human beings, the great difference so frequently observed between the development of the strictly intellectual and that of the moral powers, and yet how very intimately these two sets of powers are blended in the production of one intelligent thinking agent, it will become obvious that an inquiry regarding the aberrations of pure and separate moral faculty is one of extreme difficulty. There are probably not two individuals living whose passions and dispositions are precisely equal in respect of their subjection to the will. Psychical distinctions are doubtless as well-marked as those which occur in the physiognomy. This analogy might proceed a step further, and we might say that, in like manner as the weakness of the intellect is reflected in the features of the face, and betrays itself in their expression, so is the moral character of the individual often unmistakably photographed in the countenance, and its baseness or beauty faithfully portrayed. In particular states of deviation from physical health, we must all of us be conscious of variations in our ordinary moods of mind. Given a certain collection of morbid symptoms—for example, in the intestinal canal—and we shall frequently find our temper more or less interfered with; our sympathy with friends, our principle of benevolence, our exercise of charity, our very ideas of conscientiousness may be more or less modified. In these, however, much will depend upon the temperament of the individual, and his degree of mental discipline and self-control.

Making due allowance for some amount of latitude in mental manifestations, such as an outburst of anger, dependent on a slight derangement of bodily health, we always expect, in persons whose minds are sane, that the passions and dispositions which lead to evil will be kept in such a state of subjection to the will, that society may tolerate if it cannot approve. In a state of recurrent moral insanity, however, the bounds are outrun; the passions and vicious habits of mind conspire in a general insurrection, which the government of volition is quite insufficient at all times to put down. I am now, therefore, concerned in showing that there exists an affection of the moral faculties of the mind, truly morbid in character—part of whose natural history it is to be recurrent in its attacks—and of

(f) I have not administered this in the manner recommended in a recent interesting paper in the *Practitioner*, but I mean to try this method in future cases, and I anticipate very excellent results.

which it is a remarkable feature that, during what may properly enough be called a lucid interval, the patient, if not a pattern of goodness or morality, may at least be a being of tolerably amiable disposition, and with some ordinary capacities of self-control.

The complaint is doubtless congenital in character, and probably no amount of the most painstaking education would ever succeed in totally obviating this tendency. I am unable to discover that Dr. Pritchard has distinctly noticed this variety of moral insanity. He mentions first of all "persons of a singular, wayward and eccentric character . . . . whose tempers and dispositions are found to have undergone a change;" and he afterwards adds, "The term 'moral insanity' must not be limited in its use to cases which are characterised by preternatural excitement of the temper and spirits. . . . . In fact, the varieties of moral insanity are perhaps as numerous as the modifications of feeling and passion in the human mind." Under this last extended range of meaning the form of disease which I am about to illustrate would undoubtedly be embraced. Dr. Pritchard then goes on to say that "the most frequent forms of the disease are those which are characterised by the form of excitement already described, or by the opposite of melancholy dejection," and these states "may alternate or supersede each other." In the form of disease now under consideration, although some radical defect in the moral organisation of the individual must be conceded, it is not of such a kind as would unfit him to be a member of society. He has a fair amount of perceptive and intellectual acuteness; no one knows better the distinction between right and wrong; but, during the attacks of his disease, the power to recognise this distinction is not so much completely ignored as utterly perverted.

I think the symptoms and features of the disease will be best displayed by giving some account of a patient in the asylum who exhibits them in a very marked manner.

The man is about 45 years of age, and in good bodily health. His faculties of perception are unusually sharp and cultivated, and, considering his limited sphere of observation for twenty years past, during which period he has been in the asylum, his intellect is tolerably acute. Although his advances in education have been extremely moderate, this is obviously not due so much to any obtuseness of his mental powers as to a perversity of disposition by which he has always been distinguished. There can be no doubt there are many men in the outer world engaged in occupations requiring the exercise of much intelligence, who are no better intellectually than the man in question. The ordinary and natural expression of his face is one of moral depravity. In his better mood, the sight of a friendly face or any pleasing occurrence, such as a gift of some money or tobacco, brings out at once the sunny side of his character. His face is soon arrayed with smiles, and he is ready to any extent with repartee and jest. Some very trifling influence, however, will turn the tide of his humour with a vengeance, and his being becomes straightway metamorphosed into something malevolent or fiendish. It appears an entire perversion of the moral nature. While the attack of moral insanity continues, the patient, if addressed by a friend or an acquaintance, will answer with an ominous scowl, and probably move on without any spoken reply, or he will break out into a torrent of abuse and obscenity, misrepresenting actions to which, in his better mood, he will cheerfully accord an extravagant degree of praise. To those in authority he is especially fierce and unrelenting, while, it may be, to a fellow patient, he will, at the same time, be as friendly and civil as usual. The attack varies in its duration, and frequently arises from some cause which amply accounts in his case for the train of symptoms. When more severe in kind or degree, respect for the commonest decencies of life is lost, the patient becoming destructive to clothing and offensive in his habits. This state of matters may exist for a couple of days or longer, and will in all probability cease, either after a free evacuation of the bowels or a night of sound sleep. Occasionally it will happen that some little extra act of kindness, say from one of the officers, will put a stop to it, and divert the current of his thoughts into a happier channel. When his mood is more incorrigible, however, and none of these circumstances is of any avail in bringing about the much-desired change, a magical effect may be produced by threatening him with a shower-bath. I have seen the patient filthy, abusive—almost violent, and with a countenance of most hideous import, suddenly converted into quite an amiable and reasoning creature by the mere mention or menace of a shower-bath. He becomes repentant, apologises for his conduct, goes to bed and passes a comfortable night, getting up in the morning a sadder and a wiser man. Although events often take this happy turn, however, it is a pity to be obliged to add that his madness is sometimes too excessive to be reached and remedied by such comparatively simple measures, and the attack is then of such a kind that not the mere threat alone of the salutary corrective, but also its fulfilment, has proved utterly ineffectual in restoring the better condition of his moral nature. He is then mostly left to the curative influence of time and forbearance, which never fail ere long to result in amendment. The cause, as I have said, is often sufficiently apparent, and is not seldom to be found in a fancied insult offered to him by any of those in whose care he is placed—in fact, he is morbidly sensitive to a personal affront, and one of the very slightest character may suffice to develop the moral insanity and make him disagreeable or troublesome for several days. The severity and continuance of the symptoms appear to be in direct proportion to the gravity of the cause by which they are occasioned. Thus a more emotional one producing an impression on his mind, will give rise to a transient and modified attack; a cause which originates in some physical condition will bring on a relapse, which is much more troublesome and much more prolonged. A good opportunity was afforded, some time ago, for observing the results which a very marked change in the physical conditions of his existence would produce on his mind. Ordinarily he leads an active and busy life, and assists in a variety of ways in the work of the ward, but he had then the misfortune to meet with an accident to his right hand, demanding instant amputation to the forearm. At the operation, he manifested a much greater amount of fortitude than was expected, and he bore the immediate suffering manfully. For a short while he was all that could be desired as a Surgical patient, seconding the efforts of his Medical attendants and nurses and carefully preserving the limb in the required position. Before the evening of the same day, however, he became perfectly outrageous in his conduct, making efforts to tear away dressings and remove ligatures and stitches, more with a view to distress and annoy his guardians than with any intention of doing himself an injury, although the latter result could scarcely fail to accrue. He swore all the people in the house for a parcel of butchers, and he should persist in his attempts to frustrate the plans of the doctors regarding their treatment of his arm. On this account it was not considered safe to leave him by himself, either by night or day, for some time after. His humour had never been known to be so variable, a few hours sometimes witnessing the change from cloud to sunshine. Thanks to a constitution naturally robust and sound, and to constant nursing, care, and watchfulness, he made an excellent recovery, and since then his state of mind has not varied much from that which existed prior to the amputation. The loss of his limb, however, has always afforded a fertile theme for his abusive tongue, when in the course of his daily life his moral constitution becomes perverted, and his mind is for a time alienated from the better feelings of humanity. When in his better mood, which is after all his prevalent one, he will talk cheerfully and gratefully of the state of his arm, extol his Medical attendants for their skill and kindness, and declare that but for their endeavours his life would have been sacrificed.

During the intervals between his attacks, I cannot claim for this man a by any means exemplary condition of his moral character. I am aware that there is at all times in his conduct a vein of depravity and vice; but, nevertheless, during these intervals he is obliging, jocular, observant, and such a person as, assuming a continuance of his better dispositions, might certainly exert such qualities of mind as would enable him to earn a livelihood in society. With an unusually careful upbringing, an unremitting attention to the elements of a moral and religious education, and pains-taking efforts at the most impressible period of life to beget approbation of a virtuous course of conduct, I think it not at all improbable that a good deal of his usual vicious habits during his lucid intervals might have been checked in development, although now beyond all hope of cure. That the attacks above described might ever have been obviated, or that he could ever have grown up into a man of uniformly correct habits and behaviour, it is impossible to believe. Yet how much is gained if, by timeous and well-directed and judicious endeavours, the mind may be so disciplined as in some measure to modify, if we cannot entirely prevent, a congenital proclivity to immorality or vice! Such inborn proclivity it is painful to have to recognise in this dreadful form, but it may be profitable to do so as early as possible.

The question of responsibility for crimes or offences could scarcely arise in a case so marked as the one I have recorded.

There is never in it, however, any such confusion of moral perception as an inability to distinguish between right and wrong. Acts of wrong are performed by the patient when his depraved mood is present, because there is a something in his mind which determines him to be troublesome, vicious, or cruel, which something no endowment of his mental being can resist or oppose. In minor cases of the disease, where the symptoms are less obvious and obtrusive, the question of responsibility would be one of extreme difficulty. As they are either not recognised, however, or are of uncommon occurrence, the subject need not be further alluded to here. The existence of delusions, of strange beliefs and opinions which are akin to delusions, eccentricities of conduct, and a variety of other circumstances, will, severally or combined, nearly always in practice assist in solving the question of responsibility. I do not now refer to the degree of skill or pains which may require to be exercised in discovering those aids to the solution of the question.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

HOSPITAL FOR CONSUMPTION, ETC., BROMPTON.

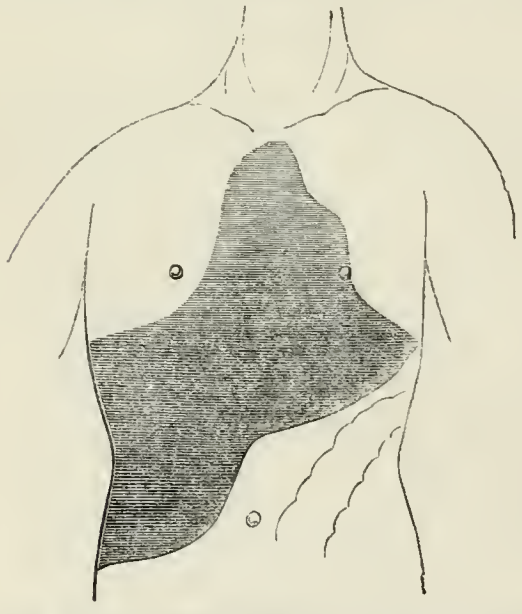
CASE OF DISPLACEMENT OF HEART AND LUNG FROM HYDATID DISEASE OF THE LIVER.

(Under the care of Dr. E. SYMES THOMPSON.)

[Communicated by WM. ROBERT SMITH, Resident Clinical Assistant.]

E. F., a porter, aged 29, was admitted into the Hospital for Consumption, Brompton, on August 30, 1869, suffering from cough, hæmoptysis, muco-purulent expectoration, night sweats, and dyspnœa. He complained of pain in the left side of the chest; the tongue was slightly furred, but there was no derangement of the digestive organs; pulse 80, of good volume. The right shoulder was lower than the left, and there was some flattening below the right clavicle; the movement of the whole left side was deficient.

Absolute dulness was found on percussion to extend from the right side of the sternum to the left nipple (see diagram),



extending throughout the hepatic and epigastric regions, and on the right side below the umbilicus. Tympanitic resonance was elicited on percussion below the sixth rib on the left side of the abdomen.

Auscultation.—Tubular breathing, with some humid crackles at the right apex. On the left, from the clavicle to the upper border of the second rib, there was prolonged expiration and some humid crepitation; from this point to the upper margin of the third rib cavernulous breathing with metallic voice, and humid crepitation with feeble respiration to the base. The respiratory sounds were absent, and the heart sounds loudly conducted over the region of dulness before mentioned, thus giving the impression of some intervening solid substance. The apex beat was in the third interspace.

The diagnosis made was, phthisis second stage right, third stage left, tumor thoracis (?), enlarged liver.

The patient improved under treatment, and, with the exception of increased crepitation and gurgling over the back of the left chest, the physical signs remained unchanged.

January 8, 1870.—This note was taken:—"Much better in general health; going home to-morrow." But about 7 p.m., after tea, was seized with vomiting, and died in ten minutes.

Autopsy Twenty-four Hours after Death.—Body well nourished. Right lung universally studded with miliary tubercle. There were several small cavities at the apex, and some disintegrating masses of cheesy deposit. Left pleura adherent universally, by strong fibrous bands posteriorly. The lung was converted into several large cavities filled with grumous blood. Towards the base there were several cheesy masses of tubercular deposit, each containing a central cavity communicating with a bronchus. Pericardium remarkably flaccid. Substance of heart soft; cavities flaccid and empty, the left ventricle only containing a small decolorised clot. Stomach displaced backwards, the transverse colon extending obliquely across the abdomen in the line of tympanitic resonance noticed during life (see diagram). Liver much enlarged, the right lobe extending nearly to the iliac crest. Left lobe occupied by an hydatid cyst, containing very little fluid, but a number of secondary cysts about the size of a Tangerine orange and of a yellow colour. The cyst extended to the lower margin of the fourth rib, displacing the heart upwards and to the left side, and likewise forwards against the thoracic walls. Spleen large and pultaceous. Mediastinal glands enlarged.

The post-mortem examination threw no light on the immediate cause of death. The question arose, in making the diagnosis, whether the cardiac displacement was due to the contraction of a cavity in the left lung or to upward pressure. The dulness on percussion was most marked inferiorly; but although the liver was manifestly enlarged, there was no disturbance of digestion, no history of hepatic disease, or evidence of tumour, or of vibratile thrill, as in hydatid disease. From the flaccidity of the cyst, and its position beneath the ribs, no thrill could have existed, and the great enlargement of the liver, without hepatic symptoms, could alone have suggested the nature of the case.

EVELINA HOSPITAL FOR SICK CHILDREN.

CASES OF LARYNGITIS.

(Under the care of Dr. HILTON FAGGE and Dr. DOUGLAS POWELL.)

For the following notes we are indebted to the kindness of Mr. Goodhart, House-Surgeon to the Hospital.

The following cases are of interest for two reasons—primarily because they are uncommon, and secondarily because they exemplify a difficulty not easily got over—viz., laryngoscopy in children.

The laryngoscope having taught us almost all we know concerning laryngeal disease, it becomes a question, when children are concerned, and when the examination of the throat by artificial means is impossible, as to how a diagnosis can be arrived at without it—a consideration of no small importance to the patient; indeed, in Case 1, involving the question of slitting up the larynx or not.

It will be seen that these children had two symptoms in common—obstruction about the larynx and chronic enlargement of the tonsils. In the first, complete recovery ensued upon the performance of tracheotomy, thus proving that inflammatory swelling, rather than any new growth, was the exciting cause. In the second, death resulted, and the thickening about the rima glottidis was found on a post-mortem examination.

It has been said that these cases are uncommon, and, in one sense, this is no doubt true, for on looking through the *Transactions* of the Pathological Society no such cases are to be found; neither is mention made of any similar condition in the Sydenham Society's translation of Czermak, but it is probable that the reason of such absence of recorded cases may be attributed to the fact that, while extremes like the present are rarely seen,

the slighter forms are of daily occurrence. One cannot, indeed, get rid of the idea that such cases are closely allied to the croup (:) which tends to recovery. For instance, it is no uncommon thing in private practice to be told that a certain child is subject to croup. Now this can only convey one idea to the mind, that the subject of this oft-recurring trouble has some permanent—or chronic, if you will—condition about the larynx, which, upon the occurrence of any fresh disease, no matter how slight, renders him liable to attacks of dyspnœa.

I am not aware that enlarged tonsils have been observed to accompany this spurious croup, but, were it so, it would be very much in favour of the view indicated by these cases, that disease of the larynx was secondary to disease of the tonsils.

Case 1.—Ada H., aged 7½ years, admitted under Dr. Hilton Fagge, August 31, 1869. Her father died from stricture, and her mother had three miscarriages between the eldest child and the patient. Both father and mother were subject to sore throats, but no further evidence of syphilis could be elicited. The child was quite well two months ago. She then had a bad cold and sore throat, accompanied by much earache. She soon began to breathe noisily, but this condition was aggravated when she slept. No cyanosis had been noticed, but at times the dyspnœa had been very extreme, especially whilst coughing. She had scarlatina three years ago, and recovered completely. She has also had hooping-cough, measles, and chicken-pox. She is worse when the weather is cold, and she is wasting.

August 20.—She made her first appearance among Dr. Kelly's out-patients. She had, to judge from the noise, much difficulty in filling her chest, both inspiration and expiration being loud, long, and hissing. Slight sucking in of the supra-sternal space was noticed, and there was some enlargement of the tonsils, but not to an inconvenient extent. She was ordered tinct. belladonnæ ♏ xv., aquæ ad ℥ ss. t. d.

31st.—She was admitted. State on admission: Breathing easily when quiet, with only a very slight roughness of the inspiratory murmur. Directly she coughs or exerts herself she becomes more distressed. There is no blueness of the surface, and no enlargement or distension of the cutaneous veins. The supra-sternal and lower intercostal spaces are slightly drawn in during inspiration. The chest is slightly rickety; the percussion note is somewhat dull over the upper part of the sternum, more on the left side than the right. Respiration is noisy on auscultation, and breathing is feeble at both bases. The tonsils are large, but there is a free passage between them. There is no injection of the fauces, and no abnormality to be felt by the finger about the larynx. To take ammonii bromid. gr. xv., aquæ ad ℥ ss. ter die.

September 4.—Dr. Fagge examined her by the laryngoscope, but she was very troublesome, and very little could be detected. Tinct. iodi co. to be painted over neck night and morning.

6th.—Re-examined to-day. The epiglottis was seen to be thickened, curled up, and red. No other abnormality could be seen.

10th.—Hydrarg. c. cretâ gr. ij., pulv. Doveri gr. ij., in pulv. j. ter die.

13th.—The child has been very much worse the last few days, and now she seems in imminent danger of being suffocated. She has had very little sleep for two or three nights—the dyspnœa has been so severe. 4.30 p.m.: Tracheotomy was performed by the House-Surgeon, a small amount of chloroform being previously inhaled. A medium-sized Fuller's tube was inserted, and the relief was immediate, the chest expanding fully. She was ordered injections of egg and beef-tea for twenty-four hours, after which she was allowed thick fluid diet.

18th.—Breathing quite comfortably. To have meat diet.

22nd.—She was examined by the laryngoscope by Dr. Fagge and Mr. Willett, but no further abnormality than much redness existed. The throat is to be well touched with a solution of nitrate of silver, ten grains to the ounce.

The tube was taken out for two hours on the 26th, and for a gradually increasing time daily till the 29th, when it was removed altogether. She continues the nitrate of silver by the inhalation of spray.

October 2.—Beginning to talk a little.

She went out well on the 24th.

December 13.—The child came to the out-patient room to-day. She has remained free from any difficulty of breathing ever since, and she is able to talk well.

Case 2.—George S., aged 6 months, came under the care of Dr. Powell on October 11, 1869. The mother states that the child's breathing has been bad for four months. There is now much noise during expiration and inspiration, but it is more like a very harsh mucous râle in the larynx than as if it were due to any positive obstruction. The face is pale, and the lips slightly blue. It is being brought up by hand, and takes the bottle well. There is much coarse crepitation at both bases. It was ordered mist. ipecac. c ammoniâ ℥ j. quater quotidie.

October 21.—Is in much the same condition. To have some mercury ointment applied on flannel to the abdomen.

25th.—Respiration is weaker, and there is now marked recession of the ribs during inspiration. The laryngeal noise continues as bad as ever. Ordered pulv. ipecac. gr. vj. statim. ℞ Pot. iodidi gr. ij., tinct. hyoscyami ♏ iv. ex mist. potassæ citratis ℥ j. quater quotidie.

28th.—Has some diarrhœa to-day. The dyspnœa is now more evident. Tracheotomy was discussed, but as the moist sounds over the lungs were so general the operation was deemed inexpedient.

Death took place on October 31.

The post-mortem was made at the child's home November 1, 1869. On removing the larynx, fauces, etc., the tonsils were seen to be large and white; over the surface of both were numerous small irregular ulcers, covered with a thin layer of yellowish pus. These did not extend deeply into the tissue, the glands below the surface being healthy. The aperture of the glottis was reduced to about half its proper size (the opening not being much more than ⅛th of an inch) by a bulging inwards towards the median line of the arytæno-epiglottidean folds. On section these were found to be solid and fleshy, but no new growth was apparent in them, the section being pellucid, looking and taking more the condition of solid œdema. The epiglottis itself was curled up, but no marked thickening existed about it. The vocal cords were healthy. The trachea contained some purulent mucus, but no false membrane was detected. There was much pleuro-pneumonia at both bases, the right base being the worse of the two.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 26, 1870.

WORK FOR THE GENERAL MEDICAL COUNCIL.

The meeting of the General Medical Council, summoned in consequence of the letter of the Lord President of the Privy Council, can scarcely fail to be a turning-point in the history of the Medical Profession in these islands. One of two courses is open to the members of that Council and the bodies they represent—either, by a new combination of the existing elements, to form examining boards for each division of the Kingdom, which may safely challenge criticism, and in which both the public and the Profession will have perfect confidence; or they must be prepared at no great distance of time to resign into the hands of the Government the power of admitting persons to the public practice of the Profession of Medicine. The latter alternative would place trammels and restrictions upon Medicine which are not borne by any other profession or calling except those paid by the Government, and would undoubtedly remove beyond the control of Professional opinion the admission to Professional ranks. Unless things remain *in statu*

quo, which, after the present agitation, seems impossible, there is no middle course to be taken. We hear much of the benefits which would accrue from the formation of a board independently of the corporations. But, in the first place, setting aside the manifest injustice of such a scheme, who, we ask, is to nominate such a board? The Government? Then the members of the Board would be Government nominees, and, according to the whim of the Prime Minister of the day, a homœopathic or hydropathic or orthodox Practitioner might be appointed to examine in Medicine. The General Medical Council? But the General Medical Council is in large part nominated by the very bodies whose functions and privileges it is sought to abolish. Is it to be supposed that the General Medical Council would go elsewhere than to their own constituencies for the members of the new board? In fact, it is idle to imagine that, in any new distribution of power, the men who at present conduct examinations at universities and colleges and halls would not—at least a proportion of them—reappear as examiners. The evil in the present system lies in the multiplicity of examinations, and the want of a uniform standard of Medical education amongst young men entering the Profession. This evil may be removed by the conjoint scheme if it be faithfully and liberally carried out in a spirit of mutual conciliation, and the adhesion of all the existing bodies be obtained. But whilst any one body, or any one division of the Kingdom, holds itself aloof, the evils are not remedied. In order to obtain a uniform standard, it has been proposed that the General Medical Council should examine all applicants for registration before it admits them to the Register; but this would add to, instead of diminishing, the number of examinations, and any board of examiners appointed by the Medical Council could only be culled from existing boards. The conjoint scheme, as we have said, offers the only escape from the dilemmas which present on all sides; and if the General Medical Council values its own prestige—nay, existence—it will not separate without returning an answer to the Lord President that an amicable and satisfactory treaty between the existing bodies in England, Scotland, and Ireland has been ratified.

LIEBIG ON FERMENTATION.

An important paper by Baron Liebig was laid before the Bavarian Academy of Sciences a short time ago, and is to be found in the January number of the *Annalen der Chemie und Pharmacie*. According to commonly received doctrines, fermentation is a vital act, the transformation of grape sugar into alcohol and carbonic acid being a part of the development of the yeast plant. Though commonly ascribed to Pasteur, who is its most prominent supporter, this theory is, in reality, an old one, having been enunciated with the utmost distinctness before Pasteur's time. In opposition to it, Liebig brings forward the following formidable objection: The yeast plant consists in great part of highly nitrogenised material, containing, moreover, sulphur and an appreciable amount of phosphates. Now, the yeast plant will bring about fermentation even in a pure solution of sugar. The yeast plant cannot grow when it is not supplied with nitrogenous matter and phosphates; therefore the transformation of sugar into alcohol and carbonic acid cannot be a part of the growth of the plant, and must be due to something else.

In order to exhibit the utter inadequacy of the amount of growth of the yeast plant to admit of fermentation being looked upon as a part of that development, Liebig quotes one of Pasteur's experiments. 9899 milligrammes of sugar were fully decomposed by the action of a very little yeast, and after the termination of the fermentation the quantity of yeast plant was weighed, and found to be 152 milligrammes. Of these 152 milligrammes, less than 30 milligrammes consisted of cellulose. Liebig asks, are we to regard the assimilation of this 30 milligrammes of cellulose as the reason of the conversion of 9869 milligrammes of sugar into carbonic acid and alcohol?

Yeast is capable of causing a breaking-up of malate of lime into carbonic acid, carbonate, acetate, and succinate of lime. A number of other chemical transformations are also effected by the action of yeast upon various organic substances.

Liebig's theory of fermentation is that it is a purely chemical or physico-chemical process. The breaking up of sugar into carbonic acid and alcohol he places side by side with the decomposition of anhydrous acetic acid into acetone and carbonic acid (a change brought about by heat), and with the change of an aqueous solution of cyanogen gas into oxamide, which is brought about by the action of the merest trace of aldehyde.

Just as the *vibration* produced by the aldehyde determines the rearrangement of the atoms of cyanogen and water so as to constitute oxamide, so Liebig regards the rearrangement of the atoms of sugar as the result of a vibration produced by the chemical changes which take place in some unstable substance produced by the yeast-plant. The growth of the yeast-plant is, according to this idea, only remotely connected with the process of fermentation. We quote the following passage from Liebig's paper:—

"It is possible that the physiological process stands in no other relation to the process of fermentation than that, by means of it, a substance is formed in the living cell, which, by an action peculiar to it—resembling that of emulsin on salicin or amygdalin—determines the decomposition of sugar and other organic atoms. In such a case the physiological action would be necessary for the production of this substance, but would be otherwise unconnected with the fermentation properly so called."

In harmony with this view, Liebig finds that the "washings" of yeast (which contain no yeast-plant) have the property of instantly converting cane-sugar into grape-sugar. And, holding to his theory, he anticipates that other very alterable complex substances, besides products of the yeast-plant, will be found to possess the property of setting up that vibration which rearranges grape-sugar into alcohol and carbonic acid, and which we call the process of alcoholic fermentation.

In a footnote Liebig calls the attention of chemists to Schunck's observations on the peculiar ferment occurring in madder, and which seems to possess the property in question.

THE TEXAS CATTLE DISEASE.

The simultaneous occurrence in New York in the summer of 1868 of an immense amount of sudden and fatal diarrhœal disorders, and a report that the herd-yards of the city contained numerous diseased and dying beasts, with the probability that the carcases of the latter were being used for the supply of the butchers' shops, gave occasion for an investigation which promises to be of great service to human pathology and to the extension of epidemiological knowledge. In the summary we are about to give of the disease under which these beasts were found to be suffering, we shall not follow the order of events as detailed in the admirable report of the New York Commission, but shall throw our remarks into a form more convenient for the purpose of displaying the nature of the disease and its mode of communication and progress. The earliest published account of the disease was given by Dr. Badger, of Vernon County, Missouri, in 1866. The disease was first recognised there as having been propagated by cattle driven from Texas in 1852 or 1853, although known in the country two years previously. From the first it was found confined to the great highways from the South, and finally it was discovered to be confined to one highway through the country, over which Texas cattle had passed in 1853. During the four years of the "war of rebellion" the disease

entirely ceased. It reappeared in the autumn of 1865, when two pairs of oxen bought in the South infected some herds. In June, 1866, a drove of Texas cattle passed through Vernon County and about eight miles into the adjoining county of Bates, when the citizens compelled them to return by the road they came. Six weeks afterwards the disease appeared in the native herds, extending to the very point on the roadside at which the beasts were turned back, but no further. In fact, it appears that wherever Texas cattle pass the disease appears in the native cattle passing over the same roads or pasturing where these beasts have previously pastured. The symptoms presented by diseased animals are thus summarised by Dr. Moreau Morris :—"Generally standing apart from their fellows, listless, indifferent to surrounding objects, restless; evidently desirous to lie down, but fearing to do so until compelled to yield by rapidly waning strength; the head hanging low, frequently within an inch of the ground, or occasionally pressed firmly against some unyielding object; the base of the horns hot, the ears drooping, the eyes dull and staring; the spine or back peculiarly arched, the hinder feet being drawn under the body and placed in a bracing attitude; a tremulous creeping over the flank muscles, with frequent efforts at voiding fæces, which are generally small, hard, and rounded, and covered with bloody mucus, though there is sometimes considerable looseness of the bowels, during some stages of the disease; frequently passing urine of a dark bloody appearance. The pulse is rapid, very soft and feeble, respirations frequent, and, during hot weather, panting without exertion. The temperature both externally and internally increased. Flies are also observed to adhere to the animals, who seem either unconscious of their presence, or too feeble to drive them off." About 80 per cent. of the native cattle attacked have been observed to die. The rest recover after a prolonged convalescence. "When animals dead of this disease are examined, even three or four hours after death has naturally taken place, it is found that there has been such rapid decomposition that the special pathognomonic signs have become almost entirely obliterated, so rapidly does the peculiar activity of this poison destroy vital tissues." When an animal is slaughtered, the blood as it flows from the carotid or aorta is found of a very high temperature, reaching in some cases to 107° Fahr. or higher. The muscular tissue is dark red, and the fat of a deep brown-yellow colour, having in intense cases a green bronzed tinge; the spleen is enlarged, more or less engorged with dark-coloured blood, and softened frequently to pulpiness; the abomasum or fourth stomach, upon its inner tubulo-pyloric portion, invariably presents sloughy erosions and deep excavated ulcers of various forms and extent, with more or less inflammatory appearances of the larger and more vascular portion; the kidneys generally enlarged, dark-coloured, congested with blood, and the cortical substance usually softened; the liver enlarged and increased in weight, generally fatty or waxy, its bile-ducts and radicles fully injected with bile, its colour changed to a yellowish-brown; the gall-bladder filled with a dark, thick, tarry, or flaky bile; the bladder distended, with dark, bloody, excessively albuminous urine; the intestinal canal in its various portions congested and its epithelium softened; the muscular tissue of the heart sometimes softened; the lungs generally healthy, but in some intense cases exhibiting interlobular emphysema; the brain in some cases congested and softened; the blood, flowing when the animals have been slaughtered, coagulated firmly without a buffy coat; in no case did the fibrine seem impaired; the blood discs, however, were always more or less deeply modified, being shrivelled or crenated. "In one case many of the discs appeared to have lost a portion of their substance, as if a circular piece had been punched out, the addition of water failing to restore the disc to its completeness." The liquor sanguinis was invariably of a yellower colour than natural. "In several instances defibrinated blood or serum poured from a clot which originally abounded in corpuscles, was found in a few hours to be absolutely devoid of the latter, complete dissolution of the red discs having taken place long before putrefaction."

The pathological conclusions arrived at are that "the Texas cattle disease is an acute infectious febrile disorder, attended by morbid action of the liver, its most distinctive phenomena being explicable as the results of the hepatic affection. The dissolution of the colouring matter of the blood corpuscles in the liquor sanguinis and the hæmaturia are consequent upon the entrance of bile into the bloodvessels, in whatever manner effected. . . . That bile is mingled with the blood is proved by the yellow colour of the serum, its yellow flocculi, its crystals of cholesterine, by the yellow drops in the epithelium of the tubuli uriniferi, by the yellow granules in the spleen, and by the hæmaturia. . . . That the greatest facility exists for admixture of bile with the blood is shown by the repletion of the reticulum of bile ducts in immediate contact with the capillaries of the liver, as well as by the abundance of bile exposed to absorption by the mucous membrane of the intestines."

From comparing the pathological characters of the human and bovine disease, Dr. Stiles has arrived at the conclusion that the Texas disease is the "yellow fever" of cattle, and hence an additional interest becomes attached to that branch of the investigation which is concerned with the etiology of the disease. We particularly allude to the fungus theory of Professor Hallier, and the evidence afforded of a ground-incubation of the contagium. Very early in the inquiry Dr. Stiles discovered in the diseased bile, and in the blood even when quite fresh, minute vegetable germs, the development of which, under various conditions, has been studied both by him and by Professor Hallier. The report of the New York Board of Health contains a full account of these inquiries, and figures of the fungus, which has been named *Coniothecium Stilesianum*, in its various stages of development, are given in some well-executed plates. It is suggested that the germs of this fungus, developing luxuriantly in the bile, and voided with the fæces, may be the source of contagion which proves so fatal in the western pastures where Texas cattle have occupied them in advance of native herds. That Texas cattle should communicate the disease while in a state of apparent health, and that northern cattle dying from the virulence of the infection should be, as a rule, incapable of communicating it, can be readily understood on the hypothesis that a definite stage or amount of development is required by the organic germs of the contagion before they become capable of giving off the infectious spores by which it is propagated. Dr. Harris adds: "Ultimately it may, and probably will, be discovered that the native habitat and source of this parasite is in the limited districts of country south of Missouri, Kansas, and Arkansas, and that it is a parasite of the indigenous herbage of those districts." The theory of ground-incubation, which is that the germs, dropped "unripe" upon the surface of the soil or herbage, undergo there a maturation and development which renders them infectious, corresponds with the fact of the period observed to elapse between the passage of Texas herds and the outbreak of disease in the native cattle. Neither is it out of accord with the cholera theory of Professor Pettenkofer.

Altogether we must say that the inquiry instituted on the spur of emergency by the New York Board without any special preparation, and with the staff of sanitary officers provided for the ordinary work of the bureau, is in the highest degree creditable to their scientific qualifications, and to transatlantic pathology. These investigators seem to have made a most important step towards the solution of a question which has, perhaps, been discussed more fully and with more heat than any other in etiology. We allude to the mode of origin and contagiousness of yellow fever.

THE WEEK.

TOPICS OF THE DAY.

We entertained a hope that at the time of our going to press we should have been enabled to announce that a conjoint scheme proposed by the Royal Colleges of Physicians and Surgeons had been accepted by the Universities and the Society of Apothecaries. The principles of the original scheme, we believe, have met with general acceptance, but we regret to hear that there is a hitch as to details. The Apothecaries' Act of 1815 gave the Society of Apothecaries the right to examine candidates for their licence *in the science and practice of Medicine*. Of this the Royal College of Physicians seeks to deprive that body by claiming to itself the sole right to nominate examiners in Medicine. The Society of Apothecaries, it is clear, cannot, even if they would, resign a duty which has been assigned to them by a special Act of Parliament, and confirmed by a second Act of Parliament—that of 1858. It is not, moreover, to be expected that the Society should, at the bidding of the royal colleges, resign the fruits of more than half a century's excellent work; and their conduct would be deservedly reprobated by the eight thousand gentlemen practising Medicine with their licence did they consent to cast a slur on that licence by consenting to forego the nomination of some of the examiners who are to test the knowledge of candidates in the most important subject in which the Society has hitherto examined. We can scarcely conceive that this difficulty will be allowed to shipwreck an otherwise excellent scheme, or that the Royal College of Physicians will be willing to lose the character for liberality and fair dealing which it has hitherto enjoyed. The dispute is the more unnecessary as a large proportion of the gentlemen who would be eligible for nomination as examiners by the Society of Apothecaries are Medical graduates of British Universities, or Fellows or Members of Royal Colleges of Physicians. If it could be for one moment maintained that the Society of Apothecaries had failed in its duty, and that its examinations in Medicine had been inadequate, we should rejoice to see it put out of court. But, as the case stands, it is a matter of sheer justice, and, if it cannot be obtained in any other way, we would strongly recommend that the Society should appeal to the Lord President of the Privy Council, the General Medical Council, and, if necessary, to Parliament.

We are glad to learn that each of the British Universities, if the scheme be carried into effect, will have the right of sending an assessor or examiner to the conjoint Board. Another good feature in the scheme is that it proposes a Committee of Examinations—a sort of inner Council, to preside over and direct the work of the conjoint Board—which Committee it is intended shall consist of the Presidents of the two Royal Colleges, *ex-officio* members, and a representative from each University and Corporation.

From Scotland, however, we have before us printed evidence that the Universities regard the rearrangement of examinations and the formation of a conjoint Board with unqualified dislike. The Universities of Edinburgh and Aberdeen have published and circulated their objections. Many of these, we think, would be removed by giving the University professors seats at the examining board either as assessors or examiners and by giving the Universities a fair share of the fees. Other objections pale before the facts that in Scotland there is probably a greater difference in the standard of Medical education and examination than in either of the other divisions of the kingdom, and that the conjoint action in the matter of examining which has been established between certain of the Scottish corporations does not compel the student to take the double qualification, but leaves him free to obtain, if he choose, a single certificate in Medicine or Surgery.

We are very glad to hear as the fruit of recent legislation in the Council of the Royal College of Surgeons that a numerously and respectably signed memorial has been presented to the Council requesting that a meeting of Fellows and Members may be convened for the purpose of discussing the position of the College in reference to the scheme of a single examining board for each division of the kingdom. We are very glad, we say, to see that the Surgical Profession generally are showing due interest not only in matters which directly affect their own College, but in a question which is of great importance to the Profession generally. We fear, however, that in the present instance the effort may have been made too late. Before a meeting can possibly be convened the scheme which has been prepared by the Committees of the two Royal Colleges ought to have been modified and accepted by the Universities and Society of Apothecaries, to have been presented to the Medical Council, and no longer to be in the hands of the College of Surgeons.

It is a matter of regret that the formation of an Academy of Medicine out of the existing Medical societies seems as far off as ever. At a recent meeting of the delegates of the societies a resolution for the formation of separate Medical and Surgical sections was carried by a majority of seven to five. But the non-separation of Medicine from Surgery is insisted on, we find, by a majority of the Medical and Chirurgical Society, who, as it would seem, under the influence of the name of their Society, insist that the Surgical and Medical sections shall be united. For ourselves, we confess that we have little sympathy with this view. Although the healing art is one, Medicine and Surgery have from time immemorial been and are practised separately. It is a matter of convenience that they should be so. To a Physician it might be a hardship to sit out a paper on the relative merits of the different modes of amputating or performing lithotomy; whilst many a Surgeon might think he could employ his time better than in yawning through a communication on presystolic murmurs. Besides, there is the example of the British Medical Association, in which the establishment of sections in Medicine and Surgery has tended materially to the popularity and effective work of each. If another example were required we might cite that of the Parisian Academy of Medicine and the Parisian Society of Surgery, which are separate bodies. If Medicine and Surgery are to be kept united, why is Obstetric Medicine, which, in the present day, is as important a branch of practice as either, to be relegated to a separate section? We confess that we think that the union between the two branches of the Profession to the exclusion of other departments, in compliance with the traditions of the Medical and Chirurgical Society, is a point that might well be surrendered to bring about a true union of all in one Academy of Medicine.

The case of Dr. Williams *v.* the Duke and Duchess of Somerset was brought to a satisfactory termination in the Court of Exchequer on Thursday morning. The Duke and Duchess, by Mr. Hawkins, made an ample apology, and expressed their regret for the publication of the outrageous and reckless libel the Duchess had published. Dr. Williams, by the Solicitor-General, accepted the apology and damages sufficient to carry the costs of the action. In this matter throughout, Dr. Williams is entitled to the thanks of the Profession for his vindication of Professional character and Professional honour assailed in his person.

ILL-TREATMENT OF A LUNATIC.

The *Leicester Advertiser* contains an account of the ill-treatment of a lunatic at Loughborough. The poor fellow, 60 years of age, was found by two Commissioners of Lunacy in an attic, crouching with his knees up to his chin upon an iron bedstead, completely denuded of every article of clothing, not a rag upon him, no bed or clothes except a piece of old cloth to lie upon. There he was, an attenuated piece of humanity, the picture of death, doubled up, and in a loathsome place worse than the grave. The floor had to serve for all purposes, being covered with filth, and emitting a stench worse than any charnel-house.

The poor fellow was removed to the workhouse, and the persons who had charge of him are committed for trial.

ARMY MEDICAL DEPARTMENT.—COMING EVENTS.

A STATEMENT which appeared in a military contemporary last week, to the effect that Medical officers are no longer to be borne on the strength of the regimental staff of cavalry or infantry, is, we believe, quite correct, and is an indication of still further impending changes in the organisation of the Department and of its approaching consolidation into a separate corps. For some such change we have for a long time been prepared, and we believe it will ultimately be beneficial, although it may at first be unpopular with individuals. The Army estimates for 1870-71 show a decrease of £10,500 in the expenditure for the Medical staff. The number of Medical officers of all ranks for the ensuing financial year will be 587, being 49 less than during the year 1869-70, of whom 4 are Surgeons and 45 Assistant-Surgeons. Instead, however, of these officers being placed on half-pay, they are retained as supernumeraries, and must be absorbed before any promotions or admissions to the service can take place. The charges for the staff-pay of the Commandant of the Herbert Hospital, Woolwich, and of the Assistant-Commandant of the Royal Victoria Hospital, Netley, have been withdrawn from the present estimates. No alteration has been made in the arrangement by which a Surgeon-Major on full-pay retains the appointment of Medical Charge of the Military Prison in Dublin, or in the constitution of the Army Sanitary Committee. On the former point, it may be remembered that a question was asked, but unsatisfactorily answered, in the House during last session, and notice of question given on the latter.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.

THE twenty-second annual report of the Association has just been issued. It congratulates the members on a very marked advance in the progress of questions of Medical polity in the opinion of the Profession outside. A motion was made by the President early last year, that prizes should be awarded for papers of merit and of general interest. The committee had several meetings and ultimately advocated the plan. At a special general meeting, however, in October last, the scheme was negatived by a large majority. The following questions have been also introduced:—"Special Fever Hospitals," by Dr. Hardie; "The Relation of the Lunacy Laws to Medical Men," by Mr. G. M. Harrison; "Voluntaryism as the Basis of Hospital Support," by Dr. Samelson. The committee reported that, impressed with the conviction of the beneficial result to society of the operation of the Contagious Diseases Act, they addressed a petition to the House of Commons in favour of its extension to Manchester and other large towns. The report then referred to the efforts made by a Council which originated in Birmingham to amend the Medical Act, and the important petition sent to Parliament on the subject. The financial condition of the Association was most cheering; the balance in favour of the Society is yearly increasing. The following were elected officers of the Society for 1870:—*President:* Richard Allen, Esq. *Vice-Presidents:* Jonathan Wilson, Esq.; John Thorburn, M.D.; G. M. Harrison, Esq.; J. Walsh, Esq. *Treasurer:* Louis Borchardt, M.D. *Honorary Secretaries:* Jas. Hardie, M.D., and C. H. Braddon, Esq.

A HANDY FORCEPS.—THE "MEMOIRS OF THE ANTHROPOLOGICAL SOCIETY."

"A MEDICAL officer, whilst travelling, was called in to see a case of difficult labour, and not having his instruments with him sent for some dancing girls. He selected one with the smallest hands and after a little instruction got her to do what was necessary. Her hands were made to act the part of a pair of forceps. The idea was a happy one, for by it the Doctor was enabled to relieve a poor suffering creature, with comfort to herself, and without risk to the child." So says Dr. Shortt in an account of the dancing girls of Southern India, which he has contributed to the third volume of the "Memoirs of the Anthropological Society of London," just published. We may take the opportunity of saying that these memoirs are a mine of curious information for students of history, law, politics, and the science of life.

AMENDMENT OF THE MEDICAL ACTS.

DR. BELL FLETCHER, President of the Medical Reform Union, with his colleagues Mr. Gamgee (Vice-President), Mr. Oakes (Treasurer), and Mr. Owen (Secretary), has published in the *Birmingham Daily Gazette* the address of the Council of the Union to the General Medical Council of the United Kingdom, which is as follows:—

"Mr. President and Gentlemen,—When we had the honour of being received by you as a deputation in July last, to present a memorial from the members of the Medical Profession concerning the amendment of the Medical Acts, 5200 registered Practitioners had signed that document. Four thousand five hundred and twenty-four signatures have since been added to it, so that at present the number of assents is 9724, a considerably larger number, we have reason to believe, than has ever been appended to a similar document in the history of the Medical Profession.

"The events of the last few months have proved that our memorial represents the feelings and wishes of the Medical Profession throughout the United Kingdom in a still greater degree than is implied by the number and character of the signatures.

"At the close of your late session we were favoured, through your Registrar, with copies of the report of your committee appointed to consider the amendment of the Medical Acts, and we had intended submitting to you some observations on that report on the approach of your ordinary session.

"It having come to our knowledge that a special meeting of your Council has been convened to consider matters intimately bearing on the proposed amendment of the Medical Acts, and it being evident from your committee's report, already referred to, and from the resolutions of your Council (July 12, 1869) founded on that report, that the prayer of your 9724 memorialists whom we are deputed to represent has not yet produced the desired effect upon you, we are anxious to rectify any existing misapprehension which may be possibly due to the brevity of the explanations offered on your invitation at the personal interview of July last.

"We take this opportunity of tendering our sincere acknowledgments of the patience and courtesy with which our remarks were listened to by your Council at the interview just referred to. We deemed it unadvisable to add to the length of your sittings by speeches; and we were under the impression that the memorial was so clearly, though tersely, expressed, that the wishes of your petitioners could not be misunderstood.

"Under existing circumstances, we respectfully beg your attention to an explanatory statement.

"The present system of granting licences to practise finds so few defenders, that the prayer of your memorialists for its abolition can scarcely fail to be successful. We deem it necessary, however, to call your attention to the fact that your petitioners do not only pray that an end be put to the present system of examinations for licences to practise, which distracts students, fails to protect the honour of the Medical Profession, and is opposed to scientific unity and to the best interests of the public; but your petitioners furthermore pray that the one legal qualification to be hereafter granted to candidates for admission into the Medical Profession shall only be granted on proof being given, by a high standard of examination, that the applicant for the licence does really possess a competent scientific and practical knowledge of Medicine and Surgery.

"We are convinced that any alteration of the present system would fail to satisfy your 9724 memorialists, if it aimed at protecting and consolidating the interests of the Corporations which now grant licences to practise, in preference to promoting the real interests of science, of the Profession, and the public. We hold these interests to be identical, and we submit that they have hitherto suffered very seriously, in consequence of the line of action pursued by several of the licensing bodies.

"We beg to quote your Resolutions Nos. 3 and 4, of July

12th ult., on the report of your Medical Acts' Amendment Committee:—

"'(3.) That having carefully considered the objects of the Medical Act of 1858, and the constitution of the Council appointed under that Act to carry out its objects, the Council are of opinion that, for the purposes of the existing Act, the present Council is essentially well constituted.

"'(4.) That the Council are of opinion that if the Legislature should think proper to invest the Council with extensive powers and fresh duties, by which the Profession at large would be brought more under the direct influence of the Council, then in that case the Profession at large should have more direct influence in the appointment of members of Council.'

"You agree with your petitioners in thinking that the existing Medical Acts need amendment, and even if it be conceded that for the purposes of the existing Medical Act the present Council is essentially well constituted, it does not follow that the present constitution would be adequate to carrying out the objects of an amended Act. It is generally conceded that the present Council is defective in power, and we take your Resolution No. 4 to be an admission of the justice of our prayer, that provision be made in a new Act of Parliament for the representation in the Council of the general body of Practitioners of Medicine and Surgery, who are now, for the most part, deprived of any professional franchise.

"At present the corporations are dominant in the Council. We feel that we are giving expression to the wishes of the memorialists when we urge that an amended Medical Act should give full power to the Medical Council to govern the corporations as well as the Profession. Such a Council could only command the respect of the Profession and the country by being representative of the Profession and responsible to Government and to public opinion.

"We are not unmindful of the good which the Medical corporations have wrought, and we shall be glad to see an amended Medical Act so framed as to enable them to devote their resources to the advancement of sicence and to the lasting interests of the Profession. Our present duty is to convey to you respectfully, but very candidly, the conviction of the memorialists that, in framing an amended Medical Act, the first interests to be considered are the interests of the public and of the Profession.

"Should you desire any further explanation of the object and intention of your memorialists, we shall be happy to furnish it.

"We enclose a duplicate of this communication, with a copy of the memorial, requesting that you will do us the honour of forwarding them to the Lord President of her Majesty's Most Honourable Privy Council, on the first occasion of your communicating with his Lordship touching the amendment of the Medical Acts."

FROM ABROAD.—REPORT ON MATERNITIES—CONVULSIVE HICCOUGH.

Among other work done by the Paris Hospital Society, to which we recently adverted, has been the appointment of a committee to consider the important question of obviating the great mortality which at present takes place in the Maternities. M. Bourdon has just published the Report of this committee, to which M. De Ranse, of the *Gazette Médicale*, has appended some useful remarks. The committee sets out with observing that this great mortality may be the result of the simple agglomeration of a number of women, although these be not overcrowded, and are, indeed, to all appearances, well-placed. Each woman, in fact contaminates the atmosphere around her, especially when ventilation is insufficient; and, although this focus of infection may remain isolated and become extinguished, yet, when a second or a third or more centres of infection become generated at the same time, the intensity and malignity of the poison and the sphere of its activity are greatly increased. Figures amply prove these effects of agglomeration. Thus, while the mortality which took place at the *bureau de bienfaisance* of the 12th *arrondissement* was only 1 in 142 deliveries, at the Maternity, situated in the same quarter, it was 1 in 19. In 1862 the mortality of women delivered in the Paris Hospitals was 1 in 14·64; in the *bureaux* it was only 1 in 164·66. In 1868 it was 1 in 25·42 in the Hospitals; and 1 in 286·75 *à domicile*. In 1869 the mortality at the residences of *sages-femmes* was 1 in 130, and in the Hospitals 1 in 25·42. The obvious practical conclusion is that confinements should take place as much as possible *à domicile*, and this is the first recommendation of the Committee. But in carrying out this view obstacles have to be considered. M. Bourdon finds that in 1868 there took place 9463 deliveries *à domicile*, and 8468 in the Hospitals; and among these latter there were scarcely a fifth or sixth part of the women who had homes at all. He calculates that about 8000 women will be thus obliged to resort to Hospitals every year. The new plan adopted by the administration of sending some of these to be delivered at the houses of *sages-femmes* may dispose of about 2000 of them; but it is to be borne in mind that if this measure be too freely resorted to, the apartments of the *sages-femmes* will be converted into little Maternities, and become in their turn foci of infection. With respect to the 6000 remaining women, they cannot be consigned to the Maternities which exist, and which, indeed, are doomed to destruction; and the special lying-in wards of the general Hospitals, in spite of all the precautions that have been taken, furnish far too high a mortality. The dissemination of lying-in women in the other wards of the Hospitals which is now being tried, can only be regarded as a temporary and exceptional measure; for here there is still danger from agglomeration, while the rest and comfort of the other patients are much interfered with. The Committee recommends as the best procedure the Maternity system proposed some years since by M. Tarnier, and which consists in small erections which give each patient her separate room with its door and window, both opening externally on opposite sides. A separate infirmary is to be appropriated to those who are ill, having its Medical officers and nurses distinct. A hygienic congress held at Brussels in 1852, proposed a very similar measure, which has, indeed, been in operation at Ghent since 1863. M. de Ranse, while approving of the proposal, believes it necessary to insist that each of these new Maternities shall consist only of a small number of rooms, and especially if these are simultaneously occupied; that they shall be separated entirely from any other Hospital; and that the Medical and other services attached to them shall be unconnected with any other Hospitals. As a supplementary measure, the Paris Medical Society proposes that at each *maison de secours*, two or three of which exist in each *arrondissement*, four rooms, separated from each other, should be appropriated to women unable to lie-in *à domicile*.

The Paris Société Medico-Pratique has also made a report on the subject of Maternities, when, after reviewing their histories and statistics in France and foreign countries, M. Collineau, the reporter, arrives at the following conclusions:—

"Considering, on the one hand, that all statistics which have been successively accumulated are in accord in affirming the extreme danger of maternities, even when the enormous expenses which have attended their establishment would seem to promise a security that has always proved illusory; while, on the other hand, these same statistics prove that in every class of the community women delivered at their own homes have always furnished a very trifling mortality, this Society expresses its opinion (1) that all maternities should be irrevocably suppressed; (2) that a service for delivering women at their own homes should be established in every arrondissement; and (3) that in each arrondissement a certain number of isolated rooms should be employed for accouchements which cannot be performed *à domicile*."

At a recent meeting of the Lyons Medical Society, M. Guinard read an interesting case of Convulsive Hiccough, or, as he prefers terming it, "Chorea of the Diaphragm." A woman, 20 years of age, was admitted into the Hôtel-Dieu January 30, 1869. Until her sixteenth year she had led an active country life, but then commenced her present sedentary occupation in Lyons, which she has pursued with much assiduity—menstruation then first appearing. Gradually her digestion became bad, and her general health deteriorated, while the menses, at first regular, since August, 1868, have been arrested. At this time, convulsive hiccough first appeared, paroxysms coming on at first two or three times a day, and gradually increasing in

number until in January, 1869, they ran into each other. During forty-eight hours this incessant hiccough continued, the patient vomiting also all she swallowed, her jerking respiration being very incompletely performed, and her strength so exhausted that her life seemed to be only an affair of hours. On admission, the hiccough reappeared several times in a minute, and was always much more frequent during and soon after a meal. She was repeatedly roused by it at night, and any moral impression aggravated it. Her general condition was that of chloro-anæmia. Bromide of potassium carried to three grammes produced not the slightest relief. Electricity employed morning and evening for a week, at first exerted a marked effect in relieving the spasm, but the amelioration kept getting less, and then entirely ceased. As by February 14 she was in nowise better, the hiccough recurring several times in a minute, she left the Hôtel-Dieu, and, after remaining two months at home, entered on April 10 the Croix-russe Hospital. The hiccough then occurred seventy or eighty times in the hour, and was accompanied by a noise resembling the barking of a dog, which was distinctly audible at a distance of forty metres. The anæmia continuing, iron and bitters were prescribed together with nux vomica and sulphureous baths. Her general health improved, and the hiccough somewhat diminished in frequency; but still, by May 1, it recurred from fifty to fifty-five times a day. Ether douches along the spinal column and opposite the insertions of the diaphragm were now tried, as this means has of late been very successful at Lyons in generalised chorea. After a fortnight's trial, the spasms were reduced to forty per hour, but no further impression was made. Firm compression over the insertions of the diaphragm by means of a broad caoutchouc girdle was tried with no benefit, and then inhalations of ether continued during twenty minutes reduced the hiccough to thirty per hour. These were repeated in all twelve times, and the effect at first was remarkable, so that by the ninth inhalation the number of hiccoughs had been reduced to nine per diem. Afterwards the ether lost its effect, the patient after each inhalation returning to her primary state. Chloroform was therefore substituted, and it is to be regretted (although, of course, at Lyons not surprising) that it was not tried at first instead of ether, for its use was attended with infinitely less discomfort to the patient, while the amelioration was surprising by its rapidity, and has continued permanent, two inhalations having only been employed.

PARLIAMENTARY.—METALLIFEROUS MINES—THE EQUALISATION OF METROPOLITAN POOR-RATES — FOOT WARMERS IN RAILWAY CARRIAGES—THE INSPECTION OF MINES—SIR JOHN GRAY'S BILL—ST. LUKE'S HOSPITAL FOR LUNATICS.

On Thursday, February 17, in the House of Lords,

Lord Kinnaird introduced a Bill for improving the sanitary conditions under which metalliferous mines are worked. The Bill was read a first time.

On Friday, in the House of Commons,

Mr. Goschen brought in a Bill for providing for equal distribution over the whole metropolis of a further portion of the charge for poor relief. In support of it he reminded the House that of the £1,400,000 now spent by the metropolis on poor relief, £400,000 was already placed on the common fund, to the great relief of the poorer parishes, twenty-six parishes receiving aid from the common fund and fifteen contributing to it. This partial equalisation he showed, though it had undoubtedly led to increased charge, particularly in salaries, had greatly improved the character of poor relief and had checked the increase of pauperism, the improvement being most remarkable in the treatment of children, of lunatics, and the establishment of dispensaries. The Bill proposed to place on the common fund a contribution to the Unions of 3s. 6d. a week for every adult inmate of a workhouse, with due security against overcrowding, and the result would be that £650,000 a year, or about half of the whole charge of relief, would henceforth be paid out of the common fund.

Mr. Sclater-Booth, though not opposed to equalisation, was rather startled by this increase, and suggested that, instead of a specific contribution, a proportion only of the cost of in-door maintenance should be charged on the common fund.

Mr. M'Cullagh Torrens and Dr. Brewer joined in objecting strongly to equalisation, unaccompanied by local control and representation; while Mr. Locke hailed the Bill as a step in the right direction; and after some observations from Mr. Whalley, the Bill was read a first time.

Mr. Plimsol obtained leave to bring in a Bill to compel railway companies to provide foot-warmers for second- and third-class passengers, "whenever the weather is such as to cause suffering without them."

On Monday,

Mr. Bruce moved the second reading of his Mines Regulation and Inspection Bill, which provides for the better ventilation of mines, the exclusion of children from the underground workings, but does not provide for the technical education and examination of the agents and viewers. In this latter respect Dr. Playfair said he thought the Bill defective. It was read a second time.

Leave was given to Sir J. Gray to bring in a Bill to amend the Medical Act of 1858 and the Acts amending the same, so as to secure a more direct representation of the Profession on the Medical Council, and to so increase the powers of the Council as to insure that no person can be enrolled on the Register of Practitioners who does not previously demonstrate that he possesses a practical acquaintance with the duties of the several branches of the Profession.

The Bill was read a first time.

On Tuesday,

Colonel Barttelot asked the Secretary of State for the Home Department, whether his attention had been called to the Report of the Lunacy Commissioners, on the condition of St. Luke's Hospital for Lunatics.

Mr. Bruce said that St. Luke's had been the subject of the criticism of the Lunacy Commissioners for the last twenty years. He admitted the truth of all that had been urged against its present condition. The report of the Commissioners, however, showed that the appearance and general bodily condition of the patients were satisfactory. The managers of the establishment had determined to submit it to a most searching inquiry. The only mode of removing St. Luke's from its present site into the country would be by Act of Parliament. But the Government were not prepared to bring in such a measure.

GENERAL MEDICAL COUNCIL
OF
EDUCATION AND REGISTRATION.

THIRTEENTH ANNUAL SESSION,
HELD AT THE ROYAL COLLEGE OF PHYSICIANS.

FIRST DAY.—THURSDAY, FEBRUARY 24.

THE General Medical Council commenced their sittings for 1870 this afternoon, Dr. Paget, President, in the chair. All the members were present except Dr. Christison.

Present—

The President.	Dr. Thomson.
Dr. Bennett.	Dr. Smith.
Mr. Hawkins.	Mr. Hargrave.
Mr. Cooper.	Dr. Leet.
Dr. Acland.	Dr. Apjohn.
Dr. Humphry.	Sir D. Corrigan, Bart.
Dr. Embleton.	Dr. Sharpey.
Dr. Storrar.	Dr. Parkes.
Dr. Alexander Wood.	Dr. Quain.
Dr. Andrew Wood.	Dr. Rumsey.
Dr. Fleming.	Dr. Stokes.
Dr. Macrobin.	

The minutes of the last meeting having been read and confirmed, the new member for the University of Cambridge, Dr. George Murray Humphry, was introduced to the Council and took his seat.

The PRESIDENT then said: You are aware of the cause that has made it necessary to call you together at this time, very little more than seven months since our last session, and at a season of the year which I am well aware is very inconvenient

to many. However, the numbers that have assembled, with those who we know will be here presently, prove, if proof were needed, that you set your public duty before your personal convenience. The whole Council will be assembled presently, with one exception. That exception is very much to be regretted, because we shall lose the advantage of the judgment and experience of Dr. Christison. His absence is the more to be regretted because the cause is recent illness. He has been confined to his bed; but I am happy to say that this very day when I arrived in town I found a letter from him dated yesterday, in which he says he is well enough to go about his work in the morning, but is not equal to the long journey from Edinburgh to London at this time of the year. He takes a very great interest in the proceedings of the Council, so that I doubt not we shall have letters from him, although he be not present to-day. I hope that every one of you has received a copy of the communication from the Lord President of the Privy Council, and I hope also that you justify me in taking the unusual course of having that letter printed and sent to every member of the Council. That communication is not only important, but much of it appears to me most satisfactory both to this Council and to the Medical Profession at large. It accedes to our request, and to the general desire of the Profession, for Government legislation with regard to the amendment of the Medical Act. It offers to undertake the settlement of a complicated and much-agitated question, and one which, in the opinion of many of us, besides the Lord President, involves the credit of the Profession and the confidence and welfare of the public. Moreover, in the whole tenor of this communication, and in express words, it does recognise the great public interests that are concerned in the efficiency of the Medical Profession; and it would be ungracious, I think, when I am speaking of this matter, not to acknowledge that the letter manifests a friendly feeling towards this Council, and a willingness to help us in the effectual discharge of the most important and most difficult of our duties. About the other business which we may expect this session I shall say nothing, except one word of acknowledgment to the President of the committee for conferring with the licensing bodies on Professional education. I know how great and zealous have been his labours during the recess. I will not set a bad example by making a very long speech. I hope this session will be a short one.

The Business and Finance Committee and the Committee on the Registration of Medical Students were appointed.

The Registrar read a communication from the Lord President of the Privy Council.

"Cambridge, February 9, 1870.

"My Dear Sir,—The importance of the following letter has induced me to take the unusual course of sending a copy of it to every Member of the Medical Council. I hope that my doing so will have your approval. It is plain that the credit of the Council is deeply concerned in a deliberate consideration of the question submitted by the Lord President, and it seems to me due to the members individually to put the letter into their hands some days before the meeting at which the question will have to be answered. Requesting that the communication may be held as *strictly confidential* until the meeting of the Council, "I remain, faithfully yours,

"G. E. Paget,

"President of the Medical Council.

"(Strictly confidential, for the use of the Members of the Council only.)

"Medical Department of the Privy Council,

"Council Office, February 2, 1870.

"Sir,—I am directed by the Lord President of Her Majesty's Council to state to you that since his recent interview with the Executive Committee of the General Medical Council, and with the assistance of such information as you were then good enough to lay before him, he has given further and most careful consideration to the question of an amendment of the Laws relating to the Medical Profession.

"The Lord President, as you are aware from the letter which by his Lordship's direction I had the honour of addressing to your official predecessor, Dr. Burrows, on May 14 last, would have the greatest pleasure in finding himself able to co-operate with your Council in any course tending to promote the development of the Medical Profession, but could not, on the part of her Majesty's Government, bring before Parliament any Bill purporting to be for amendment of the Medical Acts, unless he believed it substantially to cover all the ground where amendment of those Acts is called for, and likely, in consequence, to be for some time a settlement in that branch of legislation."

"Now, the Lord President's further consideration of the system under which candidates are at present admitted to legal qualification for practice has greatly increased the misgivings of his Lordship on that subject in his former communication to your Council; and the Lord President thinks it certain that no new legislation could have in it a fair prospect of permanence, or could even for the time be satisfactory to the Profession and the public, unless it effected, or promised to effect, some very considerable improvement in that system.

"That examinations for admissions to the Medical Register are held by many mutually independent and in great part competing corporations, and that each examining board has its own separate set of conditions for admitting candidates to examination, is the system which now exists under supervision by your Medical Council; and whereas the Lord President's former communication adverted to some of the evils which are prevailing under that system, other evils incidental to it, and the obstacles which, in the present state of the law, delay such evils from being remedied, are abundantly shown in papers which you have communicated to his Lordship and in other reports which have reached him.

"The Lord President doubts whether the present system, under any practical kind of supervision, can either work satisfactorily for Medical education or can provide adequate and uniform security for those great public interests which are concerned in the efficiency of the Medical Profession.

"His Lordship is persuaded that doubts like these could not fail to be pressed in any Parliamentary discussion of the Medical Acts, doubts particularly whether the conditions under which candidates are admitted to examination with a view to minimum qualification for practice ought not to be expressed in a single code of regulations common to all examining bodies of the United Kingdom, and whether similarly and more or less consolidated examining authority ought not to be substituted for the many separate examining boards which now act under your General Council and giving admission to the General Register.

"The Lord President believes that opinions adverse to the present system are very generally entertained in the body of the Medical Profession by persons who may be regarded as competent and impartial observers, and that some of the most important public bodies concerned with the constitution of the Profession have recorded resolutions in a like sense, and are even endeavouring to amend the working of the system by voluntary arrangements with one another.

"The report, moreover, which you brought under the Lord President's notice as recently made to your Council by a committee specially appointed to consider the subject of Medical education expresses it in terms so unqualified as to an urgent necessity for consolidation of examining authorities, and as to the general grounds on which that necessity rests, that the Lord President regards this question as presumably ripe for decision.

"The recommendation of the Education Committee of your Council is that, 'leaving to the Universities and Corporations full liberty to deal as they please with their honorary distinctions and degrees, the Medical Council should endeavour to effect such combinations of the licensing bodies included in Schedule (A) as may form a conjoint examining board for each division of the kingdom, before which every person who desires a licence to practise should appear, and by whom he should be examined in all subjects.' And your Executive Committee (referring to the possibility that such consolidations might not be adopted on mere recommendation) represents to the Lord President that, 'in the opinion of many members of the Medical Council, the Medical Act is deficient in not granting compulsory power to effect such amalgamations of examining boards as may seem desirable.'

"Accordingly, in view of the circumstances, the Lord President would not be willing to submit to Parliament any proposals for amending the Medical Act in such minor respects as were touched by the Council's draft Bill of last session, unless he were at the same time in a position to propose the larger improvements in the present system; but if it be the wish of your Council that legislation in this larger sense should be asked for, particularly such legislation as your Executive Committee seems to have in view, the Lord President would

hope to be able to propose to Parliament a Bill to give effect to such intentions.

"The Lord President therefore directs me to request that you will have the goodness to take the sense of the Council on this question. And I am also to state to you that his Lordship would have little hope of carrying any measure in this next session of Parliament unless he were enabled to introduce it without any considerable delay. "I am, Sir,

"Your obedient servant,

"(Signed) "JOHN SIMON.

"To the President of the General Medical Council of Medical Education and Registration of the United Kingdom."

Dr. BENNETT: I presume that this letter will constitute the most important part of our business this session, and that the Council will be anxious to take it into fullest consideration at the earliest possible period. I apprehend that we should not feel disposed to enter upon it at the present moment, but that we would rather consider it during the rest of this day, in connexion with other matters related to it, and proceed to discuss the whole subject to-morrow. I therefore move, "That the letter which we have just had read to us be entered upon our minutes, and upon the programme of to-morrow's business, and that its consideration take precedence to-morrow of all other business whatsoever."

Dr. STORRAR seconded the motion.

Dr. ALEXANDER WOOD thought the Council should devote the whole of the sitting to the discussion of the subject, and any other which could not brook delay. Members from Scotland and Ireland had come to the Council at great personal inconvenience, and he trusted all the business would be completed by Saturday night. He suggested that they should at once proceed with the consideration of the letter.

The motion was agreed to.

Dr. ALEXANDER WOOD moved, "That the hour of meeting be changed from 2 to 12 o'clock."

After a short discussion it was arranged that the meeting on Friday should commence at 1 o'clock.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

THE STATE OF THE PROFESSION IN 1823.

The Hall and Colleges—the Schools and Hospitals—the Periodical Medical Press—the Medical Societies.

IN order that the reforms effected during the last forty years may be properly appreciated, it is necessary that I should give an account of the actual condition of the Profession in 1823. It was then in what may be called a "transition" state. The statute of 1815, known as the "Apothecaries Act," was just coming into force. Before that enactment there were really no laws to regulate the Profession. It was not necessary for a Medical Practitioner to pass any examination whatever to qualify him for practice. The consequence was, the practice of Medicine was carried on mainly by uneducated men, who had merely served an apprenticeship behind the counter, but had given no other evidence of their capacity to take care of the health and lives of the people. They competed often successfully with men who had taken the diploma of the College of Surgeons, or with Scotch graduates. This became so intolerable that in the year 1812 an association was formed, consisting of qualified Practitioners, with the object of obtaining some protection from unqualified persons, and to obtain an Act of Parliament rendering some examination compulsory on those who entered into "general practice." The President of this Association was Mr. (afterwards Dr.) Manu Burrows, the father of Dr. Burrows, late the President of the General Medical Council. It was attempted at first by the Association to secure the College of Physicians as their patrons and the future "educators" of the "inferior grade." This the College positively refused to do, and the College of Surgeons was equally unfavourable. The consequence was the Apothecaries Act was passed at a very late hour in a very thin House. This Act, so momentous in its consequences and so sweeping and stringent in its clauses, gave all the legal power over the Profession, so far as the "general Practitioners" were concerned, into the hands of the Society. It made it incumbent that every man, not in practice at the time of the passing of the Act, who practised generally—*i.e.*, "attended, prescribed, and dispensed medicine for gain in a Medical case"—should be a Licentiate of the Society of Apothecaries, and should pass an examination such as the governing body of the Society should determine as fit and proper. By one of its clauses it was empowered to bring an action against any person, however otherwise qualified, who practised as an "apothecary" without its licence. The Act had not a retrospective effect, and hence it was some time before its enormous powers began to tell on the Profession. Gradually, however, it did tell. The examinations at the Hall became more stringent, and the sole right of the "Licentiates" to practise was enforced by actions for penalties brought against members of the College of Surgeons who practised generally. At some future time we may go further into details respecting the Society; but at present it is sufficient for our purpose to have stated so much as bears upon the position of the Profession in 1823.

The College of Surgeons, a close and irresponsible oligarchy, was obstructive and insolent. It was evidently the object of the Council and the Court of Examiners to keep the examinations at so low an ebb as to make the members, to use the words of one of them even years afterwards, only fitted "for the common exigencies of Surgery." This, too, in the face of the fact that the "Society" was steadily improving the curriculum and the examination of their alumni. The examiners of the College were, moreover, usually teachers and Hospital Surgeons, and had the control of the curriculum of the student. The Members of the College not in office were treated with insult and contempt; they were not allowed to enter the College by the ordinary doors, but had to pass through a miserable back entrance in Portugal-street.

The College of Physicians was equally exclusive. It consisted only of Fellows and Licentiates. No Licentiate could become a Fellow unless he were a graduate of one of the English universities, and none but a Fellow could hold office in the College. This was the state of things, too, at a time, be it remembered, when the reputation of Medicine was sustained in the metropolis by men who were out of "the sacred pale." At this time Clutterbuck, Copland, Tweedie, Holland, Neil Arnott, Armstrong, Birkbeck, Uwins, Shearman, Hancock, Roberts, Temple, Cleverley, and Merriman, with a host of other Licentiates, were in full practice. Such, in brief, was the state of the governing bodies. In consequence of this state of the governing bodies and their members, the antagonism of classes was bitter, and produced constant quarrels and remonstrances.

If we turn to the Schools of Medicine and the Hospitals, teaching was altogether unsatisfactory. Clinical teaching was all but unknown, and I recollect one of the earliest letters inserted in the *Lancet* was a complaint from a student of one of the larger Hospitals that a Surgeon of eminence had gone through the wards without "once opening his mouth." In consequence of the difficulties in procuring subjects, anatomy was not completely taught, and the only Hospital Schools of Medicine at that time were attached to the larger institutions—the united Hospitals of Guy and St. Thomas, St. Bartholomew's Hospital, and the London Hospital. But there were a number of "private schools," some of them of great reputation, and officered by men of high talents and acquirements. There was the Windmill-street School, at which Brodie had lectured; the famous schools of Joshua Brooks and of Carpue; the Webb-street, or the school of the Graingers and others. It is a remarkable fact that at the present moment there is not a single private school in London. The history of their rise, career, and fall will be a not uninteresting chapter in these "Recollections."

Turning to the societies, we find them in an undeveloped state. The Medico-Chirurgical met in Lincoln's-inn-fields, the numbers present at the meetings being scarcely, on the average, a dozen, and this, too, when Sir Astley Cooper was the President. Discussion was not encouraged in any way—indeed often discouraged; no reports of the proceedings were allowed to be published, on the ground that such publication might interfere with the sale of the *Transactions*. The Medical Society of London, then holding its meetings in Bolt-court, was some-

what under the influence of the "cold shade of aristocracy." The Westminster, located at the great Windmill-street School, was flourishing, but no reports of its proceedings, as was the case with the rest, were made. The societies connected with the Schools of Medicine were of use only to their members; the Profession in general derived no information from them.

What was the state of the periodical literature of the Profession at this time? It was mainly represented by the *Medico-Chirurgical Review*, established and edited by Dr. J. Johnson; the *Edinburgh Medical and Surgical Journal*, an able periodical circulated largely in England; and the *Medical Repository*, conducted by Dr. James Copland. It is worthy of remark here that Clutterbuck, when practising in St. Paul's-churchyard, edited for several years a monthly journal which ceased to exist many years before the establishment of the *Lancet*. This veteran member of our Profession, whose face and form even to a recent period were familiar to so many of us, outlived his work upwards of sixty years! In my biography of him in the "Lives of British Physicians," published by W. Tegg and Co., I enter somewhat more minutely than I can here on the services he rendered to the members of his Profession in the periodical alluded to. It is due to this able, upright, and kind-hearted man to say that he to the last was a consistent advocate of the rights of the many; this is more especially necessary, inasmuch as he was the "one faithful amid the faithless found." I shall explain this in a future article. The quarterlies contained very little except long and elaborate abstracts of new books, occasionally original articles, but no independent reports of societies or Hospital practice. As far as the social position of the Profession went, or keeping the members of it *au courant* of the events of the day, these periodicals might as well not have been in existence. With reference to the appointments to Hospitals, they were obtainable only by family or money influence. No man, whatever his talents and acquirements, had the least chance of obtaining a Hospital appointment unless he were connected with the staff by family or other ties, or had a large command of capital. Thus at Guy's and St. Thomas's, at the time we are alluding to, the Surgeons and Assistant-Surgeons formed a snug family party; whilst at others the Surgeons had been the "apprentices" of their predecessors, to whom they had given enormous premiums with the understanding that they were to be so appointed.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 22, 1870.

Dr. Burrows, President, in the Chair.

SPECIAL MEETING.

The minutes of the last meeting having been read, the President said:—This meeting has been summoned to consider the report now to be submitted to the Society, the report being made by the committee of the delegates sent by the various societies to consider the scheme for amalgamation proposed by the Royal Medical and Chirurgical Society. That conjoint committee had sent in its report as to the principles on which the new Society ought to be founded, and the meeting of this Society was to discuss these propositions, as well as to settle how far the Society was desirous of adhering to its former resolutions.

The Secretary had no sooner read the first proposition of the resolutions of the Royal Medical and Chirurgical Society, as adopted by the committee of delegates — "That a new Society be formed, and incorporated by Royal Charter, under the title of the Royal Society of Medicine; and that this Society comprise sections for the main branches of Medicine and the collateral sciences"—than

Mr. Macilwain rose, intimating that the first clause required explanation. He had no objection to it in the abstract—that was, that the Royal Medical and Chirurgical Society was to form the nucleus of a new Society—but he objected that there was no opportunity of dealing with the question generally.

Dr. Webster also wanted to know whether passing the first clause bound the Society in any way to go on with the scheme for founding a new Society.

The President here remarked that the Fellows were really commencing the business *de novo*. It was decided last year to take steps for the amalgamation of the various societies. This was reopening the whole question.

Mr. Hulke now interposed, and said that the first thing to be done was to *receive* the report, after which it might be considered, and accordingly moved to that effect.

Dr. Symes Thompson seconded the motion, which was carried unanimously.

Dr. Greenhow pointed out that the movement originated with the Royal Medical and Chirurgical Society. That Society had agreed to a scheme, and had asked the other existing Societies to send delegates to consider the same. Further, that the title of the newly proposed Society had been selected by the Royal Medical and Chirurgical Society.

Dr. Quain here showed that the resolution was a mere abstract matter, relating to all societies alike, and accordingly moved that Clause 1 be adopted.

Dr. Meryon seconded the motion, which was universally approved.

Mr. Henry Lee hoped that this did not imply that the Royal Medical and Chirurgical was to pay for the new charter, and

Dr. Leared suggested the title of Academy, but the whole thing having been so thoroughly discussed at previous meetings, this was not pressed.

Section II. now came on for discussion:—"That the following Sections be formed: 1. A Medical Section. 2. A Surgical Section. 3. An Obstetrical Section. 4. A Pathological Section. 5. A Psychological Section. 6. A Clinical Section. 7. An Epidemiological Section, including also Hygiene and Medical Jurisprudence. Each Section will entertain questions of therapeutics, chemistry, and physics, so far as they bear on its special subject."

Mr. Holmes moved that the Society recur to its original recommendation, retaining the Section of Anatomy and Physiology. He strongly objected to the separation of Medicine and Surgery. Against the separation was almost every objection which could be raised both generally and specially. The scheme was one of amalgamation; beyond this he was prepared to go, but not for the destruction of the largest Society. The most valuable gift to the Profession for many years had been the *Medical and Chirurgical Transactions* — these would, as a matter of course, cease with the proposed scheme of amalgamation—*i.e.*, when Medicine and Surgery were separated into different sections. Yet the smaller Societies would go on publishing theirs as a matter of course. He also objected to the pecuniary arrangements in the new Society. Besides, this Society was not purely one of Surgeons and Physicians; it included a certain number of General Practitioners who would have no motive to join the separated bodies. In short, he had never heard an argument in favour of separating Medicine from Surgery. Besides, they had adopted a Clinical Section; if the principle was to be carried out, there ought to be a Section for Clinical Medicine and one for Clinical Surgery.

Here Dr. Pitman being called upon moved, *pro forma*, as Chairman of the Conjoint Committee, that Section 2 be adopted.

This Dr. Barnes seconded without the *formal* reservation made by Dr. Pitman.

Mr. Birkett seconded Mr. Holmes's motion, and remarked that in the amended scheme there was not a word about the basis of all—viz., Anatomy and Physiology—and yet this was to be a kind of Encyclopædic Society. If founded on the principles here laid down, there would infallibly spring up new societies to deal with biological subjects.

Mr. Curling would readily support the former scheme, but he was not convinced of the advisability of instituting an Anatomical and Physiological Section. If a sufficient number of Fellows agreed to the scheme, well and good, but as to the propriety of retaining Medicine and Surgery in combination he had no doubt whatever. At a former meeting of the Society when this proposition was discussed 77 Fellows being present only 8 voted for separation. There would be difficulty in telling which papers should be sent to the Surgical and which to the Medical Sections. Tumours of the larynx afforded an illustration of this doubtful ground. Besides, were the scheme adopted, there ought to be a double clinical section to be symmetrical.

Mr. Holmes here remarked that if the Fellows disliked the new offer the best thing to be done was to recur to their old one. His motion might be put first, and Mr. Curling's might come as an amendment.

Dr. Quain said he voted in committee for the separation of Medicine from Surgery because he thought that the Medical and Chirurgical Society had not maintained its proper place, and he could see nothing better for it than a separation of the two. As it was, men did not go regularly, as they did not know what papers were to be read.

The PRESIDENT remarked that these were advertised.

Dr. QUAIN further remarked that in the combined Society the payment would be much the same as in the new scheme. He further thought that competition between the two sections would be advantageous.

Dr. WILSON FOX also proposed separation, and, as Mr. Holmes said he could see no reason for separation, so he (Dr. Fox) might say the reverse. Their great object appeared to be the conservation of the Medical and Chirurgical Society. In theory it might be undesirable to separate Medicine from Surgery; in practice they were so. There were debateable border-lands, no doubt, between the two, but so were there as regarded other sections. He believed more work would be done after separation. He considered the Clinical Society the great obstacle to a logical scheme. With Medicine and Surgery separated, General Practitioners would have better opportunities of hearing papers in both, for, as a rule, papers were not of a mixed character. As it was, they were now actually separated, and the Royal Medical and Chirurgical Society proposed to sink its name in the Royal Society of Medicine.

Dr. PITMAN said they were losing sight of the great object, which was to obtain union. A perfect scheme was at first impossible. New sections might by-and-by be added, and existing ones modified; but they ought to start as societies now existed.

Dr. MURCHISON pointed out that in Mr. Holmes's scheme there was something more—a proposition to found a new section.

Mr. HULKE supported Dr. Quain, because he thought the two sections would do more work separately than conjointly. It was not proposed to split up the Royal Medical and Chirurgical Society, but to add new sections to the old body.

Mr. HEATH wished to know the reasons for altering the scheme in committee.

The PRESIDENT said the Committee had been divided in opinion, the majority being favourable to separation.

Dr. GREENHOW said that on several occasions the separation had been discussed and negatived in the Committee until its last meeting, which was assembled ostensibly only to see that everything was in form, when the question was re-opened, discussed, and the resolution passed in its present form. The representatives of the Obstetrical Society had come instructed to demand separation. For his part, he thought it good to attend when Surgical as well as when Medical papers were read.

Mr. CALLENDER had voted for separation because he thought it would be good to have two sections.

Dr. MURCHISON said the Committee numbered fifteen in all. At the last meeting twelve were present; of these, seven, who voted for the separation of Medicine and Surgery, were Fellows of this Society. Of the five who voted for union, three were not Fellows of the Royal Medical and Chirurgical Society.

Dr. TYLER SMITH said that Dr. Greenhow's statement was not altogether correct. The representatives of the Obstetrical Society had not been instructed to demand one-fourth of the Council, but to demand an equality for Obstetrics with Medicine and Surgery. This scheme was not for amalgamation merely, but for the construction of a new society. The Obstetric Section would be overshadowed were there one great one of Medicine and Surgery. Their society did not seek amalgamation; they were going on well; yet, in the public interest, they did not object to certain sacrifices; but they could not consent to be overshadowed by a great conjoint body. He thought Obstetrics had not been fairly treated here.

The PRESIDENT suggested he was deviating from the matter before the meeting; but

Dr. T. SMITH said he was only showing why the Obstetrical Society objected to a conjoint section of Medicine and Surgery. The majority believed that separation was a good thing, and he believed the Obstetrical Society had flourished on acconnt of separation. The Fellows should think of other societies as well as their own.

The PRESIDENT said he had heard with pain that Medicine was shackled by Surgery, or *vice versâ*. Really they supported one another. Since Hunter's time the two had been more and more brought into one. They had a common basis in anatomy, physiology, and pathology. Why, then, seek to separate them? While President he had learned most from the Surgical papers, and so he believed the Surgeons would say in their turn of Medicine. He did not think that more or better work would be done by separating the two. The representatives of the Clinical Society had voted for separation; yet that Society dealt with both subjects. Mr. Paget regretted not being able to be present, as he was strongly in favour of a union between Medicine and Surgery. The scheme was really one for amalgamation, and not for the formation of a new society.

On being put to the vote, 44 voted for the amendment (a conjoint section), 13 against it.

Mr. CURLING moved that each section be now taken in turn, and voted on separately.

Mr. CARTER seconded this, and asked the principles on which these sections were formed.—Thirty-two for, six against the motion.

Dr. WILSON FOX asked, seeing that the great object was amalgamation, why the Medical Society of London was left out of the scheme.

Mr. CURLING next moved that a Medico-Chirurgical Section be formed, and Dr. WEBSTER seconded the motion.

Dr. QUAIN here explained why he thought Medicine and Surgery better apart. They really were separated in practice. Motion carried *nem. con.*

Dr. PITMAN moved that an *Obstetrical Section* be formed; Dr. COOPER ROSE seconded. Carried *nem. con.*

Dr. GREENHOW moved, and Mr. CALLENDER seconded, the motion that a *Psychological Section* be formed. Carried *nem. con.*

Mr. HEATH moved, and Mr. GANT seconded, the motion that a *Clinical Section* be formed.

Mr. HOLMES remarked that there was evidently a great deal of difference of opinion among the delegates, the chief ground of dissension being the Clinical Section. He thought it would be best to go back to the original scheme offered. He was heartily tired of the same questions constantly recurring, and it was cruel to ask men to come here night after night to discuss the same things over and over again. They should send back the original scheme to the other societies, telling them they would allow no essential change, and so abide the result. He really did not think that either the Obstetrical, the Pathological, or the Clinical Societies would unite with them.

The PRESIDENT said that, having gone so far with the various sections, they must finish with them.—For a Clinical Section, 25; against, 1.

Mr. HOLMES moved that there be a *Pathological Section*, and Mr. GEORGE COOPER seconded the motion.

Here Mr. MACILWAIN entered into a disqnisition against sections in general, and against the Pathological Society and section in particular, which was listened to with some amusement.

Dr. HARE said no doubt the sections would be altered in working.

Dr. PITMAN proposed that there be a State Medical Section.

Mr. HOLMES COOTE thought it should be united to the Psychological.

Dr. STEWART objected to the term State Medicine. It ought to be Public Medicine.

After some discussion, Dr. COPLAND suggested the title Epidemiological and Hygienic, to which Medico-legal was afterwards added, and under this title the section was proposed by Dr. PITMAN, the motion being seconded by Mr. CALLENDER. It was carried *nem. con.*

Mr. HOLMES moved, Mr. G. COOPER seconded, that there be an Anatomical and Physiological Section.

Mr. WEEDON COOKE proposed that each section have power to deal with anatomy and physiology as far as relates to itself.

Dr. BROADBENT said such a society as that now being formed would be disgraceful without a section to deal with Anatomy and Physiology. But a short time ago a paper had been read and listened to with the utmost attention in that society almost purely physiological.

The PRESIDENT asked, why deprive the new section of such papers?

Dr. BROADBENT said they should be encouraged, whilst now physiology was actually discouraged.

Mr. CURGENVEN thought the proposed section should be more extensive if it was to be successful.

Dr. HARE again pointed out that the scheme was merely a provisional one.

Motion carried *nem. con.*

The appendix referring to questions of therapeutics, physics, etc., having been put and carried *pro formâ*,

Mr. HOLMES again recurred to his motion, but the PRESIDENT pointed out that it would be hardly fair to push the matter at the then late hour, so many Fellows having left. It might come first at next meeting.

Mr. HULKE suggested that the next meeting ought to be held as soon as possible.

REVIEWS.

Hygiène Alimentaire des Malades, des Convalescents et des Valétudinaires, ou Du Régime envisagé comme Moyen Thérapeutique. Par J. B. Fonssagrives, Professeur d'Hygiène à la Faculté de Médecine de Montpellier, etc. Deuxième édition revue et corrigée. Pp. 670. Paris: J. B. Baillière et fils. London: Williams and Norgate. 1867.

Dr. Fonssagrives has for many years been favourably known as the author of several works on Hygiene, and one of these, his "Traité d'Hygiène Navale," has been for several years the text-book adopted by the French Minister of the Marine and Colonial Departments.

The present volume is divided into four books, which treat respectively of—1. The Elements of Dietetics; 2. The Various Modes of introducing Nutrient Matters into the System, Rules regarding the Hours of Meals, and Hospital Scales of Diet; 3. The Physiological and Morbid Conditions that regulate the Character of the Diet; and 4. Special Forms of Diet.

The first book commences with the subject of *Drinks*, to which nearly 100 pages are devoted. They are considered in the threefold relation of their quantity, their thermality (*i.e.*, the temperature at which they are taken), and their nature. The quantity of the fluids which a patient may imbibe should, for various reasons which the author assigns, be carefully regulated by the Physician, and not left to the direction of senseless nurses. "No one can tell," he adds, "the consequences of this negligent delegation of an important duty in cases of serous effusion into the pericardium or cerebral ventricles, which, under the influence of a rapid augmentation of the drinks, may quickly increase and go on to a fatal extent." If, in these and other forms of dropsy, we must put the patient on a dry diet and select for him such food as contains the smallest quantity of water, there are, on the contrary, the numerous classes of febrile disorders which present the opposite indication, and in these, as a general rule, the thirst may be our guide in the administration of fluids. Such patients, as Huxham observed more than a century ago, should take only a small dose of fluid at a time, but it should be very frequently repeated. It was to the abundant administration of fluids to his fever patients that De Haën attributed his remarkable success. "Vix viderunt studiosi nostri cutis diu aridæ, linguæve exustæ exempla." In the exanthematous fevers, and especially in variola, fluids should be very freely given. By this mode of treatment, not only are the mouth and pharynx kept cleansed, but the tendency to constipation is averted, and the depurative action towards the skin is promoted, while the mucus of the air-passages is rendered less viscid, and is thus more easily expectorated. The kinds of drink recommended by our author are acidulated whey, gruel, water acidulated with Rhenish or white French wine, cider, etc.; and in cases of variola not less than four litres (about seven pints) should be taken daily.

The temperature at which our food and drink should be taken is of more importance than is generally supposed. The caloric which impregnates our fluid and solid foods should, according to our author, be regarded as a very essential element of nutrition. It acts by stimulating the nervous filaments of the walls of the stomach, and probably in this way exciting the solar plexus. It is undoubtedly true, paradoxical as it may appear, that a small quantity of the "*condiment calorifique*" renders our foods and drinks far more difficult of digestion than if no apparent heat were detectible by the tongue. This fact is probably dependent on the circumstance that very hot drinks produce a direct excitation and very cold drinks an indirect excitation of the gastric walls, while lukewarm fluids do not excite either action. We cannot afford space to follow Dr. Fonssagrives in his observations on the special uses of hot and cold drinks in the various forms of disease, and shall proceed to the consideration of his chapter on medicated drinks, diet-drinks, or ptisans. Ptisans enjoy a far greater popularity in France than in any other country. A Dr. Higgins, who is quoted by our author, very forcibly points out the remarkable difference that, in this respect, is exhibited on the opposite sides of the Channel. "During the course of either an acute or a chronic disease," says this Physician, who resided for fifteen years in France, "every Frenchman regards the ingestion of a ptisan as a necessity. Many Physicians approve of this practice, and consequently prescribe ptisans without perhaps any great faith in their therapeutic action; and hence the variety of these drinks used in France is very puzzling to a neophyte across the Channel—a distance of but eight leagues, and how great is the contrast! *Une pénurie de tisanes véritablement affligeante.* The importance attached in France to these auxiliary agents is replaced in England by a profound indifference as to the nature of the beverages which a patient should be allowed to indulge in. The English invalid prefers the prompt and energetic remedies of the Pharmacopœia, while a sick Frenchman trusts to time, to nature, and to herbs. We must leave it to the psychologist to explain why it is that the Frenchman, who in a state of health is singularly energetic, should be so patient when he is attacked by disease, while the phlegmatic Englishman struggles against the mere idea of being confined to his bed." Dr. Fonssagrives fully admits that in France ptisans are in far too general use, and thinks that they should be reserved for suitable cases. If, as he observes, a patient comes into the Hospital for itch, why should he be compelled by "an almost necessary formality" to imbibe daily his two litres of ptisan? The ptisans may be arranged in six groups, viz.:—
1. The amylaceous (such as barley-water, rice-water, etc.).
2. The saccharine (such as hydromel, liquorice-water, etc.).
3. The acidulous (such as oxycrate, which is a mixture of vinegar and water with or without sugar, the lemonades, sherbets, artificial or natural waters containing carbonic acid, various forms of wine and water, etc.).
4. The bitter (such as the various infusions of chamomile, centaury, wormwood, sage, quassia, etc., the bitter wines, bitter ale, etc.).
5. The emulsive (such as milk of almonds, orgeat, etc.).
6. The aromatic (such as the infusions of the leaves and flowers of many of the Labiatæ and Umbelliferæ, tea, coffee, chocolate, cocoa, etc.).

Most, if not all, of these remedies have the advantage of being, at all events, perfectly harmless.

Proceeding to more potent agents, he classifies the different kinds of wine in the four following categories:—
1. The rough red wines, represented by the varieties of Bordeaux and Burgundy.
2. The dry white wines, both still and sparkling.
3. The dry alcoholic wines; and,
4. The sugared wines, or *vins de liqueurs*.

Of the rough red wines, Bordeaux may be taken as the type. It is so far the most useful kind of wine that, according to our author, it might replace all the others, while there is not one that could take its place. After describing the principal wines that are included in the general term of Bordeaux, the author observes that this is the wine *par excellence* for such valetudinarians as require to be "tonified," and in whom there is a trace of inflammatory or congestive action in some important organ. "The English," he tells us, "use it to a considerable extent as a wine for invalids, and term it *claret*; but when they pronounce it to be unfit for gouty, rheumatic, and dyspeptic patients, in consequence of its acidity, they incriminate the quality of the Bordeaux that is shipped for English use rather than the true hygienic value of this precious wine." In reference to this sentence, we would venture to remark that, if French Physicians were at all acquainted with the papers on the dietetic value of wines which have of late years appeared in this journal, the author would scarcely have published the above statement.

Next to Bordeaux, Dr. Fonssagrives regards Burgundy as the most important wine for invalids; but the best kinds, as Côte de Nuits, Chambertin, Romanée, and Clos-Vougeot, should be selected if the patient can afford them, as the cheaper Burgundies are very inferior to the different sorts of Bordeaux sold at the same price.

Amongst the dry, still, white wines he gives the preference to Sauterne, *Vin de Graves*, Blanc-Latour, and Schwartzberger. He enters fully into the consideration of the various uses of Champagne in various forms of diseases, and regards it as almost a specific in cases of sea-sickness.

Under the term dry alcoholic wines, by which he understands wines devoid of any taste of sweetness, and containing from 15 to 20 per cent. of alcohol, he includes Marsala, dry Madeira, Teneriffe, Sherry, and Port. We are somewhat surprised at our author's high commendation of port, which is now being commonly employed in France in cases in which Malaga was formerly almost exclusively employed.

The sweet or saccharine wines of most reputation are Malvoisie, Malaga, Constantia, Lunel, Grenache, and Rota. Of these Malaga is the author's favourite, and he regrets that, in consequence of its scarceness, it is difficult to obtain it pure. It is much employed in France as an agreeable vehicle for nauseous drugs.

The remarks on the forms of disease in which wine should be prescribed and where it is contra-indicated are, on the whole, very judicious. "For diabetic patients wine is indispensable; in this *thermogenic* element," says our author, "they find a means of in part supplying the abstraction of farinaceous food.

Bouchardat especially insists on the necessity of prescribing large quantities of Bordeaux in these cases; and Sydenham long ago, and without any preconceived theory, recommended Sherry and Canary."

In his section on the flesh of the mammals considered as food, he gives the decided preference to mutton. Horse-flesh comes in for a word of praise, but pork should be altogether interdicted, and the flesh of the sucking-pig is *encore plus suspecte*.

Amongst the edible birds, the domestic fowl, of course, takes the first place; then comes the turkey-poult, which should be plainly roasted. The duck and the goose are not recommended as fit food for invalids, but a young wild duckling affords delicate eating. The quail is regarded as preferable to the pheasant or partridge. The thrush affords a savoury flesh, and is far superior to the blackbird as an article of food. The reptiles yielding food are passed over very briefly, the frog and the turtle being discussed in a single page. The fishes recommended by the author as affording a good food to invalids are much the same as those similarly used in this country.

There is nothing calling for special remark in his section on the various modes of cooking the different varieties of animal food, or in his chapters on the farinaceous foods, fatty foods (under which he includes milk, eggs, fats, and oils), fruits, and legumes, except that his list of edible oils includes the oils yielded by the olive, poppy (*œillette*), beech-mast, almond, walnut, and palm, and those obtained from fishes, as the cod, the ray, the shark, and the sardine. The author strongly recommends the following mode of administering cod-liver oil—viz., cod-liver oil three ounces, iodoform seven grains, and essential oil of aniseed ten drops. The fragrant odour of the two last ingredients completely masks the smell of the cod-liver oil. Moreover, iodoform being of all the iodine compounds that which, for equal weight, contains the most iodine, we may, by giving an ounce of this mixture, introduce into the system 2·5 grains of iodoform, or 1·5 grain of metallic iodine. Those of his patients who have taken both the simple oil and the mixture, have unanimously regarded the latter as infinitely preferable both in taste and smell.

There is a long chapter on condiments, which are divided into the simple and compound. Under the first head are included common salt, the acids, the alkalies, the acrid and aromatic condiments, pepsine, and diastase, while the latter includes mustard, the *achars*,(a) and sauces. We turned with some interest to see what were the alkaline condiments to which he refers, and found that they are Vichy waters, magnesia, bicarbonate of soda, and the alkaline lactates—a class of substances which we should hardly include in this country under the term condiments. The same remark applies to Gregory's mixture, which, we are told, is habitually used in England as a condimentary powder, and universally enjoys a very high reputation. It is doubtless not very easy to define a condiment strictly. We recollect hearing a Hospital nurse remark, when a patient complained that he did not like taking his beef-tea out of the same unwashed cup which had just held his medicine, that it was impossible for the authorities to provide him with a separate receptacle for each of his condiments.

A large amount of evidence in favour of pepsine, which, in his own words, "is a condiment in every acceptation of the word," is adduced; and we have reason to think that in this country its value, especially in cases of obstinate diarrhœa and vomiting, is not sufficiently recognised, except by the more advanced class of Practitioners.

Diastase is supposed to favour the assimilation of farinaceous substances in much the same manner as pepsine acts in relation to animal food. Dr. Fonssagrives relates a case in which he prescribed it with extreme benefit. A young naval Surgeon who was suffering from chronic dysentery and painful dyspepsia, which he had contracted at one of the colonial stations, applied to the author in 1860, and was recommended to take large doses of nitrate of bismuth, and to mix a gramme (15½ grains) of pepsine with his daily food. Under the influence of this treatment he soon became able to digest animal food without any gastric annoyance; but, as is so often the case in chronic dysentery, bread and starch foods generally induced flatulence and a feeling of weight in the region of the stomach, while the *débris* of these foods passed away in the fæces. Diastase was then prescribed, and he was at once able to eat with comfort haricots and other kinds of starchy foods, which previously excited much gastric annoyance. He has subsequently had similar attacks, which have always yielded to diastase. A good form of prescribing it is in the shape of the *tablets de l'œuvret*.

It has been ascertained by Professor Schiff, from experiments on animals, that dextrine, when introduced into the stomach, promotes the formation of pepsine, and the following formula is given for its administration:—Dextrine fifteen grammes, bicarbonate of soda and sugar four grammes each. This, we presume, is the quantity to be given in divided doses through the day.

Passing over the third book, which treats of the physiological and morbid conditions which regulate the diet, we arrive at the last division, which is devoted to special or exclusive diets, and discusses negative diet or abstinence, dry diet or xerophagia, vegetable diet, animal diet, and milk diet. The essential object of these diets is to reduce the food of patients to a single variety or class. In some cases this mode of treatment must only be adopted for a few days, while in others it may be continued for months or even years. During the course of an exclusive diet the general condition of the patient must be carefully watched, and the balance and dynamometer should be frequently employed, in order that the treatment should be suspended if the weight of the body becomes too much reduced or the muscular force should be diminished.

The cases in which a negative diet or abstinence is likely to prove useful are—(1) obesity, (2) aneurisms, (3) contracted pelvis when it is desired to diminish the size of the fœtus, (4) certain surgical conditions, as after operations for artificial anus, fistula, etc., and (6) certain constitutional diseases. Under the first head the author discusses the subjects of training and of Bantonism; under the second, he of course gives Valsalva's method of treating aneurisms, of which he thinks highly, but recommends, in addition to abstinence and abstraction of blood, "a prolonged dorsal decubitus and immobility, which in themselves produce a marked sedative effect on the circulation." Another, which at first sight, appears an almost opposite kind of treatment—"la marche prolongée, *mais à très-petits pas*," originally suggested by Morgagni, and subsequently recommended by Cruveilhier, also finds favour in the author's eyes. "A prolonged walk at an extremely slow pace, continued for two or three hours, has the effect of drawing to the lower extremities so large a quantity of blood as to produce a well-marked sedative action on the heart, which may even extend to faintness." The author has seen the benefit of this practice in several cases of heart-affections of different kinds.

The idea that in cases of contracted pelvis the size of the fœtus might be diminished, and that delivery might be thus expedited, is certainly as old as the last century, but was revived in 1849 by Depaul, who in his memoir, "De l'Influence de la saignée et d'un régime débilitant sur le développement de l'enfant pendant la vie intra-utérine," quotes two very remarkable cases. One was that of a cachectic woman in whom the sacro-pubic diameter was reduced by 0·03 m. (or 1·2 inch). In three previous pregnancies, dead infants of full size had been removed by instrumental aid, the last weighing nine pounds. In her next pregnancy she submitted to the abstinent treatment, and, without artificial aid, was safely delivered of a daughter weighing only four pounds. The second case was that of a lady who, alarmed at the difficulty and prolongation of her first accouchement, submitted herself to this treatment, and, as the result, was delivered of a child weighing only five pounds, but perfectly viable.

The following are the chief objects for which a dry diet (or an abstinence as far as possible from fluids) is prescribed.

1. To diminish certain normal or morbid secretions, especially the urine.

2. To combat certain morbid conditions of the stomach, especially the *dyspepsie des boissons* first described by Chomel, and morbid dilatation of the stomach.

3. To facilitate the resorption of serous effusions, as in cases of dropsy.

4. To promote the absorption of medicines; and

5. To contribute to the cure of constitutional syphilis by the employment of the so-called *Arabian treatment*, into which our author enters very fully, and in which he seems to have considerable faith.

In the beginning of his chapter on vegetable diet Dr. Fonssagrives introduces a very interesting account of the mode of life adopted by the well-known Trappist community, for which he is indebted to the superintendent of one of these establishments, and to which we may probably recur in a special article. He subdivides vegetable diet into (1) herbaceous food, as the cabbage, lettuce, sprinach, etc.; (2) farinaceous food, under which he notices the great value of the farina of decor-

(a) The *achars*, or rather *atchars*, are (says the author), like the pimentades, an importation of exotic gastronomy. The term seems to include such stimulating substances as curry-powder, pickles, etc.

ticated lentils (*Ervum Lens*), the base of the quack remedies sold as *Revalenta* and *Ervalenta*, in cases of obstinate constipation; (3) fruit diet, of which the so-called grape-cure affords the best example; (4) saccharine food.

In the chapter on animal diet abundant evidence of the value of this mode of treatment in diabetes and chronic diarrhœa is given; while in the concluding chapter of the volume, which is devoted to the uses of milk-diet, the reader will find many interesting and practical remarks on the cases in which it may be used with advantage, and the modes of administering milk.

The concluding section treats of the mode of preparing koumiss, and the value of this comparatively little-known drink as a therapeutic agent.

The length to which this article has run must be taken as evidence of the value which we attach to Dr. Fonssagrives's volume.

GENERAL CORRESPONDENCE.

BROKEN RIBS AND STRAIT-WAISTCOATS.

LETTER FROM MR. R. G. HILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—A blot is no blot until it is hit; and with this prefatory axiom I propose to examine, with your permission, the merits of the great dogmas that are now disturbing the repose of those who bear sway in our lunatic asylums. It is high time that we should cope, as it were *ex imo*, with the painful and discreditable revelations that have emanated from those institutions, not only for the sake of truth and the interests of humanity, but for the reputation of those engaged in administering to the behests of the insane. As one of the few survivors who have lived under the old and new systems, I trust I may be acquitted of any egotism that may on the surface be supposed to be involved in my utterances. To do this logically, I propose to deal only with "those exceptional cases" that raise the question of the padded room and the strait-waistcoat; all else would appear to be plain sailing, and beyond the region of controversy. Let us begin, then, with the first stages of our introduction to our new patient. He may or may not greet us in the garb of a strait-waistcoat, but in either case we divest him of his clothing and give him a warm bath. This is so far regarded as a rule that it is printed in the regulations of all our large asylums. This is not done merely for the purposes of ablution, but to give us an opportunity of diagnosing the true condition of the patient, so that we may be able to assure ourselves that he neither labours under a retention of urine, a hernia, nor, what is more pertinent, broken ribs. Now the question arises as to whether this examination invariably takes place in the presence of a Medical officer, and if it does not, why not? There is too much reason to believe that this office falls to the lot of a head attendant or some uneducated person, upon whose report the Medical officers are satisfied. This is not as it should be. I contend that the same rule that applies to the reception of a recruit into the army should be observed on the admission of every male patient into the asylum, and I further contend that if this practice were observed the public interests would not only be greatly promoted, but that we should be spared many of these damaging scandals. Is it of no importance whether broken ribs are discovered on admission or discovered only after death? I am willing to concede that there is a difficulty in always detecting the fracture of a single rib, more especially the first rib even in a sane person, but it is beyond my conception that a series of broken ribs on one or both sides can exist without discovery by a competent examiner. But it is too much to expect that a trustworthy attendant can perform this duty. A certificate of soundness of body is surely as important as a certificate of unsoundness of mind, and no love of inglorious ease should tempt us to throw into incompetent hands a duty which we ought ourselves to discharge. It may, then, conclusively be inferred that a true bill of health properly endorsed on admission must fix on the asylum authorities the responsibility of all subsequent broken bones. It is superfluous to enter into the question of the causes that jeopardise life and limb in an asylum over and above ordinary life outside; when accidents cease to happen in our sane, they will be naturally expected to know no place in our insane population. Be it remembered that there are upwards of 30,000 of this afflicted class scattered over England and Wales, and that there is nothing to exempt them from the ordinary incidents of mortality except vigilance. Vigilance "from morn to noon, from noon to dewy eve," is our only safeguard. That is the keystone of the arch—the superintendent's divinity, and if he would do her loyal and steady service she will repay him one-hundredfold, occupying the place prudence did in Roman estimation, brought home to us in the familiar line—

"Nullum numen abest, si sit prudentia tecum."

That, with all our vigilance, there will be occasional misadventures is only to say that no human system is perfect. Our agencies for operating on this motley population can be only moral; physical force is our last refuge, the *ultima ratio regum*, to be resorted to in "the few exceptional cases" that will ever and anon present themselves. Here it is that, as a sort of *pis aller*, we encounter our old familiar friend the strait-waistcoat, ready to do duty now as he did upwards of thirty years since, and prepared to take a new lease of his life. If he had no old sins to atone for, I, perhaps, might have been disposed to give him a *locus standi*; but when I call to mind the crimes that were committed in his name, I can give him no quarter. Why, Sir, I have seen patients whose every finger could count an abscess from pressure against the waistcoat. I have known mortification and death to be the result of such restraint. The strait-waistcoat was not unfrequently used for suicidal purposes, nor was it wholly uncommon to read paragraphs in public places with such a sensational heading as "More Strangling in Strait-waistcoats." And if the sins of omission and commission were not enough, I would impress on the resuscitated advocates of the instrument that its application involves a struggle not merely of a few minutes' duration, but continues as long as the patient remains under its grip. Now, those whose vocation it is to treat maniacal cases know too well that the greatest difficulties lie in the dressing and the undressing the patient. Here you would embarrass your position by one incumbrance more. And when all is accomplished and his wardrobe complete, you turn him into the wards or the airing court a helpless guy, unable if he stumbles to save himself, and therefore peculiarly obnoxious to serious injury. And if these physical objections are not enough, how does the case look on the application of the moral microscope? Here we see not an erring, but greatly afflicted brother subjected to the treatment that is reserved for felons—his very manhood degraded as if he had committed a great crime, and shocking or brutalising the spectators of such an exhibition. No; if we cannot devise anything better than this, let us not interfere with the existing order of things. If a lunatic asylum can only paradoxically be viewed as "the land of the free," let the absence of even its limited freedom be consecrated by the reflection that it differs from a gaol and a prison, and is intended to be a place of cure, and not of punishment. Let the public executioner and his emissaries appropriate all such honours to themselves. I am, &c.

RONT. GARDINER HILL.

Earl's-court House, Old Brompton, February 21.

LETTER FROM DR. J. HAWKES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having read in your impression of February 19 a paper communicated by Dr. Sankey on Fractures of the Ribs in the Insane, and an editorial article on the same subject, I beg to offer a few remarks confirmatory of the views therein expressed. I may observe that the opinion recorded by Dr. Sankey, that these injuries are peculiar to male patients, is not borne out by facts, as the reports of the Commissioners can testify; in my experience, they may happen to either sex alike. Next, as to the causes. Are they in the majority of cases the result of direct personal violence offered by the attendants or other occupants of the ward? On this point it is very difficult to pursue a perfectly unbiassed and impartial inquiry. In all cases of injury occurring to lunatics in confinement it is too often the rule for a suspicion of some misconduct on the part of the attendant to be immediately entertained, and the subsequent inquiry is too generally pressed under the influence of this all-dominant persuasion. The public are invariably ready to be swayed by the old feelings of horror and suspicion at all that passes within the walls of a "madhouse," and, labouring under this disadvantage, any piquant article or choice bit of sensational writing is sufficient to turn the scale; but those who know intimately the actual reality of asylum life are less prejudiced. A patient labouring under general paralysis is more liable to such injuries, for a very good reason—he is less able to protect himself. If he falls, he drops heavily, like a

corpse, striking his body against the nearest object with force. We know from our own experience how readily in a sound man the body protects itself, either by involuntarily shrinking or rapidly turning on a sudden fall, so as to elude danger; but the general paralytic possesses neither the sensibility nor the necessary power of volition. In the case of Santa Nistri, this is what happened on the day upon which his injuries were supposed by most of those who investigated the matter to have occurred. He was a general paralytic, with prominent sternum and an arched chest; he was also very thin. He walked usually with his hands in his trousers. On the morning of the day in question, he was seen by another patient, whose general veracity may be trusted, to trip over a mat and fall heavily forward on the stone flags of the corridor; he lay, as the man said, a minute or two, then he arose slowly and returned, entered a bed-room, and threw himself on a bed, apparently, from the statement of another patient in bed in the same room, suffering great pain. An attendant, seeing him thus, covered him with a blanket. A Medical man who was on duty in the Asylum passed not long after, and, concluding he slept from exhaustion, did not disturb him. Without entering on a controversy as to the exact date of his injuries, it seems to my mind that some explanation may be derived from these facts as to the manner in which such injuries occasionally happen. But the possibility of such an accident resulting from a simple fall has been discredited by nearly everybody, one gentleman saying it was so improbable as to be impossible. I am not of this opinion. The above facts were only elicited by examination of the patients after Nistri's death. Of their truth there can be, I think, no question. As another instance how an apparently simple accident may be followed by most disastrous consequences, I beg to draw your attention to the annexed slip from the *Standard* of Saturday last. If this injury had only happened to a lunatic in confinement, it is difficult to see how a verdict of manslaughter against some person could have been avoided. With every apology for trespassing so far on your space, I am, &c. J. Hawkes, M.D.

Hanwell, W., February 21.

Extraordinary Accident.—Yesterday an inquest was held at the Windsor Infirmary on the body of Mr. Springbate, a builder, who resided at Datchet, and whose death was occasioned under very peculiar circumstances. He was of intemperate habits, and was wheeled home in a barrow intoxicated, and left in his house, of which he was the sole occupant, on Tuesday evening last. It appears that in pulling off his boot with a bootjack he overbalanced himself and fell on the floor, causing a compound fracture of the ankle. He managed to crawl up to his bed, but in returning to procure assistance he was unable to reach the bottom of the stairs, on which he remained all night. A boy while passing heard his groans, gave an alarm, and he was shortly afterwards taken to the infirmary, where it was found necessary to amputate the foot; but from the great loss of blood he had sustained during the night he gradually sank, and in a short time died after the operation. Verdict of Accidental Death was returned.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

Letter from Dr. Joseph Rogers.

[To the Editor of the Medical Times and Gazette.]

Sir,—You are aware that it is Dr. Brady's intention to move, early in March, for leave to bring in a Bill for the Superannuation of Poor-law Medical officers of a similar character to that which he carried last session on behalf of our Irish brethren.

With the view of providing Dr. Brady with facts to be used in supporting this measure, I shall be obliged if you will allow me to appeal through your columns to the Poor-law Medical officers, generally for information of cases which have fallen under their notice, showing how Medical men have been constrained by circumstances to cling to their appointments long after their power to discharge the duties efficiently has ceased through age or bodily infirmity.

That such cases are very numerous there can be no doubt, though for a very obvious reason they are not much talked about.

Any information I may receive will be deemed confidential—*i.e.*, the facts to which they relate will be used by Dr. Brady, who will, however, not reveal the identity of the individuals to whom they refer. The observation is the more necessary, as few gentlemen would care to own publicly their unfitness for continuing in office, though they would be very thankful to retire if they were assured of a moderate superannuation allowance.

As there is no time to spare, I shall hope to be favoured with communications on the subject as soon as possible. I may mention that the Council of the Poor-law Medical Officers' Association will petition the House of Commons in favour of Dr. Brady's Bill, and I hope that their example will be followed by Medical officers generally. I may possibly appeal to your kindness next week to give place to a suitable form of petition for general use.

I would also trust that Poor-law Medical officers will not fail to make oral or written appeals in support of the measure to members of both Houses with whom they may be acquainted without delay. I am, &c. Joseph Rogers.

"SUNDAY CHARITY."

Letter from Mr. George Reed.

[To the Editor of the Medical Times and Gazette.]

Sir,—You are perfectly aware that "union is strength." They think so in Wolverhampton and Sheffield, where "Hospital Sunday" has been instituted. Lately those places have respectively collected £800 and £1047 for aiding their Hospitals. London cannot take a better example, but should go and do likewise, and thus follow suit in a noble work of charity. Could not all the places of worship within "a radius" of ten miles from St. Paul's preach for the Hospitals and infirmaries within the same space—say on the first Sunday in May, and let those institutions which have five beds at least share in the proceeds of this united action? This would prove an easy and inexpensive mode of helping numerous charities.

I would suggest that the cash collected should be paid into a bank, and a committee appointed to divide it amongst the several institutions for the sick poor.

I am, &c. George Reed.

46, Great Coram-street, February.

HOW TO COVER THE TASTE OF CHLORAL.

Letter from Mr. P. Squire.

[To the Editor of the Medical Times and Gazette.]

Sir,—It may interest your readers who are now prescribing hydrate of chloral, to know that peppermint water sweetened with syrup covers the taste of this rather nauseous medicine better than orange, orange flower, bitter almonds, or ginger, adjuncts which I see are daily prescribed with it. If peppermint is objected to, syrup of tolu is the next best flavouring agent I am acquainted with. I am, &c. P. Squire.

277, Oxford-street, February 22.

LEGAL INTELLIGENCE.

COURT OF EXCHEQUER.

(Sittings at Nisi Prius, before Mr. Baron Bramwell *and a Special Jury.)*

WILLIAMS *v.* THE DUKE AND DUCHESS OF SOMERSET.

This was as action for libel, which had been specially fixed for Thursday morning. The court was very much crowded. The Duke of Somerset was present.

The Solicitor-General, Sir J. Karslake, Q.C., and Mr. Holl, were counsel for the plaintiff; Mr. Hawkins, Q.C., Mr. Dowdeswell, and Mr. Shaw counsel for the defendants.

From the opening statement of the Solicitor-General, it appeared that the plaintiff was Dr. Charles James Williams, a Physician, residing in Brook-street, Grosvenor-square, and that he brought the action for a libel published by the Duchess of Somerset, reflecting upon his Professional character in connexion with his treatment of the Earl St. Maur, the son and heir of the Duke and Duchess of Somerset, who died on September 30, 1869. Dr. Williams was called in by the Duchess to attend her son in August previously, and finding that he was suffering from bronchial congestion, accompanied by great difficulty of breathing, he prescribed the necessary remedies, and cautioned him against taking any violent exercise. Subsequently Dr. Williams thought there was some pressure on the larynx, and took a more serious view of the case, but he did all that a Medical man could do to give him relief. Having seen Earl St. Maur from time to time, he was ultimately called early in the morn-

ing of September 30 to the house of the Duke and Duchess, in Dover-street, and he then found the young man in danger from suffocation, and praying heaven that something might be done for him, or he would die. After trying ether and chloroform without effect, Dr. Williams told Mr. Barker, another Medical man who was present, that there was nothing more to be done but "tracheotomy"—*i.e.*, making a slit in the windpipe in order to permit air for the dilatation of the lungs—and he was of the same opinion. This was explained to the Duchess, and she assented. A Surgeon was sent for, and he performed the operation in the presence of the Duchess, but Earl St. Maur scarcely showed any signs of consciousness, and shortly afterwards, with a few gasps, he died. The Solicitor-General said that many of the most eminent Medical men in England or in the world would state that in their opinion Dr. Williams had pursued the right and only treatment in the dangerous state in which the noble patient was. Believing that the cause of death was some deeply seated disease which no human skill could cure, Dr. Williams suggested to the Duke that there should be a post-mortem examination, but that was also refused. Afterwards the Duchess circulated a pamphlet among her friends and acquaintances, headed "True Account and Real Cause of Earl St. Maur's Sudden Death, on September 30, at 20, Dover-street, 1869," complaining in bitter and eloquent terms of Dr. Williams, accusing him of ignorance and want of skill, and employing, among other hard phrases, "hypocritical murderer." One passage was as follows:—"The real cause of Earl St. Maur's death was Dr. Williams's reckless investigation to confute a rival and gratify his selfish Professional vanity, for which he sacrificed the life of a man and procured a sudden and torturing death." The production wound up with these words:—"There is no redress for this species of murder; but my duty towards society, other mothers, and my lost son impels me at least not to permit such a death to pass without protest and complaint." The Soliciter-General said that when Dr. Williams asked for an apology, the Duke sent him the name of his solicitor, and therefore he was now compelled to bring the matter into court in order to vindicate his Professional character from so serious and damaging a libel. The learned gentleman, however, expressed the readiness of his client to accept even now those amends at the hands of the defendants which he was entitled to ask.

Mr. Hawkins at once offered the amplest retractation and apology on the part of the Duke and Duchess, accompanied by sincere expressions of regret that the Duchess had, under the feelings of the moment, resulting from so terrible a scene as that of September 30, and the loss of her only son, circulated statements which she now knew to be entirely unfounded.

The Solicitor-General accepted the offer, and after

The learned Judge had expressed his strong opinion that this was the proper termination of the action,

A verdict was entered for the plaintiff—damages, five guineas.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, February 17, 1870:—

Carter, George Canning, Brighton.
Coombe, George Augustus, Burnham, Essex.
Pike, William Royston, St. Thomas's Hospital.

The following gentlemen also on the same day passed their First Professional Examination:—

Grant, Richard Farleigh, Guy's Hospital.
Huggins, Samuel Tillcott, St. Bartholomew's Hospital.
Steele, Russell, University College.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Chambers, Thomas, F.R.C.S. Eng.—Consulting Surgeon-Accoucheur to the Western Dispensary, Westminster, *vice* Dr. Eastlake, deceased.

Davies, Thomas, L.R.C.P. Edin., M.R.C.S. Eng.—Assistant Resident Medical Officer to the Leeds Public Dispensary.

Ludlow, E., M.B. Lond., F.R.C.S.—House-Surgeon to the Bristol Royal Infirmary.

Thompson, Joseph, jun., M.R.C.S. Eng., L.R.C.P. Lond.—Consulting Surgeon to the Nottingham Dispensary, *vice* Dr. Massey, resigned.

Watson, W. Spencer, F.R.C.S. (Exam.), has been elected on the Medical staff of the Great Northern Hospital.

MILITARY APPOINTMENTS.

War Office.—The following appointments have been made:—Staff Assistant-Surgeon Edmond Townsend, M.D., to be Assistant-Surgeon, *vice* James Atkinson, appointed to the 95th Foot. 82nd Foot: Staff Surgeon John Henry Gouldsbury Meares, to be Surgeon, *vice* Surgeon-Major Henry Day Fowler, appointed to the Staff. 83rd Foot: Assistant-Surgeon William Geoghegan, M.B., from the 89th Foot, to be Assistant-Surgeon. 95th Foot: Assistant-Surgeon James Atkinson, from the 3rd Foot, to be Assistant-Surgeon, *vice* Robert Arthur Elliott, appointed to the Staff. 103rd Foot: Staff Assistant-Surgeon Richard Turner, M.D., to be Assistant-Surgeon, *vice* Edmund Farrington Boult, appointed to the Staff.

Medical Department.—Surgeon-Major Henry Day Fowler, from the 82nd Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon John Henry Gouldsbury Meares, appointed to the 82nd Foot; Assistant-Surgeon Robert Arthur Elliott, from the 95th Foot, to be Staff Assistant-Surgeon, *vice* Edmond Townsend, M.D., appointed to the 3rd Foot; Assistant-Surgeon Edmund Farrington Boult, from the 103rd, to be Staff Assistant-Surgeon, *vice* Richard Turner, M.D., appointed to the 103rd Foot.

Indian Medical Service.—To be Assistant-Surgeons:—*Bengal:* Oliver Thomas Diek, M.B.; Francis Cobham Nicholson, M.B.; John Sutherland Gunn, M.B.; Thomas Holbein Hendley; William Henry Gregg, M.B.; Albert Baird Seaman; Pokeer Chunder Ghose; Frederick Augustus Smyth; Herbert Boyd; John Lloyd, M.D.; William Michael Courtney; Edward Butler Ruttledge; Thomas Robinson, M.B.; Alexander Bannerman Strahan; William Alexander Crauford Roe; Ambrose Hamilton Kelly; Charles John Walford Meadows; William Napier Keefer; Andrew Deane; William Flood Murray, M.B. *Madras:* David Sinclair, M.B.; Daniel Nicholas Martin, M.D.; John North; Edward Fawcett; Frederick Robert Paterson; William Joseph Hastings; Thos. Charles Howell Spencer; Henry George Hall; Henry Isaac Jones. *Bombay:* Selim Myer Salaman, M.B.; Frederick Charles Barker, M.D.; Randolph Caldecott; George Walters; Patrick Murphy, M.D.; James Steel Carswell, M.B.; William M'Conaghy, M.D.; Arthur Henry Hughes; Robert Moreton Wall, M.B.

BIRTHS.

Asbury.—On February 19, at East Retford, Notts, the wife of Dr. Asbury, of a son.

Barry.—On February 17, at 3, Clifden-road, Twickenham, the wife of D. Paterson Barry, M.D., late Staff Surgeon-Major, of a daughter.

Coleman.—On February 21, at Holly Lodge, Streatham, the wife of Alfred Coleman, F.R.C.S., of a son.

Southey.—On February 19, at Colnbrook, Middlesex, the wife of A. J. Southey, M.R.C.S.E., &c., of a daughter.

Stocker.—On February 20, at 2, Montagu-square, the wife of Dr. J. Sherwood Stocker, of a son.

MARRIAGES.

Bracey—Shute.—On February 17, at Christ Church, Clifton, Charles J. Bracey, M.B., of Priory House, Birmingham, to Edith, eldest daughter of John Shute, Esq., Glenavon House, Clifton.

Haward—Reeve.—On January 18, at Khundwah, Central Provinces, India, F. R. Haward, Surgeon, Boshawal, eldest son of Frederick Haward, Esq., Surgeon, Halesworth, Suffolk, to Jannette Elise, youngest daughter of the late James Reeve, formerly of Ivor Hall, near Barnet, Herts, and Randalls, Leatherhead, Surrey.

Hunter—Mansfield.—On February 16, at St. Paul's Chapel, York-place, Edinburgh, James Adam Hunter, M.D. Edinburgh, to Marion Charlotte, only daughter of the late Thomas Mansfield, Esq., C.A.

Little—Miller.—On December 34, at the British Consulate, Shanghai, China, Louis Stromeyer Little, M.D., third son of William Little, M.D., Brook-street, Grosvenor-square, to Rosetta Annie, second daughter of the late James Miller, M.D., of Welbeck-street, Cavendish-square.

Seed—Williamson.—On February 17, at St. Matthias, Malvern Link, Middleton, eldest son of the late Joseph Seed, F.R.C.S., to Emma, third daughter of the late Rev. Theophilus Williamson, M.A., of Chester.

DEATHS.

Baines, Anna, the wife of E. M. Baines, Esq., of Barnet, Herts, at 41, Alma-square, St. John's Wood, on February 19, aged 70.

Brook, Thomas George, Surgeon, of Upper Clapton, on February 19, of bronchitis, aged 87.

Geodes, David, M.D., R.N., at 8, Kildare-gardens, Westbourne-park, on February 18.

Laxon, William, M.D., M.R.C.P., at Coventry, on February 22, aged 76.

Lindo, Isabel, the wife of Zechariah Lindo, M.D., at 24, Gordon-street, Gordon-square, on February 17, in her 47th year.

Minter, Edward Withers, L.R.C.P., the beloved son of John M. Minter, M.D., Deputy Inspector of Hospitals and Fleets, at the London Fever Hospital, on February 18, aged 22, from the effects of scarlet fever contracted while in the discharge of his duties.

Renton, John, L.R.C.S.E., at Orchard-house, Shotley, Northumberland, on February 18, aged 58 years.

Rix, Helena Percy, wife of Joseph Rix, M.D., at St. Neots, on Feb. 22.

Steggall, Miss Mary, at the residence of her brother, Dr. J. Steggall, 2, Southampton-street, Bloomsbury-square, on February 19.

Tawse, Alexander, E. I. C. S., Surgeon-General, on February 10, at 7, Carden-place, Aberdeen.

Tipple, Frederick Albert, M.D., at Erith, on February 21, suddenly, in his 52nd year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Buckingham General Infirmary, Aylesbury.—Resident Surgeon and Apothecary; must be M.R.C.S. and L.S.A., and be registered. Applications and original testimonials to the Secretary, on or before March 8.

Dorset County Lunatic Asylum, near Dorchester.—Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to the "Committee of Visitors," under cover to Mr. John Brown, Dorchester, on or before March 5.

Dundee Royal Infirmary.—House-Surgeon. Further particulars from the Secretary, D. Gordon Stewart, 18, Meadowside, on or before March 16.

General Hospital, Birmingham.—Resident Surgical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to the House-Governor and Secretary on or before March 10. Election on the 18th.

Holsworthy Union, Devon.—Medical Officer for the Fourth District. Candidates must be duly qualified and registered. Applications and testimonials to Mr. G. Braund, clerk, Holsworthy, on or before March 1, 1870. Election on the 2nd.

Hospital for Consumption and Diseases of the Chest.—Resident Clinical Assistant; must have a Medical qualification. Applications and testimonials to P. Rose, Esq., Hon. Sec., at the Institution, Brompton, S.W., and before March 5. Candidates to attend the Medical Committee on March 7, at 4 p.m.

Newport Infirmary and Dispensary.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before March 1.

Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.—Medical Superintendent; must have Medical and Surgical qualifications. Applications and testimonials to the Secretary, on or before March 11.

Royal Pimlico Dispensary, 104, Buckingham Palace-road.—Honorary Physician. Applications and testimonials to the hon. secretary on or before March 5.

Royal South London Ophthalmic Hospital, St. George's-circus, S.E.—Honorary Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary on or before February 28.

St. Marylebone Provident Dispensary, 16A, Duke-street, Portland-place.—Medical officer; must have either a Medical or Surgical qualification and be L.S.A. Applications and testimonials to the Secretary on or before the 26th inst. Further particulars at the Dispensary between 10 and 2 o'clock.

University of London.—Assistant-Registrar. Applications and testimonials to W. B. Carpenter, Esq., 17, Savile-row, W., on or before March 1, 1870. The duties will commence on May 1, 1870.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Helston Union.—The First District is vacant; area 16,744; population 6593; salary £44 per annum. Also the Workhouse; salary £21 per annum.

Isle of Thanet Union.—Mr. O. C. Walton has resigned the St. Peter's District; area 2817; population 2889; salary £30 per annum.

Newcastle-in-Emlyn Union.—Mr. John Jones has resigned the Llandyssul District; population 6156; salary £50 per annum.

APPOINTMENTS.

Bromyard Union.—William H. Dawson, M.R.C.S.E., L.S.A., to the Cradley District.

East Grinstead Union.—Sydney C. Austin, M.R.C.S. Eng., L.S.A., to the Third District.

Godstone Union.—Sydney C. Austin, M.R.C.S. Eng., L.S.A., to the Southern District.

Ongar Union.—Charles Sanders, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the Fourth District.

Collegiate Meeting.—The following requisition has been sent to the President of the Royal College of Surgeons of England:—"Sir,—We, the undersigned Fellows and Members of the Royal College of Surgeons of England, request that you will forthwith summon a meeting of the Fellows and Members of the College to discuss and consider the present position of the College with respect to probable legislation and the formation of a single examining board for each division of the United Kingdom." The document, which is signed by 221 metropolitan and provincial Fellows and Members, including many Hospital Surgeons, was delivered at the College on Tuesday last, about an hour before a *special* meeting of the Council summoned for the especial purpose mentioned in the requisition.

Dinner in Aid of the Funds of University College Hospital.—The annual dinner in aid of the funds of this excellent institution was held on Wednesday, the 23rd inst., at Willis's Rooms, St. James's. A considerable number sat down to dinner under the presidency of Sir James Clarke Lawrence, Bart., M.P., who had kindly consented to take the chair on the occasion. The most gratifying feature of the meeting was, however, the announcement by the treasurer that upwards of £1340 had been subscribed in behalf of the Hospital, including £300 from Sir Francis Goldsmid, the tried friend of the institution.

The late Dr. Croker.—The governors of the Hospital for Incurables, Dublin, have resolved to place a life-size portrait of the deceased in the Board-room of the Hospital, as a memorial of their "dear friend and fellow labourer, Dr. Charles P. Croker." Mr. Catterson Smith has been selected as the artist, and the expense is to be defrayed by subscription.

A Medical botanist has been fined £5 at the Oldham County Court for describing himself as a "chemist and druggist," and not being registered as such.

Testimonial to Dr. Halford.—A meeting of gentlemen was held at Scott's Hotel, Melbourne, on December 21, last, to take means of raising a fund for the presentation of a testimonial to Dr. Halford in recognition of his discovery of a remedy for snake poison. All present formed themselves into a committee to carry out the objects of the meeting.

Anthropological Society of London.—On Feb. 15, Dr. Berthold Seemann, V.P., in the chair, a paper by Dr. J. Campbell was read "On Polygamy; its Influence in determining the Sex of our Race, and its Effects on the Growth of Population." The author, who had been many years resident in Siam, gave minute details of the relative proportions of female to male births in the harems of the king and other important Siamese dignitaries. The result seemed to be that the proportions of males and females born were, as in the case of monogamist marriages, entirely equal. On March 1 Major Millingen will read a paper entitled "The Circassian Slaves and the Sultan's Harem."

India Medical Service.—The following is a list of the candidates for her Majesty's Indian Medical Service who were successful at the competitive examination held at Chelsea on February 7. Twenty-three candidates competed for ten appointments; twenty were reported qualified.

Names.	Total No. of marks (max. 3400).	Names.	Total No. of marks (max. 3400).
1. J. F. P. McConnell	2640	6. C. Sibthorp .	. 1985
2. J. O'Brien . .	2345	7. J. A. Laing .	. 1910
3. J. O'M. McDonnell	2215	8. H. D. Cook .	. 1870
4. J. Reid . .	. 2150	9. R. A. Peterson	. 1860
5. G. P. Mackenzie .	2080	10. J. S. Weir .	. 1840

The "Wandering Thespians" have promised a grand entertainment on March 19 in St. George's Hall, W., for the benefit of the Great Northern Hospital, which charity is greatly in need of funds.

Vaccinal Syphilis.—The *Lyon Médical* (February 13) states that two instances of syphilis transmitted by vaccination have been recently observed in the Lyons Military Hospital. Two soldiers, hitherto exempt from any sign of syphilis, had been vaccinated, as is the rule, on admission into their corps. The vaccine pustules were very long in healing, and became transformed into syphilitic chancres; these were followed by secondary symptoms, and especially eethymatous pustules, which at a later period were developed on the limbs.

British Medical Benevolent Fund.—At the monthly meeting, held on Tuesday last, the Committee made grants to fifteen applicants, amounting in the aggregate to £115, and two names were added to the list of candidates for an annuity, bringing the number up to eighteen. The resignation of Dr. J. Warburton Begbie as Hon. Local Secretary for Edinburgh was received with much regret, and a cordial vote of thanks was passed for the active interest he has at all times taken in the work of the Society. Dr. Begbie enclosed an additional donation of £5 and also another of £10 in remembrance of his late respected father. Dr. Joseph Bell was elected Hon. Local Secretary for Edinburgh, and Joseph Hinton, Esq., for Warminster and neighbourhood.

Banquet at the Royal College of Surgeons in Ireland.—On Saturday, the 19th inst., Mr. Rawdon Macnamara, President of the College of Surgeons, entertained his Excellency the Lord Lieutenant of Ireland, K.G., and a large and distinguished company, at a sumptuous banquet, in the Albert-hall. Among those who accepted the President's invitation to meet his excellency were: The Right Hon. the Lord Mayor, Viscount Powerscourt, the Right Hon. the Master of the Rolls, the Right Hon. Judge Lawson, the Hon. Judge Harrison, the President of the College of Physicians, Dr. Banks; the Governor of the Apothecaries Hall, Dr. Shea; the President of the Irish Medical Association, Dr. Martin; the Master of the Dublin Lying-in Hospital, Dr. Johnston; Drs. Adams and Porter, Surgeons-in-Ordinary to the Queen in Ireland; Mr. Thompson, Private Secretary; Mr. Villiers, A.D.C. to the Lord Lieutenant; Drs. Hughes and Hatchell, Surgeons to his Excellency; Major Knox, D.L.; Sir John Gray, M.P.; Dr. Brady, M.P.; J. Pim, M.P.; F. MacDonogh, Q.C.; the Rev. Professor Haughton, M.D.; the Rev. Professor Galbraith, etc. After the toasts of "The Queen" and "The Prince and Princess of Wales," the President proposed "The health of the Lord Lieutenant, and prosperity to Ireland." His Excellency, in replying, referred to the world-wide reputation of the Dublin School of Medicine. The toast of "The House of Lords" was responded to by Viscount Powerscourt; that of "The House of Commons" by Dr.

Brady, M.P.; and that of "The College of Physicians" by the President, Dr. Banks. After a most agreeable evening, the company separated at a late hour.

THE HEALTH OF SCOTLAND.—During the month of January, 1870, there were registered in the eight principal towns of Scotland, 3456 births, 1298 marriages, and 3081 deaths. With the exception of the deaths during the same month of 1864, when 3151 were registered, these numbers are the highest recorded during any month of January since the Registration Act came into operation in 1855; and, allowance being made for increase of population, the births are 122, the marriages 210, and the deaths 218 above the average of the corresponding month of the last ten years. Of the 3081 deaths, 1497 were of males and 1584 of females; and 1327, or 43 per cent., were of children under five years of age. In Perth, 25 per cent. of the persons who died were under five years; in Edinburgh, 30; in Paisley, 42; in Aberdeen, 43; in Glasgow, 46; in Greenock, 47; in Dundee and in Leith, 49 per cent.

MORTALITY IN SCOTLAND.—19,377 deaths were registered in Scotland during the fourth quarter of 1869, being in the annual proportion of 242 deaths in every ten thousand of the estimated population, or 2·42 per cent. The mean death-rate of the quarter during the ten previous years was 214 deaths in every ten thousand persons, or 2·14 per cent., so that the mortality of the past quarter has not only been very high, but has exceeded that of any fourth quarter during the ten previous years. The English death-rate during the same quarter was also high above its average, for 128,146 deaths were registered, showing an annual proportion of 234 deaths in every ten thousand persons, the quarter's average during the ten previous years being only 219 deaths in a like population. The death-rate in the groups of town and rural districts closely corresponded to the birth-rate in each, being highest where the greatest number of human beings were massed together, and lowest in the sparsely inhabited rural districts. Thus, for every thousand persons in each district, the annual death-rate during the quarter was 33·6 deaths in the principal towns, 29·2 deaths in the large towns, 22·7 deaths in the small towns, but only 17·2 deaths in the rural districts.

THE SANITARY ACT.—DESTRUCTION OF HOUSES UNFIT FOR HABITATION.—Dr. Whitmore, in his report for January, says in respect to York-court—"The interval of time (three months) which, by the Act of Parliament, must elapse before houses that have been declared unfit for habitation and incapable of structural repair can be demolished, having in respect of the houses in York-court expired, we may now hope in a very short time to see these wretched dens of misery and filth entirely swept away. Nothing more deplorable or sickening than their present condition can be imagined. For some weeks past the destitute occupants of them have been engaged in their destruction by ripping up the flooring, tearing down the shutters and window sashes, removing doors, and even the laths from the walls and ceilings for the purpose of providing themselves with fuel during the late inclement weather. Three of the houses are now entirely gutted and are no longer inhabited, whilst the remainder of them, although still tenanted, are in the utmost state of dilapidation. It will constitute a most important step in sanitary progress, if the Act, in regard to these houses, can be successfully carried out, inasmuch as it will establish the right and power of vestries and local boards to deal (although not sufficiently promptly) with a class of tenements that have too long been a disgrace to this great metropolis."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

*** Dr. O'Connor's letter has been received, and shall be attended to. It came too late for notice this week.

A Young Surgeon and Subscriber.—All depends on the means and status of the patients. Not less than five guineas if the patient can afford it; but ten or more if the means are ample. There is no general rule.

Bessborough-street.—The utility of warm water injections is unquestionable; and if a little Condy be added, so much the better. It is the general rule in Medicine and Surgery to cleanse away all offensive secretions, and to soothe inflamed organs.

A Provincial Fellow.—On inquiry, we find that the gentleman who signed the requisition "of Fellows and Members of the College," of which a notice appears in another page, is quite unconnected with the institution in Lincoln's-inn-fields.

A Student.—There will be an examination in Arts in June next at the College.

Prevention.—The whole subject yet requires discussion. We affirm that any loose women who pursue their calling with public scandal and open demonstration, should be restrained by the arm of the law; and that no money is ill-spent which will heal their bodies and reclaim their souls. What we object to is the going at the flower and not the root of the thistle—the being content with curing disease, and letting the victim go on in her life of degradation.

Inquirer.—If first cousins will fall in love, they will marry, let the consequences be what they may; in anything we say, therefore, we treat of things in the abstract, without presuming to offer advice. The marriage of cousins tends to perpetuate and to intensify all the peculiarities of their respective families. If the families of two brothers are remarkable for physical or mental excellence, the union of these brothers' children will enhance the chance of preserving these qualities in the next generation. Conversely, if there be gout, scrofula, or insanity, if the children of gouty, scrofulous, or insane people intermarry, their children will have a double chance of inheriting disease. There is yet another point. If persons of highly developed nervous system intermarry, their children are too "highly bred," and are characterised by extreme sensitiveness and deficiency of blood, bone, and muscle.

Brighton and Hove Provident Dispensary.—Provident dispensaries, if properly conducted, are undoubtedly of great benefit both to the public and the Profession. When the rules which regulate them are incomplete or lax, these institutions are fraught with mischief. The Brighton Provident Dispensary seems well and ably conducted, and, if properly carried out, will tend to put a check on the system of indiscriminate gratuitous advice which is at present prevalent.

Southampton.—Dr. MacCormack, officer of health for this town, says, with reference to the sewage of the place:—

"I sincerely trust that the Board will soon be enabled to conclude the arrangements with the Native Guano Company for utilising the sewage. I have but one opinion on the subject—namely, that it is not as a commercial or remunerative question we must view the matter, but as a great sanitary improvement, and one calculated without doubt to improve the health of the residents along both banks of the Itchin and the low-lying districts of Northam, Marine Parade, etc.; as, when the works are completed and in active operation, you will no longer have your beautiful water and river defiled by masses of floating sewage, nothing will be then discharged but comparatively clean water."

Acetopathy.—A gentleman of the name of Coutts, belonging to Aberdeen, has invented a new mode for treating disease, to which he has given the above loud-sounding title. His panacea is acetic acid, which he takes care to let people know he sells, and thus he expounds its merits:—

This acid, as externally applied by my new and peculiar mode of treatment, indicates the cause as well as the effects of disease, which it expels in the form of gas and inflammation. In chronic diseases, pimples and grosser matter, etc., are also expelled. The acid operates thus until the disease is completely exhausted, when the gas and inflammation cease, whilst the pimples and grosser matter, etc., disappear, and the skin resumes its natural appearance.

POISONS ORDERED IN PRESCRIPTIONS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In a paragraph headed "Poisons ordered in Prescriptions," in your paper of February 19, you give a perfectly correct account of the decision given in the Court of Queen's Bench in an appeal by Mr. Berry against a conviction by the magistrates of Worthing, except that you omit to state that Mr. Justice Lush, as well as Mr. Justice Hannen, took part therein.

But, while fully agreeing with you in the opinion expressed, that in sending out dangerous medicines druggists should use extra labels indicating danger in addition to the ordinary instructions for use, I feel that in justice to Mr. Berry it should be made known that he did not omit that precaution, and I accordingly send a true copy of the label attached by him to the lotion in question.

CAUTION.—FOR EXTERNAL USE.
The lotion to be used three times a day.
B 1842. Mrs. Newton.
H. Berry, Pharmaceutical Chemist, 6, Montague-street, Worthing.

I am, &c.
ELIAS BREMRIDGE, Secretary and Registrar.
Pharmaceutical Society of Great Britain, February 22.

PHTHISIS IN ICELAND.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I see the question of phthisis in Iceland is still before your readers. I suppose it to be one of climate, and not of race, and therefore I venture to send you a few trifling addenda. On my book-shelves there lies, what I believe in this country to be a rare work, John Scheffer's "History of Lapland," translated from the Latin, with additions, London, 1704. The author (pages 308-9), in his chapter on diseases, etc., of that people, gives us the information that they are generally healthy, with few distempers, and giving little employment to Physicians. Their most common ailments, he says, are the pleurisy, pains in the breast and back, and dizziness in the head; sometimes they have the small-pox. Ophthalmia is bad among them, and sooner or later, for the most part, they go blind, from closeness of their dwellings and the smoke. Such a description is, I think, rather favourable to the idea that this people suffered from phthisis. They used the moxa severely, and for cough and "all other distempers of the breast and lungs arising from cold" they give cheese from reindeer boiled in milk. For internal distempers they use also a moss called ferth and angelica. What is worthy of note (p. 309) is their practice

of rubbing with snow their newly-born infants, after which, when the poor little thing can scarcely draw breath, they plunge it in hot water. They then wrap the child in a hare skin instead of swaddling clothes.

February 19. I am, &c. E. N.

COMMUNICATIONS have been received from—

Mr. Draper; Messrs. Rollisson and Sons; Messrs. Letts and Co.; Dr. Stephens; Mr. Bryant; Dr. MacCormack; Mr. Rogers; Prevention; Dr. Southworth; Mr. Grantham; E. N.; Dr. Gardiner Hill; Rev. J. W. Carter; Dr. Hawkes; Dr. Waring; Inquirer; Mr. A. W. Moore; Mr. Bramridge; Mr. Wright; Mr. Ludlow; Mr. Weeks; Mr. George Reed; Mr. F. W. Teevan; Mr. Wanklyn; Mr. Haynes Walton; Mr. Harry Leach; Mr. J. Chatto; Mr. J. F. Clarke; Sir J. Y. Simpson, Bart.; P.; Mr. Tallerman; Mr. Teevan; Mr. Poole; Dr. Felce; Mr. Curgenven; A Young Surgeon and Subscriber; Dr. O'Connor; Mr. Thompson; Messrs. W. J. Coleman and Co.

BOOKS RECEIVED—

Revista Médico-Quirúrgica (Buenos Aires)—Three Papers, by M. Bonnafont, reprinted from *l'Union Médicale*—Acton on the Contagious Diseases Act—Observations by the Senatus Academicus of the University of Aberdeen, etc.—Watson on Abscess and Tumours of the Orbit, Part II.—Memoirs read before the Anthropological Society of London, vol. iii.—Roger on the Present State of Therapeutics—Report of Manchester Medico-Ethical Association—Dr. Dobell's Reports on the Progress of Medicine—Traité des Fièvres Intermittentes, par Léon Colin—Letters of Sir Charles Bell.

NEWSPAPERS RECEIVED—

Nature—L'Union Médicale—Gazette des Hôpitaux—Brighton Observer—Gazette Hebdomadaire, etc.—Glasgow Herald—Brighton Times—Brighton Daily News—La Tribune Médicale—New York Medical Gazette—Melbourne Age—Medical Press and Circular—Croydon Times.

APPOINTMENTS FOR THE WEEK.

February 26. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Prof. Max Müller, "Science of Religion."

28. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 5.

Medical Society of London, 8 p.m. Mr. Henry Hancock, "A Case of Severe Injury to the Hand by the Explosion of Gunpowder; the Saving of the greater Portion of the Hand and the Adaptation of an Artificial Thumb." Mr. Walter Coulson, "On Vesical Calculus." Dr. Arthur Leared, "On Sulpho-cyanides in the Blood and in the Urine."

March 1. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Royal Institution, 3 p.m. Dr. Masters, "Plant Life."

Royal Medical and Chirurgical Society, 8 p.m. Anniversary.

2. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society, 8 p.m. Adjourned Discussion on Dr. Braxton Hicks's Paper "On Puerperal Diseases." Baron Paul von Seydewitz, M.D., "Two Cases of Eclampsia successfully treated by Chloral." Dr. Routh and Dr. Rogers, "Cases of Bilocular Uterus." Dr. Brunton, "Two Cases of Twins in which, while the First Child presented naturally, there was Placental Presentation with the Second."

Society of Arts, 8 p.m. Meeting.

3. *Thursday.*

Operations at St. George's, 1 p.m. Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Mr. W. F. Teevan, "On the Functional Derangements of the Male Generative Organs."

Pathological Society, 8 p.m. Mr. Gay, "Gangrene of Femoral Vein with Perforation of the Artery." Dr. H. Weber, "Tubercular Meningitis in connexion with a Caseous Formation." Mr. Hulke, "Subperiosteal Hæmatoma of Orbit." Dr. Langdon Down, "Paralysis with apparent Muscular Hypertrophy." Mr. Carr Jackson, "Disease of Knee-joint." Dr. Robinson, "Aortic Aneurism."

Royal Institution, 3 p.m. Prof. Odling, "Chemistry."

4. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Medical Society of London, 8 p.m. Meeting of Council.

Royal Institution, 8 p.m. Mr. Reed, "Iron-built Ships."

Western Medical and Surgical Society, 8 p.m. Mr. J. R. Lane, President, "On the Modern Treatment of Syphilis."

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 19, 1870.

BIRTHS.

Births of Boys, 1153; Girls, 1100; Total, 2256.
Average of 10 corresponding weeks, 1860-69, 2117·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	906	810	1716
Average of the ten years 1860-69	721·4	696·4	1417·8
Average corrected to increased population	...	...	1559
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	3	11	1	7	3	5	1	6
North ...	618210	3	2	26	1	9	3	8	1	5
Central ...	383321	...	1	7	...	8	...	2	...	2
East	571158	5	3	25	...	17	1	2	1	3
South	773175	1	8	35	1	20	2	4	6	4
Total	2803989	10	17	104	3	61	9	21	9	20

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·901 in.
Mean temperature	30·7
Highest point of thermometer	38·9
Lowest point of thermometer	26·0
Mean dew-point temperature	23·6
General direction of wind	N.E. & E.N.E.
Whole amount of rain in the week	0·05

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 19, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Feb. 19.	Deaths Registered during the week ending Feb. 19.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2256	1716	38·9	23·0	30·7	−0·72	0·05	0·13
Portsmouth ...	122084	32	91	79	44·1	19·5	31·6	−0·22	0·00	0·00
Norwich	81087	27	57	52	38·5	25·0	31·2	−0·45	0·00	0·00
Bristol	171382	90	127	88	38·5	21·9	30·9	−0·61	0·09	0·23
Wolverhampton ...	72990	53	74	33	37·4	19·6	30·9	−0·61	0·12	0·30
Birmingham ...	369604	117	255	156	39·4	21·4	31·9	−0·06	0·17	0·43
Leicester	97427	75	85	49	39·7	23·0	31·6	−0·22	0·22	0·56
Nottingham ...	88888	110	54	53	39·8	21·3	31·5	−0·28	0·21	0·54
Liverpool	517567	250	426	320	40·4	29·4	34·0	1·11	0·00	0·00
Manchester ...	374993	207	256	249	41·4	25·0	34·0	1·11	0·01	0·03
Salford	121580	58	93	83	42·7	22·9	33·4	0·78	0·07	0·18
Bradford	143197	54	155	60	40·5	21·6	33·1	0·62	0·30	0·76
Leeds	259527	30	298	142	42·0	25·0	33·9	1·06	0·15	0·38
Sheffield	247378	27	178	148	40·0	22·5	32·7	0·39	0 15	0·38
Hull	130869	91	87	63	42·0	21·0	32·2	0·11	0·58	1·47
Sunderland ...	94257	52	68	40	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	113	81	40·0	23·3	34·4	1·33	0·97	2·47
Edinburgh	178970	100	113	116	41·7	26·0	33·0	0·56	0·20	0·08
Glasgow	468189	228	384	348	42·0	26·0	34·3	1·28	0·03	0·51
Dublin (City, etc.*)	321510	82	171	161	49·0	29·5	37·5	3·06	0·05	0·13
Total of 20 Towns in United Kingd'm	7209603	83	5341	4037	49·0	19·5	32·8	0·45	0·18	0·45
Week ending Feb. 19 Paris	1889842	242	...	1292	...	...	...	...	...	...
Week ending Feb. 19 Vienna	605200	162	...	322	...	...	9·1	−12·75	...	...
Week ending Feb. 17 Berlin	702437	112	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·901 in. The barometrical reading decreased from 30·11 in. on Tuesday, Feb. 15, to 29·70 in. on Saturday, Feb. 19.

The general direction of the wind was N.E. and E.N.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

DIABETES.—GLUTEN BREAD and BISCUITS are the only good

Substitutes for WHEATEN BREAD. Used at all the Metropolitan, Provincial, and Colonial Hospitals.

VAN ABBOTT Original Importer of Liebig's Extract of Meat, Invalid and Infant Dietetic and Wine Depot,
5, PRINCES-STREET, CAVENDISH-SQUARE.

HALFORD'S WHEATEN PERISTALTIC BISCUITS.

14, DOWN-STREET, PICCADILLY, W.

For Invalids, Persons of Sedentary Habits, and Children. These Biscuits act as a stimulant to the intestines, causing them to move with regularity; they also supply the earthy phosphates which give firmness to the bones, are pleasant to masticate, and relishing with wine or cheese.
Plain or Sweetened, in Boxes at 1s., and Tins 2s. 6d. and 5s. each.
See "Medical Times and Gazette" of 25th December, 1869.

DIABETES.

BONTHRON'S DIABETIC BREAD AND BISCUITS

have been approved by the Profession and by Diabetic patients, contain no starchy matter, and are highly palatable and agreeable.
Country orders punctually attended to.
Address—BONTHRON, 106, REGENT-STREET, W., LONDON.

NEW MUSTARD PLASTER.

RIGOLLOT'S MUSTARD LEAVES

Combine Cleanliness, Efficiency, and Convenience.

They are as portable as a Card-case.
They have been adopted by the Administration of the Paris Hospitals, and by the Imperial Navy of France.

See THE LANCET, Feb. 22nd, 1868:—
"In the Mustard Leaves of Mr. Rigollot we have, it is believed, a reliable and very ready means of obtaining the epispastic effects of mustard."

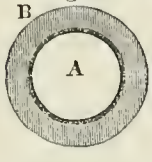
See MEDICAL TIMES, Feb. 8th, 1868:—
"This preparation has the advantage of being portable, cleanly, convenient, and effective."

Sold in Tin Cases and Packets by all Chemists and Druggists. Special prices for Hospitals and Charitable Institutions.

Wholesale—23, HENRIETTA-STREET, COVENT-GARDEN.

HAINES'
PATENT LEAD-ENCASED BLOCK-TIN PIPE,

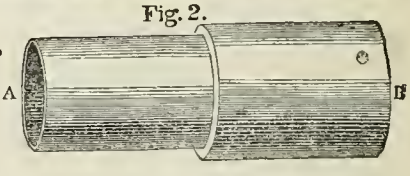
Fig. 1



FOR

Preventing Lead-Poisoning in Water
AND OTHER POTABLE LIQUIDS.
SAME PRICE AS COMMON LEAD PIPE.

Fig. 2.



THIS Pipe is endorsed by the highest Medical and scientific authority as the best, and as a most advisable substitute for lead pipe for conveying water to be used for drinking or culinary purposes. A, in Figs. 1 and 2, represents the interior pipe of pure Block Tin, and B the exterior casing of Lead; the two metals composing the Pipe being so united at their surfaces of contact as to constitute a physically homogeneous body, inseparable except by heat sufficient to melt them, and entirely insusceptible to galvanic action.

The following is a copy of a report made on this pipe by Dr. Letheby:—

The Laboratory, Medical College,
The London Hospital, London,
23*rd Dec.*, 1869.

Messrs. WALKER, CAMPBELL, & CO., 59, Bridgewater-street, Liverpool.

Gentlemen,—*I duly received the specimens of your Lead Encased Block-Tin Pipe, and find on experiment that the coating of Block-Tin completely protects the Lead from the action of water; in fact, pure distilled water, which acts freely on ordinary lead pipe, has no action whatever on the Tin Pipe encased with lead. In this respect, therefore, it is of great hygienic value.*

I remain, yours truly, HENRY LETHEBY.

MANUFACTURED SOLELY BY

WALKER, CAMPBELL, & CO.,
59, BRIDGEWATER-STREET, LIVERPOOL.

GENERAL MEDICAL COUNCIL

OF

EDUCATION AND REGISTRATION.

THIRTEENTH ANNUAL SESSION,

HELD AT THE ROYAL COLLEGE OF PHYSICIANS.

FIRST DAY (*continued*).—THURSDAY, FEBRUARY 24.

Present—

The President.	Dr. Thomson.
Dr. Bennett.	Dr. Smith.
Mr. Hawkins.	Mr. Hargrave.
Mr. Cooper.	Dr. Leet.
Dr. Acland.	Dr. Anjohn.
Dr. Humphry.	Sir D. Corrigan, Bart.
Dr. Embleton.	Dr. Sharpey.
Dr. Storrar.	Dr. Parkes.
Dr. Alexander Wood.	Dr. Quain.
Dr. Andrew Wood.	Dr. Rumsey.
Dr. Fleming.	Dr. Stokes.
Dr. Macrobin.	

A communication from the King and Queen's College of Physicians in Ireland, suggesting inquiry on the subjects of Medical education and examination by a Royal Commission, was then read.

Dr. AQUILLA SMITH moved, and Dr. RUMSEY seconded, "That the communication be entered on the minutes." This was agreed to.

A communication was also read from the President and other officers of the Medical Reform Union, with regard to the memorial presented last year, and the Registrar was directed to inform the memorialists that their communication had been received and read.

The following report of the Committee appointed by the Council to confer with the licensing bodies on the Education Report was read:—

In accordance with the resolution of Council (Minutes, vol. vii. p. 94,, the report of the Education Committee, which had been presented, but not discussed, at the end of the last meeting of Council, was forwarded to the licensing bodies. Their attention was particularly directed to the suggestion made in paragraph 22 of the report that conjoint examining boards should be formed in each division of the kingdom, before which every person who desired a licence to practise should appear, and by which he should be examined on all subjects, any higher degrees he might wish to take being optional, and taken afterwards.

Answers were requested from them on this point in December, 1869, the other portions of the report being left for further and separate consideration.

Up to the present date answers have been received from thirteen of the licensing bodies, and are given in the appendices. Owing to the unusually early period at which the Council has been summoned, it is probable that the answers from several licensing bodies will not arrive in time to be laid before the Council, and the same cause will make the present report less complete than it would otherwise have been.

The questions raised in the report of the Education Committee referred to matters either of examination or of teaching.

EXAMINATION—THE FORMATION OF CONJOINT EXAMINING BOARDS.

All the English bodies have replied to the question of conjoint examining boards, and it is satisfactory to find how much unanimity exists. The carefully expressed answers of the Universities of Oxford, Cambridge, London, and Durham, and the decided resolutions of the Royal College of Physicians of London, and of the Royal College of Surgeons of England, in favour of such boards are decisive evidence of the opinion which prevails in England.

The College of Physicians of London at once proceeded to act on its resolution by framing a scheme, and by inviting a conference with the College of Surgeons, and subsequently with the Society of Apothecaries; and afterwards communications were made to the English universities. The results of these conferences and the final arrangement of the details of the plan are not yet officially made known, but enough has transpired to show that the anticipated difficulties have nearly been surmounted, and that not improbably when the Council meets the matured scheme will be laid before it.

The case is different in Scotland. Only two bodies—the University of St. Andrews and the Faculty of Physicians and Surgeons of Glasgow—have yet officially replied; the other two universities—the Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh—have all had the subject under repeated consideration, but without as yet coming to any conclusion which can be now announced. It would seem as though more difficulties have been experienced than in England, or the desirability of the plan has not been so strongly felt. The Council will, no doubt, hear from the representatives of the Scotch universities and corporations the position of the question, and will be able to judge of the weight of the alleged difficulties.

The University of Dublin, the Royal College of Surgeons of Ireland, the King and Queen's College of Physicians, and the Apothecaries' Hall have replied from Ireland. The Royal College of Surgeons, in expressing an unfavourable opinion of the suggestion of the committee, have given, in one of the latter paragraphs of their report, a very strong argument in its favour. The University of Dublin has admitted the desirability of a single examining board, but the plan it proposes seems not to be the most advantageous way in which the principle can be carried out.

The King and Queen's College of Physicians in Ireland express their want of concurrence in the principle of conjoint examining boards, and decline "at present to enter into details as to the mode of carrying out that proposal."

The Apothecaries' Hall of Ireland have, without reserve, expressed their concurrence in such a plan, and have suggested the corporations which should unite.

The Queen's University has as yet made no reply.

To sum up the results so far: in England the desirability of altering the present cumbrous and inefficient system by establishing a single efficient examining board has been acknowledged and acted on; in Ireland it has been acknowledged by two bodies, and virtually so by a third; while in Scotland it has not been acknowledged in any case.

Without anticipating the decision of the Council, the committee believe that the time has now come when the Council should set this question at rest by expressing a decided opinion upon it.

TEACHING.

In the absence, at present, of sufficient detailed criticism on the educational matters discussed in the report of the committee of last year, it is impossible to recommend the Council to take complete action in this matter. But there are four points on which there is sufficient unanimity of opinion, and on which, therefore, the Council might at once proceed to legislate. If this be done, a very substantial improvement in Medical education would be made.

1. The Committee on Education recommended that written class examinations should be enforced in all cases, and that the certificate of attendance on lectures should bear evidence of this. The Society of Apothecaries of London has already acted upon this, and has ordered that after June, 1870, this regulation shall be enforced on all who seek its licence. As this order will affect all the English schools, and as the system of written class examinations is already in use in several of the Scotch and Irish schools, it is evidently desirable that the Council should give fuller scope to the recommendations of its committee and recommend that from and after the commencement of the winter session of 1870, this custom shall be put in force in all schools, and shall be certified by the teachers on the certificates of attendance.

2. The Committee on Education likewise recommended that every student should be obliged to serve the offices of clerk and dresser; this was done with a full knowledge that a rearrangement of Hospital duties would have to be made, but with a conviction that the practical instruction of an Hospital should be made available to all, and that, if it is not done, it is impossible that the great body of students can acquire even the rudiments of practical Hospital work. The College of Surgeons of England has had, for some years, a regulation of this kind, and the Society of Apothecaries of London has now ordered that, after June, 1870, any candidate for its licence shall have served, for at least six weeks, the office of clerk.

A very competent authority has pronounced this recommendation of the Committee on Education to be the most important in their whole report, and in the belief that this is true, and considering that, like the former order of the Society of Apothecaries, it must now be carried out in all the English schools, it is recommended that the Council should make it current throughout the United Kingdom.

3. The Committee on Education advised that the teaching of therapeutics should be separated entirely from that of pharmacy, and should form the subject of a later course. Although this point has not been yet fully discussed by the licensing bodies, yet, as it has been advocated by every teacher of Materia Medica, whose replies are in the appendix to the education report, and is supported by Dr. Christison and Dr. Aquilla Smith, as well as by many of the teachers of the principles of Medicine, there can be no doubt that it would be an essential improvement, and should be carried into effect without delay.

4. The last point on which the Council can now properly take action is more connected with examinations than method of teaching, yet has a close bearing upon this.

The clinical examination in Medicine and Surgery is now carried out by so many licensing bodies, and is so good a test of practical knowledge, that the Council ought to make it imperative. It is believed that this proposition will command general assent in and out of the Council, and there is therefore no occasion to enter more fully into the argument in its favour.

As the early session of Council has rendered it impossible to put on record the replies of all the licensing bodies to the education report, it will be desirable to reappoint the present Committee, in order that a final report, disposing of all the other matters now necessarily left untouched, may be made at a future session of Council.

E. A. PARKES, Chairman.

Dr. PARKES moved that the report be received and entered on the minutes. He explained that, when the report was written the reports of certain licensing bodies had not been received.

Mr. HARGRAVE seconded the motion.

Dr. ANDREW WOOD said, as all the licensing bodies had since sent in their reports, certain statements in the report were not correct.

Dr. ALEXANDER WOOD suggested that the report should be recommitted in order that it might be brought down to the present time. Most of the documents received early were in favour of the committee's scheme, but those received later have been quite on the other side.

An amendment by Dr. Rumsey "that the report be continued on the programme until Friday, when it be taken up in connexion with the Lord President's letter; and that power be given to the committee to make in it any alterations and additions that appear to be necessary," was lost, and eventually the following was agreed to:—"That the report be received and entered on the minutes, and that the appendices and the reports which arrived after the appendices were printed be distributed to the members of the Council."

The joint report of the Executive and Finance Committees,

on the best means of lessening the expenditure of the Council, was then read.

The Executive and Finance Committees appointed July 10, 1869, jointly to consider and to report on the best means of lessening the expenditure of the Council, having carefully examined into and considered the several items of expenditure, beg leave to make the following remarks and recommendations in respect to some of the principal charges :—

MEETINGS OF GENERAL COUNCIL.

The joint committees recommend that the duration of the annual session of the General Council be limited by standing order to seven days; the remaining business, if any, to be transacted by the Executive Committee; the meetings of the Executive Committee being held in continuation of that of the General Council.

The joint committees feel that, if this recommendation be adopted, the Council would naturally support the President in the exercise of his discretion, in controlling the debates, so as to economise as far as possible the time of the Council.

PRINTING.

The Register.—The duty of publishing the Register occasions a large yearly expense to the Council. The net cost of the Register and Quarterly Lists (after deducting moneys received) was last year £394 3s. 6d. The 2000 copies supplied to Government cost more than is paid for them by 1s. 5d. per copy. The committees recommend that the Executive Committee, with the Treasurers, consult with the Comptroller of her Majesty's Stationery Office, with the view of reducing the expense. They also recommend that only one supplementary list be published annually—viz., at midsummer, instead of the four quarterly lists.

Reports.—The committees recommend that chairmen of committees be directed to give, in most cases in abstract only, the various documents and other evidence on which their reports are founded, it being understood that in all cases the original documents will be preserved for reference; and that reports drawn up when the General Council is not sitting, be printed only by direction of the President and Treasurers.

Minutes, etc.—A considerable saving has been effected in the printing of the minutes and the annual volume by the operation of the financial recommendations of last year. Nevertheless, those expenses are still very large. The committees therefore advise that the Business Committee and the Council be vigilant in limiting as far as possible the quantity of documentary matter to be printed in the programmes and the minutes.

The committees are of opinion that the printing of the volume of minutes should be under the direction of the Executive Committee.

Dr. Sharpey moved that the report be received.

Mr. Cooper seconded it.

Sir D. Corrigan moved as an amendment that the duration of the session should be limited to six days instead of seven.

This was seconded by Dr. Andrew Wood, and ultimately carried.

Dr. Andrew Wood moved that in lieu of the recommendation of the committees with regard to the meetings of the Executive Committee being held in continuation of that of the General Council, the following words should be inserted :—"That the remaining business, so far as delegated by the General Council, be transacted by the Executive Committee, the meetings of the Executive Committee for that purpose being held immediately after the termination of the session of the General Council."

Dr. Parkes seconded this, which was also agreed to.

The paragraph recommending that the President should have power to control the debates was struck out.

Dr. Alexander Wood thought there should be some control over the size of the volumes issued by the different committees. Some years ago, Mr. Churchill was willing to undertake the printing and publishing of the Register for £150 a year. If that offer had been acceded to, a great saving would have been effected. He therefore suggested that an arrangement should be entered into with some respectable publisher, so that the Council might know exactly what its expenses under that head would be.

The list of examining bodies whose examinations fulfil the conditions of the Medical Council received the sanction of the Council.

Some correspondence between the Registrar and the Queen's University relative to preliminary examinations, was ordered to be entered on the minutes, as was also a report of visitation of examinations at the Queen's University in Ireland.

Dr. Arjohn proposed that the returns from the India Office of examinations for commissions be entered on the minutes. The publication of such lists he regarded as extremely useful.

Sir D. Corrigan seconded the motion. Some of the licensing bodies have reason to be ashamed of themselves when they look at the Government returns, inasmuch as they have allowed candidates to obtain their licenses, who have been proved afterwards to be quite unfit to practise. The publicity given to these returns has had a most salutary effect on the licensing bodies.

Dr. Alexander Wood submitted, as an amendment, that the thanks of the Council be given to the India Examination Board, and that the returns be laid on the table.

Dr. Bennett seconded the amendment.

Dr. Andrew Wood demurred to the Army Medical Board, the Navy Medical Board, or the Indian Medical Board being regarded as infallible judges.

The President said he intended to vote in favour of entering the returns on the minutes. He thought they had been very serviceable as a test to the state of the previous examinations. So far from their being a cause of shame to the corporate bodies, they rather did them credit. The returns had been so drawn up, that a person who did not take the greatest care would be apt to be misled. Candidates were alluded to as having failed, when they were merely rejected because there were not vacancies for them, and not because they were incompetent. In 1865, the percentage of candidates declared incompetent in the army Medical examinations was 37, in 1866 it was 27, in 1867 it was 18, and in 1868 only 13. This improvement was most creditable both to the corporate bodies and to the Council itself. The results shown by the Navy Medical Examinations were very similar. In 1865 the percentages of candidates declared incompetent was 57, in 1866 it was 42, in 1867 it was 28, and in 1868 it was 22. The Council has only received two returns from the India Board. Last year 21 per cent. of candidates were rejected as incompetent, while this year only 2½ per cent. were so. These facts were so creditable to the corporate bodies, that it was worth the expense of printing to make them public, and remove the false impressions which exist on this subject.

Dr. Alexander Wood expressed his readiness to withdraw his amendment after this explanation.

The motion was then agreed to.

Dr. Andrew Wood drew the attention of the Council to the Bill relating to Medical Education which has been introduced into the House of Commons by Sir John Gray. He thought it was most desirable that the Council should have a copy of that Bill before proceeding to discuss the letter of the Lord President, and moved that the President should address a letter to Sir John Gray, requesting that he will have the kindness to favour the Council with copies of his Bill.

Dr. Quain seconded the motion.

Dr. Bennett proposed, and Dr. Rumsey seconded, "That the President be requested to apply to the Lord President of the Council, with a view to obtain a copy of the Bill introduced by Sir John Gray."

By the casting vote of the President the amendment was carried, and the meeting was then adjourned till to-morrow at one o'clock.

Second Day.—Friday, February 25.

The Council resumed their sittings at 1 o'clock, the President in the chair.

The President announced that he had written to the Lord President of the Privy Council requesting that a copy of Sir John Gray's Bill might be supplied to the Council, and had been promised one as soon as it could be obtained. As none had been sent, he concluded it was not yet in print.

Dr. A. Smith said a printed copy of the Bill could not be had before Monday, the second reading taking place on Tuesday.

The Council then proceeded to consider the communication from the Lord President of the Privy Council.

Dr. Parkes rose to move the resolutions of which he had given notice. He said, in the eighth paragraph of Mr. Simon's letter conveying the wishes of the Lord President, the attention of the Council is invited to the consideration of the desirability of a consolidated board. It is, therefore, necessary for the Council to express an opinion upon this point and upon the proposal which was made by the Education Committee of last year that a joint examining board should be formed for each division of the kingdom. It will be necessary for us to give reasons why this proposal should be carried out; and I now purpose to do so, and to state the arguments which have satisfied my own mind, and no doubt the minds of other members of the committee, on the subject. The present system under which the Medical Practitioner is licensed under the Act of 1858 appears to be wrong in four points—first, it is wrong in respect to the inequality of the examinations for licences throughout the United Kingdom, although there is a reciprocity of privilege; secondly, there is a competition which may be, and, I believe, will be, injurious, if it is not so at present; thirdly, inefficient men occasionally enter the Profession; and, fourthly, under the present system that regulation of examinations by means of which the Medical education of the country could be supervised is impossible. Now, with regard to the first of these points—the inequality of the examinations—it is a matter which any one can easily satisfy himself upon. The written and oral examinations and practical tests vary very considerably, and though a great deal has been done to

lessen this diversity by means of the visitations and recommendations of the Medical Council, still great differences do exist. It is apparent also that, whether from the mode in which examiners are appointed or from some other cause, the standard by which men are admitted to the Profession by the various bodies varies from year to year. If the figures given by Dr. Embleton's committee are referred to, it will be seen that from the same licensing body there is a very small percentage of rejections some years and a large percentage at other times. For example, one body rejected in one year under 2 per cent., the following year 3 per cent., and in a year or two afterwards 9 or 10 per cent., showing that there must be a very considerable inequality in the standard. I now pass to the next point, which is that there is a competition which may be, and possibly is at the present time, injurious. I shall prove this by figures, which I most sincerely hope will be capable of explanation. I do not see how they are to be explained except in one way, but if they are, I for one shall most sincerely rejoice. I never wished on any occasion that I might be refuted more than at present. I derive my information partly from personal observation and partly from the returns published in the minutes of the Council by Dr. Embleton's committee. If those returns can be shown to be incorrect, of course that I am not answerable for. As the Council knows, I have been for many years an examiner for the Army and India services, and during the last year for the navy, and during the last few years I have been struck by the fact that candidates for those services who are educated in one division of the country go for their licences, or part of their licences, to another division; or, to be more precise, I found that Englishmen educated in London or in a provincial town, and Irishmen educated in Belfast or Cork, were graduating in Edinburgh at the College of Physicians or the College of Surgeons. The extent to which this goes on is as follows:—During the years 1867, 1868, 1869, and the first examination this year, 200 gentlemen educated in Ireland have appeared before the boards. Of these, 36, or 18 per cent., have graduated wholly or partly in Scotland, chiefly at the Edinburgh Colleges. Of the same number, 13½ per cent. had been educated in England, but had sought their licences in Edinburgh. Of course I am quite unable to state what proportion of the students generally have acted in this way. I have been anxious to inquire from these gentlemen what were the reasons which led them to take the trouble to go to Edinburgh, and their answers have been extremely various. In some cases it has been evidently a simple matter of convenience: the Edinburgh Colleges had given their degrees at a time which was more convenient for them; and in some cases a gentleman, after passing his first examination at the Queen's University, would go to the Edinburgh Colleges, and subsequently return and finish his degree at the Queen's University. A small minority have frankly said they went to Edinburgh because the examination was easier. In other cases it appears that it was a matter of cheapness. For example, an Irishman will have to pay at the Royal College of Surgeons in Ireland twenty-six guineas for his licence, and at Queen's College of Physicians £15, while he can go over to Scotland and get the conjoint licence of the two Colleges for £15 or £16. Some of them have said to me, "We can go to Scotland and see Edinburgh, and go back again to Ireland, for the same money that it would cost us to get our licences at the Irish Colleges." In other cases, the reasons given have assumed a somewhat poetic character: Irishmen wished to see Edinburgh, and had a great attachment for Scotchmen; and some appeared to think that an Irishman educated in Scotland was as near perfection as possibly could be. However, from one cause or the other, the fact is there has been going on among these gentlemen a very considerable amount of licensing in this way. At the last examination, which occurred only the other day, we had twenty-two Irishmen, and no less than six of them had graduated in Edinburgh, although educated in Ireland. Well, I turned to the records of the Council and to the records of Dr. Embleton's Committee, and I dealt with the numbers in the following way:—In these returns it will be seen that there are two headings for the final examination—a heading of "passed" and a heading of "rejected." I then took these two columns and added them together to obtain the total number of applicants. Some, of course, were applicants for the second time; but that will not interfere with the accuracy of the results. When I worked out these numbers I became aware that two English bodies and one Irish body are being subjected to a very serious competition. I will first read the figures relating to the Society of Apothecaries. Let it be remembered that in 1858 that Society was the only body in England which could really license a General Practitioner. Everyman who took a Medical licence went to that Society. Since then other bodies have licensed for England as well as for other parts of the United Kingdom. Bear in mind, also, that the number of those seeking licences has not diminished, but rather somewhat increased during the last few years in England. In 1862 there were 340 applicants for the Apothecaries' licence; in 1863, 313; in 1864, 296; in 1865, 286; in 1866, 243; in 1867 there was a gain up to 284; in 1868, 223. Taking these numbers as correct, they show that there were 117 fewer applicants in 1868 than in 1862. When I saw these numbers I applied to Mr. Cooper, to get the figures direct from the Apothecaries' Company, and, though I cannot reconcile the two documents, I find that their returns also show a diminution during those years, but to a smaller extent, the diminution being from 312 licences in 1862 to 261 in 1868, or a decrease of 51. The two documents, however, are not exactly comparable, because one gives the number of certificates, and the other the number of applicants. I then turned to the College of Physicians of London, thinking that in all probability the cause might be found there of the diminution in the number of licences granted by the Apothecaries Society. Their numbers have not increased to any extent, and therefore the loss to the Apothecaries could not be accounted for in that direction. I then turned to the Royal College of Physicians of Edinburgh, and I found that during the last few years there has been a wonderful increase in the number of its licences. A few Fellowships may possibly be included in the returns, but it is impossible to conceive that this has had any material effect upon the result. In 1863 there were 160 licences given; in 1864, 248; in 1865, 261; in 1866, 271; in 1867, 292; in 1868, 406. Now, of course I cannot tell, nor can any one, whether the men who were lost from the Apothecaries' Society went up to Edinburgh; but this I do know, that somehow or other they must be accounted for, and, as far as I can learn, there has been no increase in any other body sufficient to account for this diminution. If this can be explained away I shall be only too happy, because it will smooth the difficulties very much. Then the College of Surgeons of England is beginning to suffer, not to such an extent as the Apothecaries' Society, but still it is suffering. In the year 1862 there were 531 candidates for the licence of the College of Surgeons; in 1863, 538; in 1864, 488; in 1865, 423; in 1866, 420; in 1867, 405; in 1868, 404. Thus there has been a diminution of 127 candidates. Where have these gentlemen gone to? As far as I can see, they must have gone to Edinburgh. They may have gone to Glasgow, but certainly to a less extent. The number of candidates at the College of Surgeons, Edinburgh, in 1863 was 132; in 1864, 167; in 1865, 155; in 1866, 158; in 1867, 184; in 1868, 153.

Dr. Andrew Wood: Where did you get those figures from?

Dr. Parkes: Of course the Council will remember that I must throw upon Dr. Embleton's committee the responsibility of the numbers being correct. The Faculty of Physicians and Surgeons of Glasgow do not appear from these returns to have increased, or, at all events, but very slightly. In the year 1862 the number was 78; in 1863, 101; in 1864, 125; in 1865, 96; in 1866, 74; in 1867, 93; in 1868, 87. Then I find that the Royal College of Surgeons of Ireland has suffered; and on inquiring of Mr. Hargrave, I find that he is aware of the fact, though he tells me my figures are not quite correct. In 1862 the Royal College of Surgeons of Ireland had 149 applicants; in 1863, 174; in 1864, 131; in 1865, 115; in 1866, 106; in 1867, 101; in 1868, 116. Taking the first three years, the mean is 142, while the mean of the last three years gives 109. I am glad to be able to say that the King and Queen's College of Physicians in Ireland hold their own. The representative of that College will be glad to hear that there appears, in fact, to have been a slight increase. The cause of that I have not been able to explain. (Laughter.)

Sir D. Corrigan: Can you give the numbers for 1862 and 1868?

Dr. Parkes: In 1862 there were 52; in 1868, 112. I assume that the diminution in England and Ireland is owing to the Edinburgh Colleges. Of course I cannot prove it, but I do not see any other way of explaining it. I think the Council ought to go thoroughly into the question of this displacement. At first I thought that some gentlemen might prefer the licence of the College of Physicians to the licence of the College of Surgeons or the Apothecaries' Society. I feel very little sympathy with such a feeling, but there may be some who have such a preference. But if that is the cause, how is it the English students do not go up to the College of Physicians of London? Then, again, you may say it is because the licences in Edinburgh are cheaper, but that won't account for it, because

the licence of the Apothecaries' Society is cheaper still, only six guineas for licences in country districts, and ten guineas in London. Among Englishmen a not inconsiderable number go to the College of Surgeons for a Surgical licence, and to Edinburgh for their Medical licence. Is this because the Edinburgh examinations are easier? Now here I must say I think it would be extremely difficult to give any proof, and I should be very sorry to state anything of the kind, or to cast any imputation upon those colleges. I hope that they will be able to show that that is not the cause, and they have some very good arguments in their favour. The visitors of the Branch Council have reported favourably of them. Mr. Syme says—"On the whole, I feel warranted in stating that the examinations which I was desired to visit are in every respect worthy of the two bodies on whose part they have been established;" and a subsequent report by Dr. Christison and Dr. Fleming stated that "these examinations were sufficiently extensive, varied, and searching, yet not unduly difficult." With respect to the College of Physicians, Mr. Syme reports—"On the whole, I beg to express my opinion that their system of examination is in every respect highly creditable to the college." I therefore feel that I have no *locus standi* when I say that their examinations are easier. However, I do not see how this displacement is to be explained except in one of two ways; either the Society of Apothecaries has its examinations too rigorous and searching, and therefore unnecessarily deterrent, or the College of Physicians of Edinburgh has its examinations too low, and therefore improperly attractive. One or other of those two must be the cause. Well, then there is another thing. It is stated in a report which has been made to the Council by the Royal College of Surgeons of Ireland that candidates rejected by one examining board have gone to and been immediately passed by another. I do not think this can apply to the Edinburgh colleges, because they do not admit any one for three months after being rejected by another board. This is a state of things requiring serious consideration. It is no use blinking the fact that the Act of 1858, which was admirable in that it secured a reciprocity of licence throughout the whole kingdom, was faulty in this respect, that it did not insure that the examinations in different parts of the kingdom should be equal. Whoever framed that Bill framed it either as a compromise, or else he had no real interest in the Profession, or no statesmanlike foresight as to what its consequences would be. What, then, must the Society of Apothecaries and the College of Surgeons do? Very soon they must do one of three things. The first alternative is to submit to gradual extinction. Will they submit to that? There will come a time when their fees will fall below the expenses of their examination. Will they submit to that? I say they will not submit. They will rather lower the standard of their examinations to a level with the other body. This will be the second alternative, and no effort of the Medical Council will be able to prevent them from doing that. The third course will be to call for a modification of the Act of 1858—in fact, the call for the repeal of the union will come from England. I say we are in the wrong course altogether under this Act of 1858, and we must make an alteration somehow. I will now pass on to the third point—that there are passing into the Profession gentlemen who are imperfectly and inefficiently educated. Yesterday very strong remarks were made by Dr. Andrew Wood upon the examiners for the public services, and it was said that they were not proper tests and supervisors of the examinations of the corporations. I was astonished to hear those remarks, because the examiners have never put themselves in that position. They have done their work and nothing else. Who applied to the public bodies for the returns and printed them upon their minutes? Why, the Medical Council. This Council has made the public examinations into a test. For myself, during the whole time I have been on this Council, with the exception of one occasion, I have never referred to the examinations of the licensing bodies, and on the occasion when I did refer to them what was the reason? Why, because two gentlemen of this Council, Dr. Christison and Mr. Syme, attempted to make this Council the instrument of doing away with the honest and fair competition for admission to the public services and returning to the rotten system of patronage. I then brought before the Council certain facts, and I proved by documentary evidence that some of the corporations were admitting men improperly into the Profession. That was in 1864. You, sir, very properly drew attention to the fact that the percentage of men unfit to serve in the Army and Navy is diminishing, and I am happy to state that you were correct. I wish the members of the Council to understand that we do not get the worst men coming up as candidates for those services. I believe we get men above the average. The bad men never come up to us. When a man wants to come up to the public services, eight times out of ten he goes to a tutor or grinder, and the grinder does the man a great deal of good, and if he does not show himself particularly capable he is told "You will not pass; there are a small number of vacancies, the chance is not worth the expense." Thus, the worst men get eliminated, and the remainder, I have no doubt whatever, have been considerably improved in elementary education. We do not now get, or comparatively seldom, those extremely bad specimens of English and composition which made us wonder how such men could get admitted into a Profession which called itself learned. I believe the action of the Medical Council has done a great deal. With regard to the preliminary examination, too, there has been a great improvement, upon which the Council may congratulate itself. But I wish it to be clearly understood that the evil is not yet eradicated. There are still men entering the Profession who ought not to be allowed to do so, and I do not believe that this will ever be entirely prevented under the present system. At the last examination there were two men so bad that I cannot conceive how they passed the board that did pass them. I assure you that sooner than have admitted these men to serve in the army and navy I would have left the soldiers and sailors without doctors at all. The fourth point is this: If we are to regulate Medical education by means of this Council, we must do it chiefly through the examinations; but we shall never be able sufficiently to regulate them so long as the licensing bodies continue as at present. We must consolidate them in some way, in order to effect an improvement. These are the grounds that have satisfied me that consolidation of the various licensing bodies is necessary, and I trust and hope they will be found sufficient to satisfy the members of the Council. I pass on now to the next point—that is, how these conjoint boards should be formed. On this subject there are two opinions expressed out of doors. One of these opinions you will find in the reports of the various Scotch bodies, which unequivocally condemn the consolidation. It is looked upon as bad in its origin, and certain to be disastrous in its results; as subversive, anarchical, and revolutionary. Some of the Medical press look upon this proposition as merely a means of saving the corporations—as, in fact, a mere make-believe; or, to use a military term, simply a change of front. I think it can be shown that neither of these views is correct. My own opinion is, that the proposition is neither revolutionary nor anarchical, but eminently conservative, and, instead of being a make-believe and useless, it is, in fact, an organic change of a most important kind. I conceive that we want two things especially. First of all, simplification of the present system. We do not want to add another examination to the already numerous examinations. The proposal which has been made to add to the various examinations an examination by a Government body is faulty in every way. It is a complication instead of a simplification, and it gives no certainty that we shall get good examiners. I believe a Government examining board is about the worst thing we can have. With the present Government we might be certain to get good examiners, but we all know that in England there is still a great deal of influence exercised by political and private means which is constantly acting upon the appointments, and it is impossible to insure from year to year that the examiners shall be chosen on good grounds. This system, in fact, would only lead us into modification of the German system, in which the degrees of the university have gradually been lowered, and the State examination has come to be regarded as the important one. This is exactly the opposite result to that which it is desirable to secure. Well, then, how can you get a simplification? You cannot by having an additional examination by a Government board; but you will get it by a consolidation. Can you get it in any other way—by substituting a board appointed by this Council in the face of the licensing bodies? My firm conviction is that the Medical Council will do very wrong indeed if it does not support to the very utmost of its power the Medical corporations. I do not in the least wish my remarks to imply that any of the corporations should be at all injured; I believe it would be for the Profession one of the worst things that ever occurred if our College of Surgeons, or College of Physicians, or Society of Apothecaries were in any way damaged. Would not anything that injured the College of Surgeons, entering as it now is upon a liberal course, and being almost the only Medical body in the kingdom that has the means and appliances for teaching science to its students, be a direct and positive injury to the Profession? So, again, with the College of Physicians of London, which is now leavening the whole Profession and

bringing into its fold all the best members of the Profession. The same may be said, doubtless, of the Colleges in Scotland and Ireland. Why should they be injured? If they have done wrong, is it not because of the imperfections to which we are all subject? and have they not of late been trying in every possible way to do right? You must not, then, supersede them by another board. We come, therefore, to the conclusion that we must have a consolidation of these various boards. The next point is that we should insure good examiners. That, I believe, can be attained in no other way than by attaching the examiners to those great corporations, which include all the teachers, old and young, and the most eminent members of the Profession. For example, can anybody doubt that the College of Surgeons is the best and most competent body in England to appoint an examiner in Surgery? Can anybody doubt that the College of Physicians would be the best judge of an examiner in Medicine? He would be chosen by the full College, by all the Fellows, and under the opinion of public opinion within and without. I believe the same might be said of the other corporations. In the original draft of the Committee it was proposed to carry out in England and in Ireland what has been done in Scotland by a union of the various bodies; but it was afterwards suggested that all the bodies in Schedule A should be included. My own opinion at that time was unfavourable to this: I thought there would be a great difficulty in dealing with the universities, but events have shown me that I was mistaken. I regard the introduction of the university element as a matter of the greatest importance, but we know already that in England the universities are willing to concur in the scheme with the most perfect frankness, and the influence of those great seats of learning will be most important on the board of examiners which we hope will be formed. In Scotland and Ireland, too, an alliance between the universities and the corporations would be in the highest degree desirable. Is there any practical difficulty in effecting such an alliance? I think I can show that there is not. But, as I have already said so much which may be considered introductory to the discussion, and as various other members of the Council will have to speak after me, and will bring to bear upon this question the very great knowledge that they have with respect to it, I feel it would be better for me to leave to them the further discussion of the details, and merely content myself with recapitulating the principles upon which I think the board should be formed. The new system should be a simplification of the present system, the boards should be perfectly efficient, and we should be quite certain that good examiners will be appointed. The details can of course be arranged after full consideration of these very important points. I have no doubt that these conjoint boards can be formed, and then I believe the greatest improvement will be made in Medical education which has been made in our time. The Council may then legitimately congratulate itself upon the result. I will ask those members of the universities who know that their examinations are good, and therefore think no change is necessary, to look upon the Profession as a whole, to look upon the emigration, so to speak, that I have spoken of, and then to see if they cannot reconcile the public good with their own interests. If they cannot, the public good must be cared for, and the interests of the universities must be sacrificed. I will conclude by moving "That full liberty being left to the universities and corporations to deal as they please with their honorary distinctions and degrees, an examining board should be formed in each of the three divisions of the kingdom, and that every person who desires to register any of the qualifications recognised in Schedule (A) of the Medical Act shall be required, previously to such registration, to appear before one of these boards and be examined on such subjects as may be required by the Medical Council, any distinctions or degrees he may wish to take to be in addition and optional."

Dr. Storrar seconded the resolution.

Mr. Cæsar Hawkins explained that it was not intended to interfere with any of the present qualifications. It was merely proposed that every one should undergo the examination by one of the conjoint boards before they could register any other qualifications. Full liberty would therefore be left to the universities and corporations to deal as they pleased with their honorary distinctions and degrees. Hereafter the Medical Council would have nothing to do with the education given by the various licensing bodies, and would therefore be able to avoid those bickerings and discussions which had led to so much dissatisfaction among the public. To bring three boards into uniformity with one another was a very easy matter, but it was not so easy to deal with nineteeen different boards. Very few of the licensing bodies had examinations on the dead subject, but the rest were too numerous for the Council to deal with on this subject. He had long wished that his own board should be constituted differently from what it is. Every member of that board was required to examine in anatomy and Surgery; but though a man might be quite competent to examine in one of these, he might not be so with regard to the other. If a conjoint board was appointed, the best men would be selected for each subject. Men who were in practice were the fittest to examine, and by changing the boards from time to time all risk of continuing the examinations in one particular groove would be avoided. This scheme would get rid of a great deal of the obloquy thrown upon the different corporations and the Council, while the Council would be able to act upon the examining boards with far greater effect than at present. He thought the Scotch amalgamation had failed to give satisfaction. It was expected that the double licences would gradually supersede the single licences; but in 1867 the Edinburgh College of Surgeons gave 47 single diplomas, and the College of Physicians 139, while the double licences were only 101. In 1868, the College of Physicians gave 219 single diplomas, showing an immense increase on the previous year, while the joint examinations gave only 74, showing a diminution from the number in 1868. Thus the single examinations were gradually superseding the double examinations instead of the reverse, as was expected when the amalgamation first took place. The same effect was observable in Glasgow, where in 1867 the single diplomas numbered 28, while in 1868 they had increased to 36, the joint examinations during the same period diminishing from 29 to 18.

Dr. Andrew Wood said he did not know how Dr. Parkes's numbers were made out, but he had telegraphed to Edinburgh in order to get a table which he himself had prepared about a month ago, by means of which he would be able to show that the number of diplomas granted by the College of Surgeons of Edinburgh, and the amount of fees received, had diminished rather than increased. He had had the curiosity to make out a sort of *résumé* of the various plans propounded for the cure of the evils which exist. The first was the appointment of a Government board like the *Staats Examen* of Germany, the colleges and universities granting licences as at present, but none of those licences being registered before the candidate had passed the Government examination. He objected to this plan, because it would take away altogether the power of the licensing bodies. The second plan was a conjoint board, such as that which had been sketched by Dr. Parkes, to examine all who were to enter the Profession, and then, after having passed that examination, every man must attach himself either to a college or a university. That was exactly the plan which was contained in Mr. Headlam's first bill, and all the corporations agreed to it. The present Medical bill, with which the corporations had been so much twitted, was a compromise agreed to, not in consequence of the urgency of any of the corporations, but in spite of all the corporations and the universities. The next plan was a conjoint board to examine at the various colleges and universities at the option of the student. Dr. Fleming would probably propound that plan before the termination of the debate. Another plan was that of a conjoint examination in Ireland, Scotland, and England, by the corporations, as at present was done in Scotland, the universities being left to themselves. He did not approve of this either. The next plan was conjoint examinations by the corporations and by the universities combined amongst themselves. In Scotland, when the corporations came to consider the matter, they had before them nothing but what they saw recorded in the journals. They had not then the letter of the Lord President, and afterwards the members of the Council were placed in the very awkward position of having the letter of the Lord President sent down to them with strict injunctions to show it to no one. They thus had no opportunity of consulting the corporations as to what should be done under the altered circumstances. He therefore thought it was unjust to level at the Scotch Boards such diatribes as had appeared in some of the journals, characterising them as obstructives unwilling to take into consideration the question of conjoint boards. When he returned to Scotland he was quite prepared to recommend the body which he represented to receive Dr. Parkes's resolution, because it was exactly the resolution to which they had agreed many years ago when it was introduced in Mr. Headlam's Bill. He did not believe that Dr. Parkes's scheme would satisfy the journals, but it would secure the great object of a conjoint board in each of the divisions of the kingdom, which might be easily supervised, and by means of which uniformity of education and examination would be secured. The resolution contrived to combine this with the preservation and the welfare of the corporations

and the universities. Whatever might be the *lâches* of the corporations in past times, he believed they were institutions peculiar to Great Britain which excited the envy of foreign countries. To abolish them would be to put down the means of competition, and would be doing for the Profession the very reverse of what every other profession and trade was doing in this country—uniting themselves together in order to preserve their rights and privileges and independence. There could not dawn upon Great Britain or upon the Medical Profession a day more disastrous than that which should involve in one common ruin the corporations and universities of this country. If the scheme suggested by Dr. Parkes could be carried out, he believed the corporations, when consulted, would agree to it, but the revolutionary plans to which he had alluded would find little support in the Council or from the more moderate and right-thinking part of the Medical Profession.

Dr. Bennett said he thought the excuse made by Dr. Wood for the inaction of the Scotch bodies was not a sufficient one. At the breaking-up of the last session of the Council a committee was formed, of which Dr. Parkes was chairman, and all licensing bodies were requested by that committee to give their opinions upon several distinct points, one of which was the formation of joint examining boards. The Royal College of Physicians of London no sooner had these resolutions sent to them than they took them into their serious consideration, and returned a distinct answer with regard to the main point, to the effect that it was desirable to form conjoint boards for the three divisions of the kingdom. They then communicated with the College of Surgeons, next with the universities, and finally with the Society of Apothecaries, and were exceedingly gratified to find how very general was the feeling that such boards should be formed. The result had been that they had succeeded in framing a scheme, which had, more or less, been approved of. The conduct of the universities in this matter had been peculiarly gratifying. They had given up a very important point, one in regard to which they might very well have been supposed to stand upon their dignity—they had agreed to allow their candidates to be compelled to come up to the conjoint board before obtaining the university degrees. The regulations for the course of study for their graduates remained precisely as before. The expense to the graduates of the examination would be five guineas. In this way the difficulty with regard to the universities had been got over. In addition to this, the scheme provided for a certain amount of university superintendence over the examining board. The next point which they had proceeded to consider was upon what principle the examiners should be appointed, and it was very naturally felt that, for the purposes of Surgery, the College of Surgeons was the best body to select competent examiners, and, with regard to Medicine, the College of Physicians. At the present time, the two corporations of Physicians and Surgeons and the universities, with the exception of the University of Durham, which had not had time properly to consider the matter, he believed were willing to agree to the scheme, although official authoritative answers had not yet been received. With regard to the Apothecaries' Society, certain difficulties had been raised, which had not yet been overcome. Those difficulties partly depended upon their Act of Parliament, and partly upon the settlement of the important question of the appointment of examiners in Medicine. Still a scheme had been devised, and, to a great extent, detailed, which showed the practicability of carrying out in England the proposition now before the Council. He felt that it was but just to the College of Physicians to accord to them all the credit of having taken the initiative in this matter.

Mr. Cooper, alluding to the scheme propounded by the College of Physicians, said it had been assumed that the Apothecaries' Society only examined in pharmacy and Medical botany, but the fact was they examined in every science connected with the science and practice of Medicine—in anatomy, chemistry, physiology, materia medica, etc.—and the examinations were complete and searching. It could not, however, be denied that many of the students went elsewhere for their licences, and such a state of things ought not to exist.

Mr. Hargrave admitted that the College of Surgeons of Ireland had been seriously injured in the way mentioned by Dr. Parkes. He had known instances in which candidates rejected by that body had in less than a week been passed by other bodies as full-fledged Surgeons. Unless there was some understanding that a candidate rejected by one board should not be examined by another within six months after that rejection the evil would continue even after the formation of the conjoint boards. He also recommended equality of fees among the examining boards.

Dr. Apjohn asked if it was intended that a candidate passing the examination of the joint board could be put upon the Register without receiving the diploma of any public corporation or university.

The President said he understood that passing that examination alone was not sufficient to entitle a man to have his name placed on the Register.

Dr. Apjohn said the body which he represented strongly desired that there should be only one board for the three divisions of the kingdom.

Dr. Humphry was exceedingly glad to be able to state that the University of Cambridge and the College of Surgeons of England had expressed their unanimous approval of the scheme for a joint board for England. The whole matter should be regarded as an imperial question, not as one merely affecting certain corporations or either of the divisions of the United Kingdom in particular. He regarded Dr. Parkes's proposal as exceedingly satisfactory. It was a reform without any spoliation. The present condition of affairs was eminently unsatisfactory. The majority of the nineteen corporate bodies were competent to examine only in one subject, although in many cases they examined in several. The fact mentioned by Dr. Parkes of students passing from one country to another for the purpose of examination proved that there must be something decidedly wrong in the present system, and the only possible mode of remedying this would be by the appointment of one common board. The Corporations at present occupy a by no means dignified position. There ought not to be any room for such an accusation as that the examination of one body was inferior to or easier than that of another, and that students rejected by one had very shortly afterwards succeeded before another board. Neither was it a dignified position for the corporations to have their examinations subjected to inspection by members of the Medical Council. All this would be avoided, and the several corporations would really occupy a higher place in public estimation if Dr. Parkes's scheme was carried out. No opportunity should be given to the students to select easy examinations, but all ought to obtain their qualifications by passing equal tests. The proposals which emanated from the College of Physicians were at once taken up by the University of Cambridge. All consideration with regard to the interest of the University was laid aside, and by the several syndics by which it had been considered the question had been treated simply as one affecting the Profession and the public in general. The remarks made by Mr. Cooper and Mr. Hargrave clearly proved that the supervision of the Medical Council as at present carried out was not sufficient to effect the object desired. Some further power should therefore be obtained from Parliament in order that the Council might act upon the several corporate bodies in an effectual manner. He objected to the plan of having one peripatetic board for the three kingdoms which would involve a very serious expense. He agreed with Dr. Parkes in his estimate of the importance of maintaining the efficiency of the corporate bodies, their existence being essential to the preservation of the high character of the Profession. Nothing could be more disastrous than that the Colleges should be swept away or their influence materially weakened.

Dr. Fleming thought the amalgamation of the Scotch boards was one cause of so many candidates going to Scotland for their diplomas, for a double qualification could be obtained there by one examination. Scotch licences, too, had always stood high both at home and in the colonies. The reports of Dr. Embleton's committee showed that no charge of laxity in examination could be sustained against the Scotch boards. The fee for the double qualification was only £16, and this no doubt was an inducement to many. If the English and Irish bodies had seen fit to amalgamate as the Scotch had done, the question now before the Council would probably never have been discussed. The reason why the Scotch bodies continued to give single qualifications as well as double ones was because the English and Irish bodies did the same. The subject of a joint examining board had been discussed in Scotland, but the Scotch boards had been kept completely in the dark as to what was being done in England. The Scotch system differed materially from the English. The Scotch universities had obtained the power of licensing to practise Medicine and Surgery, and would have to be taken into consideration in any scheme for a joint board on a very different principle from that applied to England or Ireland. He differed from Apjohn in thinking that if a gentleman passed the conjoint board and was found qualified to practise he should be entitled to be registered. Such a person might be named Licentiate in Medicine and Surgery, which could be repre-

sented by the letters L.M.S. It should be left optional to the students to join any of the corporations in order to attain higher distinctions.

Dr. Alexander Wood said the opinions with which he had come to the Council had undergone considerable modification; at the same time, he was convinced that if any stringent resolution binding the Council or the bodies represented at the Council to any specific course of action was passed, many of those bodies would be taken by surprise, and regard themselves as treated unjustly. There had been too little interchange of communication between the three divisions of the kingdom upon these matters, but probably, if a little delay took place, they might be able to come to a unanimous resolution that would satisfy all parties. He was astonished to hear that there was any reluctance on the part of the Scotch boards to enter into amalgamation. Before the Medical Act was passed a single year Scotland set the example and amalgamated, and ever since had been trying to impress upon the boards in England and Ireland the propriety of adopting a similar course. For a long time the value of this was denied, then the possibility of doing the same thing in England was denied, but now, at last, the various London bodies seemed to have come to some general agreement, and were trying to force that specific agreement or something similar to it upon the Profession elsewhere. (No, no.) The Scotch boards had waited nine long years to see something of the kind carried out in England, and now all they asked the Council to do was to wait two months to enable them to consider the altered circumstances of the case, and very likely at the end of that time they would give in their adhesion to what was proposed. The amendment which he was about to propose would contain nothing in the slightest degree condemning Dr. Parkes's resolution. All he claimed in the interests of common justice was time for the Scotch boards to consider the subject in its new phase. Dr. Bennett had said that ample time had been afforded; but there had not been ample opportunity, because the Scotch boards had not had before them the important documents which would have enabled them to come to a decision. On a great question like this, everything that tended to produce jealousy or dissatisfaction between different bodies should be avoided; but, as sentence after sentence rolled from Dr. Parkes's mouth, he was surprised at hearing Dr. Parkes in a new character. The speech seemed designed to set the different corporations of the United Kingdom in opposition to one another. (No, no.) He said the Scotch were drawing away the students from the Apothecaries' Society and from Ireland. It was lamentable that such statements should have been made, and yet Dr. Parkes had said, "I have no proof for this; on the contrary, all the authorities were against it; still I cannot explain it in any other way." The explanation was that Dr. Parkes seemed to be utterly ignorant of the progress of Medical reform during the last fifty years. Was he not aware that in the very same year in which the Medical Act was passed another Act was passed called the Scotch Universities Act; that, previous to the passing of that Act, there was a university in Scotland which was entitled to give degrees in Medicine, and which did, in fact, give those degrees in a very lavish way to all those who had passed its examination, wherever they had been educated, without requiring the residence test, which other Scotch universities required? Was he not aware that immense numbers of Practitioners flocked from England to St. Andrews to obtain degrees in consequence of the residence requirements not existing? Was he not aware that by the Universities Act this was abolished, and that thus the opportunity of a gentleman receiving a degree in Scotland without residence was done away with? Then with regard to the aspersions which had been thrown upon the Scotch bodies, was it a fair, was it a generous argument to say, "I asked the various students who came to my examination why it was they went from Ireland and England to Scotland. Some spoke of the beauty of Scotland, and a few of the cheapness, and a few—I am bound to say a few—of the easiness of the examinations?" The Council was rather bound to believe the reports of its own examiners, who were not very favourable to the Scotch bodies which they reported upon. Had Dr. Parkes introduced another set of statistics from the volumes which the Council had published, he would have obtained evidence enough to show that his ungenerous conjecture was utterly indefensible. At page 118 of last year's minutes there was a table drawn up by Dr. Embleton's Committee, which was the best refutation possible of the accusations brought against the Scotch bodies. The Royal College of Physicians for Edinburgh examined for its licences, the first examination, sixty-seven candidates, and of these it rejected forty-five. Did this look like an inferior examination? Did this look like easy passing? Was there another body in that table that could show such a large percentage of rejections upon the number that presented themselves? Then, at the second or pass examination, of 299 applicants 86 were rejected. This sufficiently vindicated the character of the examinations. It must also be remembered that up to the passing of the Medical Act no qualification obtained in Scotland enabled a Practitioner to practise in England. England was then a close preserve; but when the hedges were taken down, there was no longer anything to prevent those who were desirous of entering the Profession from going to take Scotch diplomas. After alluding to the returns from the examinations for the public services, and characterising them as unfair tests, Dr. Wood went on to say that, in common with all who had thoughtfully considered the subject, he regarded the multitude of examining boards as an evil, and that if their number were reduced to three it would be easier for the Medical Council to superintend the examinations; but the plan proposed by Dr. Parkes might, after all, turn out not to be so desirable as some thought. The effect of the Government examination upon teachers in other than Medical schools in Scotland had been to dwarf them to one level instead of allowing them to follow the bent of their genius. They were put into a Procrustean bed and shortened more often than lengthened to the Government regulation model. He should deprecate exceedingly anything like a regulation Doctor. Such a plan might for a year or two bring some up to the level who otherwise would not have been, but subsequently its tendency would be to arrest progress. Still he was not going to contend against the principle of establishing three boards; but was the English branch that had been so tardy that for nine long years they had not seen the advantage of amalgamation, now that they were thoroughly convinced, to refuse to wait to hear what the views of the Scotch bodies were? The Scotch corporations were honest and sincere in their desire to meet the views of the English boards, and if they had bad materials to enable them to come to a decision, most probably they would agree to what was proposed; but they had not had the advantages for considering the question which the English boards had had, and therefore they wished for a little delay, and concluded by moving the following amendments:—"1. That the proposal to establish a general examining board in each division of the kingdom is a very important one, and may seriously affect the interests of ancient universities and corporations, the maintenance of which in unimpaired efficiency is of importance to the interests of the Medical Profession."—"2. That no opportunity has yet been given to these universities and corporations to consider the suggestions in the letter sent by authority of the Lord President of the Privy Council to the President of the General Medical Council, and therefore that the representatives of these bodies in the General Medical Council cannot be prepared, in this stage, to agree to any proposals for forming such a board, and this Council would deprecate any hasty legislation on so important a subject."

Dr. A. Smith seconded the amendments.

Dr. Quain said, in reference to postponement, that he regarded the question before the Council as one of the most important that had ever occupied their attention. The Lord President of the Council had in substance asked the Medical Council whether they were prepared to recommend a consolidation of the examinations in each division of the kingdom. This was the point which the Council was called upon to consider, and their meeting would be to no purpose if they failed to come to a decision. What could be gained by delay? The only hope of legislating during this session on the subject was by giving a definite answer to the Lord President's letter. Such an opportunity of getting the matter settled had never before offered itself, and yet Dr. Alexander Wood wished them to lose that opportunity. There was no detailed plan before the Council; they were simply required to answer a question, "Is it desirable to have one board for each division of the kingdom?" He believed the large majority of the Council had made up their minds that such an arrangement was an absolute necessity. (No, no.) Well, if they did not do that, which was now an absolute necessity, they would find that it would be done for them by Parliament. If the resolution were agreed to and carried out, the corporations and universities would remain precisely as at present, so far as regarded their examinations, they would appoint their own examiners and conduct their own examinations, but not separately. The advantages of the proposed arrangement were so plain, the difficulties so slight, and it could be carried out with so little injury to

existing institutions, that it appeared to him a source of surprise that the Council did not unanimously agree to it.

Dr. Macrobin was in favour of two months' delay.

Dr. Stokes supported the resolution.

Dr. Rumsey did not regard the proposal for delay as negativing the resolution. A more decisive and satisfactory reply might be given if more time were allowed for deliberation. He thought the Government were as capable of appointing competent men to be examiners as any board in the kingdom. Would it not, then, be better that the board should be nominated by some body in whom the public would have full confidence than that the examiners should be selected by the corporations?

Dr. Thomson supported the amendment. The proposal of the Government was now for the first time brought before the notice of the corporate bodies, and it was unfair to require them to give an immediate answer.

Sir D. Corrigan could not agree to the resolution. The members of the Council were there to act as representatives, not as individuals expressing their own judgment merely, and therefore they were bound to consult the bodies which they represented before giving a reply to such an important communication as that from the Lord President. As yet they had had no opportunity of ascertaining the views of their constituents, and he should, therefore, vote in favour of delay. A great deal had been made of what was represented as the wonderful unanimity of the licensing bodies on this question, but of the nineteen Scotch seven had protested against the proposal, and two others had not assented to it. In England, though it was represented that the boards were almost unanimous, it appeared that there had been no official communication from Oxford, Cambridge, or London University. The results of conferences with official and formal agreement were only just worth the time spent on them and nothing more. If Dr. Parkes's resolution was agreed to, there would be a considerable minority opposed to him, and such a resolution would not be a proper one with which to go to the Government. He had received explicit instructions from the body which he represented, not to agree to [illegible] principle of the conjoint examining boards, but to advise the [illegible] he had done before the appointment of [illegible] a royal commission of inquiry to take evidence on the question, both from members of the Council and others. He candidly confessed, too, that he did not understand the resolution. He had thought that honorary distinctions were only given by universities to distinguished persons; not a word was said about the other distinctions and degrees, so that these bodies were given permission to continue to do what they could not be prevented from doing.

At 6 o'clock the debate was adjourned to Saturday at 1 o'clock, Sir D. Corrigan not having finished his speech.

Third Day.—Saturday, February 26.

At one o'clock the debate on the communication from the Lord President of the Privy Council was continued by

Sir D. Corrigan, who said the Lord President's letter was only communicated to the members ten days ago, and was marked "Private and confidential," so that they were prevented from consulting the bodies which they represented upon the matter, and yet they were now called upon to determine what answer should be given to that letter. He could not give his assent to such a proposition. He could not gather from the resolution whether it was intended that the candidate should be examined by the joint board before or after he had obtained the diploma of any of the licensing bodies. It appeared to him that the result of establishing the proposed boards would be merely to beget competition between three more "shops," in addition to the nineteen already existing. From this point of view the resolution was entirely objectionable. The whole object of the Council from the beginning had been to introduce union, reciprocity, and equality; but the proposed arrangements would really cause social war between the holders of the different diplomas, for whenever three men competed for a vacancy in the army, the navy, or the civil service, the examiners must be, to a certain extent, biased in favour of the diploma of one particular division. It was very well to say that they would be above such a thing, but it was not in human nature to resist it. If there was to be a central examining board to test the efficiency of the students, all the diplomas ought to bear the same stamp, so that no person afterwards voting for or appointing the holder of a diploma should know whether he came from England, Scotland, or Ireland. He quite agreed with Dr. Parkes as to the evils that exist under the present system. He felt those evils so strongly two years ago that he brought before the Council a proposal for a Royal commission of inquiry as the only way to remedy matters. He saw so much disunion in the Medical Council itself, that there was no prospect whatever of their coming to any conclusion, and that was the reason he proposed the Royal commission. But while he agreed with Dr. Parkes as to his diagnosis, he differed from him as to his prognosis or proposed treatment. The proposal which he had advanced long ago was not to destroy the existing "shops," and probably substitute something worse for them, but to improve the article that came from them. He was astonished to hear it argued that where there was inequality in the number of candidates examined and the number of rejections from one year to another, there must necessarily be inequality in the examinations, and that that was the only explanation that could be offered. Had it never occurred to Dr. Parkes that young men might come up one year very much better prepared than those that came up the year before, and that if a greater number passed one year than in the year before, it was because they were better prepared? Strong evidence in support of this view could be drawn from what had taken place in the London University. When they increased the severity of the matriculation examination, the rejections were very numerous, and there was an outcry that the examination was too stringent. But what happened the next year? Why, the rejections were not one quarter of those of the preceding year. According to Dr. Parkes's view, the inevitable conclusion would be that the University of London lowered its requirements in order to let in a greater number; but it did no such thing. The University of London, setting an example for all our universities, stood to its colours, kept up its standard, sent back the boys, and said "Come again next year." They came again, and, having learnt a lesson from experience, there were comparatively few rejections. He could not vote for the resolution, because his directions from the body he represented were not to give his assent to any particular provisions of an Act of Parliament before they had had an opportunity of considering them. His own view was in sympathy with these instructions, and he should therefore support Dr. Wood's amendment. The second year after the Council sat, he and Dr. Storrar took a very active part in attempting to draw up a Medical Bill. That Bill was enshrined. Every year since then the Council had been tinkering on the matter, endeavouring to stop first one hole and then another; but their efforts had been of very little avail. Last year, after ten years' experience, a committee was appointed to bring up resolutions with regard to a Bill. The fate of their report was well known. With all these proofs of disunion, what chance was there of any Bill that was brought forward obtaining the unanimous consent, or even the consent of three-fourths, of the Council? Whatever resolution was carried, it would only express the opinion of a majority, and when it came before the House of Commons every licensing body that did not exactly agree with it would immediately get up an opposition. No Government would make it a party question, and therefore every member of the House of Commons would be influenced by the fact that the Council was divided on the subject, and would give their votes without caring one farthing about the Profession, merely with an eye to secure votes at the next dissolution. The only way he could see of escaping out of the difficulty was to appoint a Royal Commission. There would be no difficulty whatever in working it; the best men would be appointed, the Commission could sit while the Council was in session, the members could give their evidence before it, the Medical Reform Union could do the same, and the whole truth would be elicited. There would then be data for the members of the House of Commons, and a basis on which to found a Bill. He did not believe their object could be attained in any other way.

Dr. Storrar repudiated the idea that the members of the Council were merely delegates sent to obey the behests of their constituents. He himself would not retain his seat one moment under such conditions. The original scheme for the General Council was that the members should deliberate as independent gentlemen upon what concerned the interests of the Profession, and he was therefore astonished to hear Sir D. Corrigan say that he had received specific instructions from the Queen's University to oppose the resolution. He could not but express his very great sympathy with Sir Dominic in his state of bondage, and he hoped that the time would soon arrive when he would be able to disenthral himself from that bondage, and have a freedom of action corresponding to his freedom of speech. (Laughter.) Sir Dominic had recommended the appointment of a royal commission. Such a commission was

generally appointed to inquire into circumstances which were unknown. But would anybody venture to say that all the facts of the case were not known with regard to the evils existing in connexion with the Medical Profession? No royal commission could throw any light upon it. Why, then, should such a commission be appointed? The whole of Dr. Wood's amendment was based on the idea that the members of the Council were delegates; otherwise what necessity could there be for delay? The Lord President had merely asked for the opinion of the Council on a particular proposition, and it was quite possible that after he had received that opinion he might communicate with the colleges and universities in order to ascertain their views. It was therefore clearly the duty of the Council to state their own views without waiting for consultation with their constituents. Last summer a report was presented by the Educational Committee in which the inequality of the examinations for licences was alluded to, and that report with the appendices had been submitted to the various licensing bodies for consideration. The remarks of the licensing bodies on that report had been sent in to the Council, and therefore there could not be any necessity for waiting while those bodies again considered the question. Of course that report was sent by the Executive Committee to the Lord President, and, in fact, it was alluded to in his letter. Therefore he knew that the Council had already resolved to seek for power in any amended Medical Act to refuse registration to any candidate who had not been properly examined both in Medicine and Surgery. It might, however, be questioned whether even such a power would be sufficient, and whether it would not be desirable to grant to the Council the power of compelling amalgamation in the event of voluntary amalgamations not proving effective. The amendment was therefore a proposal that the Council should recede from their already expressed opinion. This would be to move in a circle in a most extraordinary manner. He never knew a greater bull in his life. It was not an Irish bull, but a Scotch bull with an Irish cross—(laughter)—for Dr. Wood and Dr. Smith were both members of the Educational Committee. Sir D. Corrigan had said that the University of London had not expressed approval of such a scheme, but the Senate of that university adopted the report of the committee, and expressed their willingness to co-operate with the other universities and corporations of the United Kingdom in carrying out a scheme which might secure the efficiency of such uniform examinations. Though Dr. Alexander Wood had taken great glory to the corporations of Scotland for having amalgamated, it must be remembered that the amalgamation was brought about under very different circumstances from those existing in England, and even at present it was optional with the student whether he should seek a double qualification or merely a single one. The reason given for the flocking of students from England and Ireland to Scotland was very curious, but by no means satisfactory. There was a spirit existing at the present time in the Colleges of Physicians and Surgeons of England which he heartily responded to, and he should be very sorry, for professional, social, and educational reasons, to see those Colleges in any way injured. He would gladly preserve them so long as any arrangement could be entered into by which the public good could be secured. The proposal now before the Council was, instead of nineteen examining bodies, to form three. It was much easier to exercise some kind of rein over three bodies than over nineteen, and when those three bodies were established, probably the amount of intercommunication between them would secure this advantage—that while there would be a certain difference of complexion, there would be no difference in essentials. He implored the members of the Council to rise above the mere local interests of corporations and universities, and to do their duty to the Profession and to the public generally.

Dr. Sharpey said what the Council had to do was simply to send an answer to the Lord President's proposal for consolidating the examinations. It would not be in accordance with the wish of the Lord President as expressed in his letter to defer replying as suggested by the amendment. What was required was the opinion of the Medical Council, and when that was obtained the Lord President might directly communicate with the various licensing bodies and ask for their views. It was contended that those bodies had had no opportunity of considering the Lord President's letter, but even if that were so they had had full opportunity of considering the matter contained in that letter. Their attention had been directed to it for many months, and therefore they must by this time have formed an opinion upon it. Without waiting for any application from the Government, the English bodies had set themselves to consider some plan by which the desired object could be attained, and they had manifested a wonderful coincidence of opinion. He trusted that the Council would not separate without coming to a definite conclusion upon the question before them. He regarded Dr. Alexander Wood's explanation of the reason why students leave England and go to Scotland to obtain their licences as by no means convincing. They all knew that when it was found that there was a greater facility for obtaining the necessary qualification at one point than at another, the weakest candidates were sure to resort to that place.

The President said the gist of the Lord President's letter was this: he acceded to the Council's request for Government legislation on certain conditions. The Council had previously sent to the Lord President a draft bill, and subsequently the Executive Committee communicated to him other matters on which legislation was needed. In that draft bill, which was placed in the Lord President's hands last July, there was a clause for the amendment of section 40 of the Medical Act of 1858, which section was intended to check the lowest form of quackery, but had wholly failed to do so. The Council was well aware that the clause for the amended Bill was drawn up with the greatest pains and care in order more effectually to deal with the worst forms of quackery by preventing quacks from assuming Medical titles which they did not possess. This was part of the legislation the Government offered on a certain condition. This condition was not a very hard one, but on the contrary was rather complimentary, simply that the Council should be willing to accept fresh powers. Were they for one moment prepared to refuse those powers? Such a refusal could only be justified by their being able to show the Lord President that acceptance would be injurious, and it was impossible to show that. If there was anything the Council could plume itself upon, it was that it had done so much for the improvement of Medical education without the exercise of that extreme power, an appeal to the Privy Council. What then was the fresh power for? To effect the amalgamation of the examining bodies. The only point of detail that had been objected to by any member of the Council was that there should be but one board for the three kingdoms instead of one for each. That was a matter for future discussion. What such amalgamations would effect had been indicated by Dr. Parkes, and whether his figures and interpretations of them were right or wrong, one statement which he made was calculated to make a strong impression on the minds of the members of the Council. He mentioned having recently met with two gentlemen possessed of the necessary diplomas who were so exceedingly incompetent that he could not imagine how they could ever have obtained their qualifications. Of course that statement could be perfectly relied on, and as Dr. Parkes was an experienced examiner it was utterly impossible he could have made a mistake. Then, again, in the report of the College of Surgeons of Ireland, it was stated positively that men rejected at one examination often quickly go to another and get passed. Even if these facts were overstated, still for such things to be reported and believed was itself a scandal. The examinations at which qualifications for practice were to be obtained should be altogether above suspicion, yet Dr. Parkes had pointed out how one body performing its duties carefully and strictly might suffer while another body performing its duties negligently might be benefited. The influence of this state of things was very injurious and unjust, and was a constant impediment in the way of the Council in their attempts to raise the ordinary standard of the Profession. A great improvement had taken place during the last four or five years, but it had caused the Council an enormous deal of trouble to effect it. The result of a very small raising of the standard of ordinary Medical acquirements might be very well expressed in a great number of lives, and a great amount of suffering saved. It was clearly the duty of the Council to do all they could to improve Medical education, and so to care for the lives and diminish the suffering of the people. Their responsibility, therefore, would be more than doubled if they actually refused the power that was offered them, which would enable them to perform their duties and to do their work more effectually. He believed in reality there was very little difference of opinion among the members of the Council. He was free to confess that he should be far better satisfied with the opinions of the representatives than with opinions of the licensing bodies themselves, because the Council had fully and carefully considered the subject. He protested against its being supposed that the members of the Council were merely delegates sent to do what their constituents told them, and he should protest far more strongly if he were still only the representative of the

University of Cambridge. He was quite certain that that University never sent him to the Council for any other purpose than to do what he could do for the public good; and he was of opinion that, if the subject of the Lord President's letter were shelved for a time, and in a month or two it was found that action had been taken by the Government in the matter, the representatives who now asked for delay would be blamed by their constituents instead of praised. The only possible circumstances under which it could be advisable for them to wait two months, or even one month, could be that the whole world should stand still except the Universities of Scotland, the Queen's University of Ireland, and the Colleges of Physicians of Edinburgh and Dublin, that the sittings of Parliament should be suspended, that the editors of the Medical journals should go to sleep, and, in fact, that there should be an entire suspension of everything else, so that nothing should be done until their decision was come to. What the Council had to do was to consider their own dignity and do justice to themselves. The question was for them to decide. The Lord President knew perfectly well what he was about when he asked for the decision of the Council, and the Council would be risking its reputation, and the members their personal reputation, for judgment if they did not give a direct answer, yes or no.

Dr. Parkes, in reply, said he never intended any remarks which he had made to cause a difference between the various licensing bodies; in fact, his own feeling in the matter was so strong that he should be exceedingly sorry to see the Act of 1858 interfered with as far as regards Medical education. One of the great reasons that had moved him in the course he had taken was the conviction that the present system was imperilling the connexion between the different bodies. The subject which they had been discussing was by no means new to the Council, for motions bearing upon it had been constantly submitted to them, and the report of the Educational Committee had brought the scheme definitely forward. He himself had communicated with various members of the Council urging them to bring the matter before their colleges or universities, and they had done so. It was therefore impossible to maintain that the various licensing bodies had had no opportunity of considering the question. No advantage could be gained by delay, and not one member of the Council would alter his opinion within two months. The Council had now such an opportunity as they never had before and as they might never have again, and they would act very unwisely if they did not avail themselves of it. With regard to the suggestion that there should be only one board rather than three, he thought that as the examiners in that case would have to go from one division of the country to the other, the appointments must be permanent, and thus the efficiency of the examinations would be interfered with. Another objection to such a plan was that the examiners would have to go a-begging for the appliances and means of conducting the examinations. The supervision of the Council would be sufficient to prevent any evil effects from competition between the three boards. Delay in answering the Lord President's letter would be nothing else than abdication and suicide, and would be actual betrayal of the Profession. If the letter of the Lord President was not answered, the Council would shut themselves out of Court altogether, and the Government would proceed without them.

Dr. Alexander Wood's amendment was then put to the Council, and lost, the numbers being—For, 5; against, 17.

Dr. Thomson submitted another amendment:—"That this Council is of opinion that a joint examining board should be formed in each of the three divisions of the kingdom; and that every person who desires to be registered under any of the qualifications recognised in Schedule (A) to the Medical Act shall be required previously to such registration to appear before one of these boards, and be examined on all the subjects which may be deemed advisable by the Medical Council, the rights and privileges of the universities and corporations being left in all other respects the same as at present." He said he had felt that the debate would terminate as it had done, and that differences with regard to points of detail were in reality the only cause of the want of unanimity. He had therefore endeavoured to make the resolution more clear and more satisfactory to those boards which had up to the present time entertained doubts with respect to the proposal. His amendment expressed more strongly than the original resolution did the assurance that the rights of the various licensing bodies were not intended to be interfered with in any way.

Dr. Bennett seconded the amendment, and with the permission of the Council Dr. Parkes and Dr. Storrar withdrew the original resolution in favour of the amendment.

Dr. Apjohn then moved "That the Council agree to the principle of instituting an examining authority before which every person who desires to register any of the qualifications recognised in Schedule (A) to the Medical Act must appear, and be examined in such subjects as may be required by the Medical Council; it being understood that no person shall be put on the Register who is not in possession of one of the qualifications which at present entitle him to registration.

Dr. Stokes seconded it.

Sir D. Corrigan said, if he were free from the directions of his constituents, he should certainly vote for the amendment.

Dr. Rumsey said Dr. Apjohn's proposal had removed from his mind the doubt which he had felt, and enabled him to affirm the principle that unity and uniformity of examination for qualification throughout the United Kingdom was desirable. He therefore had great pleasure in supporting that proposition. He regarded the question of whether the examining board should be tripartite or single as a matter of detail which could be settled hereafter. The great principle established by the amendment would be uniformity throughout the United Kingdom.

The amendment was put to the Council and lost—three voting for it, and fifteen against.

Dr. Thomson's resolution was then agreed to, seventeen supporting it, Sir D. Corrigan alone voting against it.

During the afternoon the President received the following letter in answer to the request which he had made for copies of Sir John Gray's Bill:—

Sir,—In reply to your letter of yesterday, I am directed by the Lord President to inform you that, in answer to his Lordship's requisition for copies of Sir John Gray's Medical Acts' Amendment Bill, the Lord President has received an intimation that the Bill in question is not yet printed, and that it will be some days ere it will be printed.

I am, Sir, your obedient Servant, Bruce M. Seton.

Adjourned till Monday, the 28th.

Fourth Day.—Monday, February 28.

The Council resumed at 2 o'clock.

The President announced that Sir John Gray had sent him, as President of the Council, the draft of his Medical Acts Amendment Bill, accompanied by a letter soliciting suggestions from the Council on the subject.

Dr. Parkes then proceeded to move the series of resolutions of which he had given notice on the subject of the Lord President's letter. He said the resolutions were drawn up with the following object. The first clause was to enable a request to be addressed to the various universities and corporations in the United Kingdom to proceed as soon as they could with the drawing up of some scheme for the conjoint examining board, the principle of which was confirmed by the resolution of Saturday, and, within a time to be fixed, to submit the scheme to the consideration of the General Medical Council. The object of the next clause was this, that supposing the scheme, when drawn up, should appear to the Council to be deficient, they should have the means of representing that and discussing it with the various bodies, and that if the difference in opinion could not be overcome, then that a reference should be made to the Lord President of the Council. Some of his friends were anxious to add to that a proviso that, supposing the universities and corporations in any part of the United Kingdom could not agree upon a scheme, and refused, in fact, to do so, power should be provided for the Medical Council forming such a scheme, and that, after consultation with the superior authorities, such scheme should become law. The next clause was simply to carry out by Parliamentary proceedings this previous arrangement, and the last was the appointment of a committee to confer with her Majesty's Government in framing the proper clauses necessary to be introduced into the new measure for the purpose of carrying out the principle of the resolution carried on Saturday. That was the general effect of all these clauses. They seemed to accomplish what was desired, and if they could appoint a good committee to confer with the Government in the preparation of the clauses of the Bill, everything would then be done which the Council could do in the present state of proceedings. The clause which would have to be introduced in such a Bill was rather a wide one, giving the Council sufficient powers to carry out the scheme for a conjoint board, and also to alter the constitution of the conjoint board at any future time, provided it was found it did not work well. He concluded by moving the first resolution—"That an answer, founded on the following resolutions, be sent to the Lord President of the Council:—That, in accordance with the foregoing resolution, the universities and Medical

corporations established in each division of the United Kingdom shall be requested to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong, and, on or before June 1, 1870, to transmit such scheme to the Registrar of the General Medical Council."

Dr. ANDREW WOOD seconded the motion.

Dr. HUMPHRY thought the resolution an admirable one. It laid down an important principle: it would throw the responsibility of the study of the several subjects of their Profession on the corporations. It would make the College of Surgeons of each division responsible to a certain extent for the education and examination in Surgery, and the College of Physicians for the education and examination in Medicine. This was a very important principle. The responsibility should, to a considerable extent, rest with the corporations, the examination, nevertheless, being subject to the supervision of the Council. It might be said that this scheme had been framed by those who were members of corporations; but the answer was that, though they were members of corporations, they were, nevertheless, members of their Profession, and, associated as they might be with the corporations to which they belonged, they all felt that they had higher and greater duties to the Profession to which those corporations were subservient. He rose not for the purpose in the slightest degree of diminishing the force of the resolution, but rather for the purpose of increasing it by adding as a supplement "and that the General Medical Council shall make provisions to supervise and to insure as far as possible harmony, and a sufficient and uniform standard in the examinations to be held in the several divisions of the United Kingdom." He thought it would be hardly fair to send a resolution of the kind proposed to the several corporations and universities who were requested to combine unless there were superadded to it the addition he proposed.

Dr. BENNETT thought it was a very important point, and suggested that it should be put as an independent resolution.

Sir D. CORRIGAN asked what the Council intended to do supposing the universities did not concert a scheme. They were assuming that they would agree to a scheme, but had no information as to whether they would. They were in the position of a respected friend of his who said he was about to be married to one of the richest heiresses in the country. He was asked how far it had gone, and said "It has gone halfway, for I have my own consent." They were much in that position. It had gone halfway; they had got their own consent in favour of a scheme for a separate examining board to each division of the United Kingdom, a scheme to which he personally had the strongest opposition, and were now going coolly to call upon the Medical corporations and universities to concert a scheme and submit it to the Council on or before June 1. Was there the slightest probability of an Act of Parliament being passed this session if it was delayed till June? It might, perhaps, be that Dr. Parkes, knowing that the scheme could not be carried into effect, had named June 1, as that would put an end to all legislation this session. (Vote, vote.)

The resolution was then put to the Council, and adopted.

Dr. PARKES moved the next resolution—"That any alterations deemed necessary by the Council should be considered by the conjoint bodies and their opinion reported to the Council, and that, in case of disagreement between any of the conjoint bodies and the Council, the points of difference should be referred to the consideration and decision of the Lord President of the Privy Council. That the same course should be followed if, in process of time, it should be considered advisable to make any alteration in the original constitution or rules of the conjoint examining boards."

Dr. STORRAR, in seconding the resolution, said he took upon himself the responsibility of having strongly advised the introduction of the "Lord President of the Council" instead of "her Majesty's Privy Council." They must bear in mind that in appealing to the Privy Council they were appealing to the highest court of law in the kingdom, and a very expensive court it was. It was a very great advantage in an arrangement of this kind that they should have some ultimate responsible authority to whom they might appeal. The Lord President of the Council was really, under certain circumstances, the education minister of the country. It was very true that they appealed to one man, but still they appealed to one man exercising a very important trust, with very heavy responsibilities upon his shoulders, quite sufficient to keep him straight.

Dr. AQUILLA SMITH thought they were assuming too much. They were assuming that the Government would frame an Act in accordance with the resolution passed on Saturday. They seemed to be drifting into a course which would waste a great deal of time and not do any good.

Dr. BENNETT thought these resolutions would follow as a matter of course on what had been already done.

Mr. CÆSAR HAWKINS said that all these details would prepare them for another year, and they might be just as well done now as at any other time.

Dr. ACLAND thought the Council would desire to adopt whatever was the ordinary course. His impression was, the appeal in the ordinances and statutes of the universities and public bodies was to her Majesty in Council, and he saw no reason, if that were so, why they should at a moment's notice be called upon to depart from what he believed to be the usual custom.

Dr. BENNETT thought they had better follow the example of the Act of 1858, which was to "represent the same before her Majesty's most Honourable Privy Council."

Dr. MACROBIN did not think they could exclude anybody from appealing to the Privy Council, even if they put in "the Lord President."

Dr. ANDREW WOOD said the words of the clause, as they stood, at present, simply asked the Lord President to arbitrate between the two parties. But he should be very sorry indeed to say that that arbitration should be decisive. They should add in addition "with power to appeal to the Privy Council."

Sir D. CORRIGAN said if these words, "the Lord President of the Council," were retained, they were drifting into about as foolish a position as they could possibly be in. Did any man in his senses think the Lord President of the Council would take up such an office as to decide differences between competing Medical universities and corporations? If his knowledge of Medical matters went so far as to know that physiology and pathology differed, one could not expect it to go much further. Would any Lord President in the world take up such an office as to take up disputes between the Medical Council and nineteen corporations of the United Kingdom, and to take up disputes between the Medical corporations themselves on all subjects from toxicology up to midwifery, to decide which was right, and which was wrong; and did any one who understood even the elements of their constitutional law, suppose that the House of Commons would grant to an individual the power of deciding any question of law? The Lord President in such a case would be given a power by the House of Commons above any power possessed by the constitution, even the power of the Throne. The Lord President would not accept it, and the House of Commons would never give it.

Dr. PARKES proposed, with the consent of the Council, to strike out the words "the Lord President of the Privy Council," and to insert "her Majesty's Privy Council."

This was assented to, and the resolution as amended was adopted.

Dr. PARKES then moved the third clause:—"That the powers required for carrying the foregoing resolutions into operation be sought from the Legislature; and that her Majesty's Government be requested to bring in and carry through Parliament a Bill to amend the Medical Acts, which shall contain the requisite provisions."

Dr. STORRAR seconded the resolution.

Sir D. CORRIGAN objected to the clause, because it assumed that it was the opinion of the Council that there should be an examining board in each of the three divisions of the United Kingdom. By making these three boards the principle on which legislation was to be founded, the competition of shops would be just as bad between three as between thirteen, and, worse than all, the men would go out stamped as English, Irish, and Scotch, into the world. On that ground alone he had from the beginning opposed the establishment of these three boards, and advocated the establishment of a central board, from which a certificate or diploma should be issued, which would not distinguish the men of Scotland, Ireland, or England, from one another. By the introduction of the three boards, they would be doing that which would tend to revive national jealousies. If he stood alone, he must divide the Council on that; he could not be a party to such a resolution.

Dr. ACLAND said he could not allow Sir Dominic Corrigan's interpretation of what the Council had just done to be stigmatised in that way. The Council on Saturday resolved upon the principle of united examinations. They had known for years that, as long as this number of licensing bodies existed conducting separate examinations, it was impossible that they or the country at large could be satisfied. The only practical course open to the Council was to resolve to adopt the principle of union by three boards. It was a matter of indifference to him whether there were three boards or there was only one;

the principle he felt pledged to was that of uniting their boards in the best possible manner, and, as soon as ever the next resolution was passed, to do the utmost he could to get the best national board or boards that could be got. All that remained was matter of detail. He entirely objected, as a man and as a member of the Council, to being charged with an endeavour to revive national jealousies. They had no intention of the kind, and he ventured, on behalf of all his colleagues, distinctly and positively to assert that, in their resolution of last week, they had no intention to revive national jealousies; they had no such intention, and would do the best of their ability to resist that result. He was well aware that there were very great difficulties in the conduct of three national boards. It was a great disadvantage that these boards should be in these separate parts of the kingdom in the abstract, but just as they had differences of Scottish, Irish, and English law by the very necessity of their insular existence and other imperial causes, so it might be in this instance that this was the best thing to be done.

Sir D. Corrigan explained that what he said was that, when they were engaged, like all other bodies, in endeavouring to abolish all national jealousies, the introduction of three boards might have the effect of reviving them. He hoped Dr. Acland would withdraw his observation.

Dr. Acland was sorry that he had misunderstood Sir Dominic.

Dr. Andrew Word said he wished to guard himself against being supposed to be pledged to any particular way of carrying out the great principle on which they had agreed of instituting a combined system of action of controlling the examinations. He did not consider himself pledged, by having voted in favour of Dr. Parkes's resolutions, to carry out the principle of three separate boards; if he thought so, he should have voted against them.

Dr. Stokes said it did not follow that because there were three boards, those boards would assume any national character, because their examinations were to be regulated by the Council.

The resolution was then agreed to.

Dr. Humphry then rose to move his resolution. He said that the necessity for some such resolution as he had suggested was shown by the discussion to which they had just listened. It was important that they should guard themselves against misrepresentation, and show that although they were proposing three boards, their object was that those three boards should work harmoniously together. The resolution was—"That a Committee be appointed to communicate with the Government in the preparation of such Bill, and that it be an instruction to them to introduce such clauses as may not only legalise the action of the conjoint boards, but may contain powers to the General Medical Council to organise such boards, if the universities and corporations of any division of the kingdom fail to do so, and may also contain provisions for the supervision of the conjoint boards, and which may, as far as possible, assure their harmonious working; but that the draft of the bill, when ready, be submitted for approval to the General Council."

Dr. Hargrave seconded the motion.

Dr. Alexander Wood objected to the motion as pledging the Council to what Dr. Andrew Wood and others had refused to be pledged to—the question of whether they were to have three boards or one. That, hitherto, had been left an open question; but, if Dr. Humphry's motion should be carried, their hands would be tied up, and they would be pledged to three boards. The last part of the motion was perhaps necessary, but the part referring to the three boards should not be most certainly forced upon the Council at the present stage. He moved the previous question.

This was seconded by Dr. Andrew Wood and carried.

Mr. Cæsar Hawkins said, on referring to the draft Medical Bill proposed by the Council last session, it would be found that they had told the Government that they were willing to allow colonial or foreign degrees or diplomas to be registered here on certain conditions. They had now determined that none of their licences should be of any value unless they were accompanied by the certificate of a conjoint board. Now they ought to put the holder of a colonial diploma on a par with those holding diplomas from home colleges, and, to meet that case, he proposed the following resolution:—"It is the opinion of this Council that if powers should be given to the General Council to register under certain restrictions foreign or colonial degrees or diplomas, the holders of such foreign or colonial degrees or diplomas should undergo, previous to their registration, the same examination which will be necessary in the case of every person who desires to register any of the qualifications recognised in Schedule (A) of the General Medical Act."

Dr. Quain seconded the resolution, which was adopted.

Mr. Cæsar Hawkins: There was a clause in the Act which would now be unnecessary. He proposed, therefore, "That it is the opinion of this Council that the words 'provided such persons shall be resident in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered' should be omitted from the proposed Clause XI. in the draft Bill of the amendment to the Medical Acts."

Dr. Alexander Wood said the question was at present under the consideration of their solicitors whether an offence committed previous to registration could be visited by removal from the Register, which was the only means they had of dealing with persons who had conducted themselves improperly in a Professional aspect. The clause Mr. Hawkins wished to remove was adopted, after great consideration, because it was thought possible gentlemen who had misconducted themselves in the colonies might come over here and get put upon the Register, and then they would find a legal impediment to their removal, because the offence was committed before registration. He moved the previous question.

Mr. Cæsar Hawkins withdrew his resolution.

Dr. Fleming moved, "That, in any amending Medical Bill, it is desirable that a clause should be inserted, enabling the General Medical Council, or any of the Branch Councils, to establish a board or boards for the examination of intending Medical students in general education."

Mr. Hargrave seconded the motion, which was agreed to.

Dr. Apjohn moved "That, in any Bill intended to carry out the preceding resolutions, this Council is of opinion there should be no interference with the universities and Surgical and Medical corporations as respects the times at which they may, as heretofore, choose to confer their degrees and licences."

Dr. Aquilla Smith seconded the motion, which was negatived.

Dr. Parkes then moved—"That a committee be appointed to communicate with the Government in the preparation of the Amending Bill; and the draft of the Bill, when ready, be submitted for approval to the General Council." He said, with regard to the last paragraph, there was a very considerable difficulty which the Council should consider. It was no doubt of extreme importance that the members of the Council should have full opportunity of considering the Bill and expressing their opinions upon it. But on the other hand there was almost as great a difficulty. If the Bill was passed this session, and he believed they were all very anxious that it should do so——

Sir D. Corrigan: No! (Laughter.)

Dr. Parkes: It certainly must be introduced very soon, and therefore the Council would have to meet again in a very short time—perhaps in a fortnight or three weeks. (Laughter.) But then it was also very important that the Council should meet late in the summer for the purpose of considering the scheme, or if not, these things would have to be postponed till next year. Between these difficulties it was not easy to stir. He thought the best thing would be that the Bill, when drawn out, should be sent out to the branch councils and considered there. The opinions of the branch councils could be represented to the Government if necessary, and then the General Council could have its meeting at a later period—July probably—when they might, under the authority of the Bill, proceed to settle the scheme submitted to it.

Dr. Rumsey thought Dr. Parkes's remarks went to show the great advantage that would result from deferring legislation till next year. ("Hear, hear," and "No.")

Dr. Alexander Wood said he had listened with great attention to Dr. Parkes, and could not help thinking that there had been negotiations going on that some of them knew nothing about. They found documents prepared and mutual understandings which all of a sudden burst in upon them; and now they were told that a Bill could be brought in in a fortnight.

Dr. Parkes: In a week. (Laughter.)

Dr. Alexander Wood said he wished to point out that he could conceive no course of action more likely to be detrimental to the interests of any Bill that might be introduced than referring it to the Branch Council. He appealed to them whether the free discussion of questions in the Council had not tended to reconcile the Branch Councils, and he could contemplate with nothing but the greatest dissatisfaction the proposal that each division of the Kingdom should meet separately and consider and discuss this question. It was not absolutely necessary that the Council should be consulted as to the clauses of the measure before it was introduced into Parliament. It was with

a sincere wish to facilitate legislation that he opposed Dr. Parkes's motion.

Sir D. Corrigan: What is the motion before us? The motion is that it shall be referred for approval to the General Council, but Dr. Parkes has made a speech proposing its being submitted to the Branch Councils.

Dr. Acland seconded Dr. Parkes's motion.

Dr. Alexander Wood moved as an amendment, "That a committee be appointed to communicate with Government in the preparation of an amending Medical Bill. That the President be instructed to summon the Council in time to consider the provisions of such Bill before it passes into committee in either House of Parliament.'

Dr. Sharpey seconded the amendment.

Dr. Parkes said he should be very glad to withdraw his motion, and substitute the amendment for it.

The motion was then withdrawn, and the amendment put as a substantive motion, and adopted.

Some discussion took place as to the Committee that was to undertake the conduct of this business, and it was eventually determined to entrust it to the Executive Committee.

Dr. Parkes moved—"That a Committee, consisting of the President, Mr. Hawkins, Dr. Sharpey, and Dr. Parkes, be appointed to draft a letter to the Lord President of the Privy Council." Agreed to.

The Council then proceeded to consider the following letter from the King and Queen's College of Physicians in Ireland:—

King and Queen's College of Physicians in Ireland,
February 22, 1870.

Sir,—I am directed by the President and Fellows of the King and Queen's College of Physicians in Ireland to inform you that, having maturely considered the subject of the introduction of an amended Medical Bill, they are of opinion that any Bill introduced without the previous step of the issuing of a Royal Commission to inquire into the working of the several Medical Acts, especially in regard to the last eleven years, during which the General Medical Council has been in action, would almost certainly prove unsatisfactory, and would probably be opposed.

From their knowledge of past occurrences, the President and Fellows with great reason apprehend that, without such preliminary inquiry and report, there will arise such influences of conflicting interests, contradictory views, and embarrassments of judgment in the Houses of Parliament as will mar the progress of any measure, however useful.

The General Medical Council has now been in action for more than eleven years; and it may be fairly expected, from the long experience and knowledge of its members, aided by the information of members of the Profession generally, that such a mass of information will be collected as, when embodied and impartially analysed in a report, will furnish a satisfactory basis for the introduction of a good Bill, and will carry with it an amount of trustworthy information and authority that will insure a general assent to its provisions.

The President and Fellows think that it is only by the adoption of this course a satisfactory result will be attained, and they therefore earnestly solicit the attention of the General Medical Council to their recommendation. I have the honour to remain,

Your obedient Servant,
(Signed) James Little, Registrar.

Francis Hawkins, Esq., M.D., Registrar General Medical Council.

Sir D. Corrigan moved the following resolution founded upon the foregoing letter:—"That from the many differing opinions that have existed, and still exist, as to proposed amendments of the Medical Acts both within and without the Council, it appears desirable, before proceeding with any new legislation, that a royal commission of inquiry should issue to take evidence from such members of the Medical Council, and such other persons as the Commission may see fit to examine, with the view of furnishing evidence and a report, which it is hoped will prove a sound basis for legislation." He said the letter so fully expressed the reasons why the royal commission should issue, that he did not think it necessary to enlarge upon it.

Dr. Rumsey seconded the resolution. He said it was not only very important that the Council should deliver an opinion on the General Medical Acts, but the opinion of Medical men of the Profession should also be taken on a matter so deeply touching the welfare of the Profession. He could not conceive that any legislation would be satisfactory which did not elicit the opinions of the leading Professional men in the country.

Dr. Andrew Wood opposed the motion not because he was averse to obtaining information on any part of the questions with which they had to deal, but because if they were to go to the Government and ask them for a royal commission, they might naturally turn round and say, "Gentlemen, you have been sitting for the last twelve years; you have been in a position to obtain a vast deal of information; you have been in a position to know a great deal more of the Medical Profession than any royal commission—(no, no)—and you ought to be in a position to advise us in regard to this matter." If the Government were dissatisfied with what the Medical Council had done, they would issue a royal commission themselves, but the demand for such a commission should not come from the Medical Council, who had been working as well as any royal commission could work, and were as anxious as any royal commission could be to obtain information.

Sir D. Corrigan having replied, the motion was put to the Council and lost.

The Council then entered on the consideration of the following report of the Committee appointed by the Council to confer with the licensing bodies on the Education Report:—

In accordance with the resolution of Council (Minutes, vol. vii. p. 94), the report of the Education Committee, which had been presented, but not discussed, at the end of the last meeting of Council, was forwarded to the licensing bodies. Their attention was particularly directed to the suggestion made in paragraph 22 of the report, that conjoint examining boards should be formed in each division of the kingdom, before which every person who desired a licence to practise should appear, and by which he should be examined on all subjects; any higher degrees he might wish to take being optional, and taken afterwards.

Answers were requested from them on this point in December, 1869, the other portions of the report being left for further and separate consideration.

Up to the present date answers have been received from thirteen of the licensing bodies, and are given in the Appendices. Owing to the unusually early period at which the Council has been summoned, it is probable that the answers from several licensing bodies will not arrive in time to be laid before the Council, and the same cause will make the present report less complete than it would otherwise have been.

The questions raised in the report of the Education Committee referred to matters either of examination or of teaching.

EXAMINATION—THE FORMATION OF CONJOINT EXAMINING BOARDS.

All the English bodies have replied to the question of conjoint examining boards, and it is satisfactory to find how much unanimity exists. The carefully expressed answers of the Universities of Oxford, Cambridge, London, and Durham, and the decided resolutions of the Royal College of Physicians of London, and of the Royal College of Surgeons of England, in favour of such boards, are decisive evidence of the opinion which prevails in England.

The College of Physicians of London at once proceeded to act on its resolution by framing a scheme, and by inviting a conference with the College of Surgeons, and subsequently with the Society of Apothecaries; and afterwards communications were made to the English universities. The results of these conferences, and the final arrangement of the details of the plan, are not yet officially made known, but enough has transpired to show that the anticipated difficulties have nearly been surmounted, and that not improbably when the Council meets the matured scheme will be laid before it.

The case is different in Scotland. Only two bodies, the University of St. Andrews and the Faculty of Physicians and Surgeons of Glasgow, have yet officially replied; the other two Universities—the Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh—have all had the subject under repeated consideration, but without as yet coming to any conclusion which can be now announced. It would seem as though more difficulties have been experienced than in England, or the desirability of the plan has not been so strongly felt. The Council will no doubt hear from the representatives of the Scotch universities and corporations the position of the question, and will be able to judge of the weight of the alleged difficulties.

The University of Dublin, the Royal College of Surgeons of Ireland, the King and Queen's College of Physicians, and the Apothecaries' Hall, have replied from Ireland. The Royal College of Surgeons, in expressing an unfavourable opinion of the suggestion of the Committee, have given in one of the latter paragraphs of their report a very strong argument in its favour. The University of Dublin has admitted the desirability of a single examining board, but the plan it proposes seems not to be the most advantageous way in which the principle can be carried out.

The King and Queen's College of Physicians in Ireland express their want of concurrence in the principle of conjoint Examining Boards, and decline "at present to enter into details as to the mode of carrying out that proposal."

The Apothecaries' Hall of Ireland have, without reserve, expressed their concurrence in such a plan, and have suggested the Corporations which should unite.

The Queen's University has as yet made no reply.

To sum up the results so far; in England, the desirability of altering the present cumbrous and inefficient system by establishing a single efficient Examining Board, has been acknowledged and acted on; in Ireland, it has been acknowledged by two bodies, and virtually so by a third; while in Scotland it has not been acknowledged in any case.

Without anticipating the decision of the Council, the Committee believe that the time has now come when the Council should set this question at rest by expressing a decided opinion upon it.

TEACHING.

In the absence, at present, of sufficient detailed criticism on the educational matters discussed in the Report of the Committee of last year, it is impossible to recommend the Council to take complete action in this matter. But there are four points on which there is sufficient unanimity of opinion, and on which, therefore, the Council might at once proceed to legislate. If this be done, a very substantial improvement in Medical education would be made.

1. The Committee on Education recommended that written class examinations should be enforced in all cases, and that the certificate of attendance on lectures should bear evidence to this. The Society of Apothecaries of London has already acted upon this, and has ordered that after June, 1870, this regulation shall be enforced on all who seek its licence. As this order will affect all the English schools, and as the system of written class examinations is already in use in several of the Scotch and Irish schools, it is evidently desirable that the Council should give fuller scope to the recommendations of its Committee, and recommend that from and after the commencement of the Winter Session of 1870, this custom shall be put in force in all schools, and shall be certified by the teachers on the certificates of attendance.

2. The Committee on Education likewise recommended that every student should be obliged to serve the offices of clerk and dresser; this was done with a full knowledge that a rearrangement of Hospital duties would have to be made, but with a conviction that the practical instructio of an Hospital should be made available to all, and that if it is not done, it is impossible that the great body of students can acquire even the

rudiments of practical Hospital work. The College of Surgeons of England has had for some years a regulation of this kind, and the Society of Apothecaries of London has now ordered that after June, 1870, any candidate for its licence shall have served for at least six weeks the office of clerk.

A very competent authority has pronounced this recommendation of the Committee on Education to be the most important in their whole report, and in the belief that this is true, and considering that like the former order of the Society of Apothecaries, it must now be carried out in all the English Schools, it is recommended that the Council should make it current throughout the United Kingdom.

3. The Committee on Education advised that the teaching of therapeutics should be separated entirely from that of Pharmacy, and should form the subject of a later course. Although this point has not been yet fully discussed by the licensing bodies, yet, as it has been advocated by every teacher of Materia Medica, whose replies are in the appendix to the education report, and is supported by Dr. Christison and Dr. Aquilla Smith, as well as by many of the teachers of the Principles of Medicine, there can be no doubt that it would be an essential improvement, and should be carried into effect without delay.

4. The last point on which the Council can now properly take action is more connected with examinations than method of teaching, yet has a close bearing upon this.

The clinical examination in Medicine and Surgery is now carried out by so many licensing bodies, and is so good a test of practical knowledge, that the Council ought to make it imperative. It is believed that this proposition will command general assent in and out of the Council, and there is therefore no occasion to enter more fully into the argument in its favour.

As the early session of Council has rendered it impossible to put on record the replies of all the licensing bodies to the education report, it will be desirable to reappoint the present committee in order that a final report, disposing of all the other matters, now necessarily left untouched, may be made at a future Session of Council.

(Signed) E. A. Parkes, Chairman.

Dr. Parkes moved, "That the committee appointed to confer with the licensing bodies on the report of the Committee on Education be reconstituted, and be termed the Committee on Professional Education."

Mr. Hawkins seconded the resolution, which was agreed to.

The Queen's University in Ireland.

Dr. Parkes moved "That it be an instruction to the Executive Committee to communicate to the Privy Council the correspondence between the Registrar and the Queen's University in Ireland, and to urge upon the Privy Council the necessity of refusing registration to the graduates of the Queen's University until the University complies with the recommendations of the General Medical Council on the preliminary examination of Medical students." He said it was extremely unfortunate that such an institution as the Queen's University of Ireland should be placed in such a position. It was, he believed, a most admirable institution. Its Medical degrees were of an extremely high order, and not a word had ever been expressed against its professional examinations. It would have been impossible, he thought, for the Queen's University to have replied in the way they had done to the Council had it not been a misconception on their part as to what the Council wished. The question was not at all as to the Professional standing of the Queen's University nor as to the power which the University had of continuing general education during the time that students were studying for the Medical Profession. It was simply this—the Medical Council had made a regulation, binding on all bodies, that, before Medical education commenced, there should be a preliminary examination in general education, and that recommendation had been carried out by every licensing body in the kingdom, with the exception, as he understood, of the Queen's University. The questions for the Council to consider were these — Had that recommendation been infringed by the Queen's University? Secondly, was it so important a one as to render it necessary that it should be strictly enforced? and, thirdly, whether, under the circumstances of the case, the Queen's University should be represented to the Privy Council for not adopting it? Having referred to the previous history of the matter, which he said plainly showed that the recommendation had been infringed by the Queen's University, he said as to the second question—whether the Queen's University was right in refusing to carry out this recommendation—that was a point which they must argue before the Privy Council. The recommendation was one which, they must all agree, was important and vital, and one which it was absolutely necessary should be generally enforced. It was open to the Queen's University to say, "We admit the value of the recommendation in the case of various bodies, but in our case it is not necessary; our system is so different and so good that it would be folly for us to adopt a recommendation of this kind, the confines of which we pass far beyond." The question was whether the Council could allow any one body, however good any examination might be, to deviate from a recommendation of this kind. If it was a good one, it must be made general; and if it was not, the sooner they did away with it the better. With regard to the third point—whether they were right in bringing up such an institution as the Queen's University in this way—he answered that the Queen's University had compelled them to do it, and they were not dealing at all hardly in passing the matter on to the Privy Council for its decision. He hoped Sir D. Corrigan would state that he was commissioned by his University to inform the Council that it would comply with this very necessary regulation.

Dr. Storrar seconded the motion.

The Council then adjourned until 1 o'clock on Tuesday.

Fifth Day.—Tuesday, March 1.

The Council resumed its sitting at one o'clock.

The draft of the letter to the Lord President of the Privy Council was brought up by the committee, and after some discussion was finally settled as follows:—

General Council of Medical Education and Registration,
32, Soho-square, London, W., March 1, 1870.

Sir,—I beg leave to acquaint you, for the information of the Lord President of her Majesty's Council, that your letter of the 2nd February, written by direction of his Lordship, the receipt of which I have already acknowledged, seemed to me to deal with matters of so much importance, and to require so early a reply, that I thought it advisable to summon without delay a meeting of the General Medical Council for its consideration.

The General Medical Council desires me to express the great satisfaction with which it received the intimation conveyed in your letter, that the Lord President would hope to propose to Parliament a measure for amending the Medical Act, which should remedy not only such defects as were touched on by the Medical Council's draft Bill of last session, but effect much larger and more important improvements in the system under which persons now receive licences to exercise the Profession of Medicine.

In addition to former communications from the Medical Council relative to the matters requiring legislation in any new Medical Act, I now beg to forward, for the information of the Lord President, copies of resolutions agreed to by the Medical Council at its meetings on February 26 and 28, 1870, when your letter was brought under its consideration.

You will see from these resolutions that the Medical Council agrees with the Lord President in thinking that the present system of Medical examination entitling to registration requires amendment, and that the Council considers that some more or less consolidated examining authority should be instituted.

The Council has decided that this may be best accomplished by the formation of a conjoint examining board in each division of the kingdom, such board being constituted by a combination of the present licensing bodies on a plan to be hereafter determined.

The Council believe that arrangements may be thus made which, with the least injury to existing institutions, will insure that the examination for licence to practise shall be in every respect complete and trustworthy.

The Council has appointed its Executive Committee to confer with the Lord President, and to bring before him, for his consideration, the various provisions which it would be necessary to introduce into an amended Act, in order to carry out the objects stated in this and former communications from the Council.

I have only further to acquaint you that the Executive Committee will be prepared to attend upon his Lordship at any time he may appoint.

I have the honour to be, Sir, your most obedient servant,
(Signed) George Edward Paget, M.D.,
President of the General Medical Council.

John Simon, Esq., F.R.S., Medical Officer to the Privy Council.

The Queen's University in Ireland.

The debate on this subject was resumed.

Dr. Aquilla Smith said he thought Dr. Parkes's resolution was inopportune. The last paragraph of Dr. Stoney's letter contained an undertaking on the part of the Queen's University that the matter should be taken into consideration:—"The committee further recommend that the secretary inform the General Medical Council that the Senate are engaged in revising the whole scheme of Medical education and examination, and that the question of holding a preliminary examination prior to the commencement of Medical studies will obtain their careful consideration." That was dated December 2, 1869, and, that being the present state of things, he thought it would not be a gracious act on the part of the Council now to institute such a proceeding.

Dr. Apjohn said he fully concurred with Dr. Smith that this question ought to be postponed till the next meeting. He had the pleasure of knowing Dr. Stoney, and placed great confidence in the statement he made. He was perfectly satisfied the question would undergo very full consideration at the hands of the College, and till then they had better not go into it.

The President said that in the course of the last twelve months the Queen's University had added clinical examinations to their final examinations, and, taking that fact into account, he asked Dr. Parkes whether he would wish to press his motion at the present time.

Dr. Parkes said after what Dr. Smith, Dr. Apjohn, and the President had said, it would be perhaps desirable to postpone it. But he thought if the motion was withdrawn a letter should be written to the Queen's University, to state that before the next meeting of Council it was hoped some reply would be made to this point.

Dr. A. Smith: That will be the fourth letter.

Dr. Parkes: I do not know; it may be the fiftieth. I dare say it will be fifty before they reply.

Dr. Alexander Wood said, considering the great difficulties which this Council had in carrying out the instructions given to it by Act of Parliament, one would have thought every one of the bodies over which they exercised supervision would have assisted them to the utmost of their power, and, as a rule, every body had shown its loyalty to the Council, with the exception of the Queen's University in Ireland. The motion would probably not have been brought forward but for the jocular way in which Sir Dominic Corrigan referred to the refusal of the University, as a matter of glorification instead of a matter of shame. That body had endeavoured in every possible way to prevent the Council in their endeavours to improve the Medical Profession, and that was why it had at last been found necessary to move this resolution. He was not prepared to say that the course of study pursued at the University was not such as to fit a man for practising in his profession, but his object in rising was to direct the attention of the Council to the extremely awkward terms of the 20th clause in the Act of Parliament, and to express the hope that in the amended Act they might have something that could be more easily dealt with. He thought they should have it in their power to represent to the Privy Council if any body did not comply with the regulations made by the Council. It was a serious thing to charge a body with introducing into practice unqualified persons, and yet it might be a very necessary thing to bring a body before the Privy Council for want of conformity to their regulations, which was by no means so serious a charge. It was of some importance that his motion should stand in their minutes, and he would therefore move as an amendment, "That in answer to the communication from the Queen's University, informing the Council that 'the Senate are engaged in revising the whole scheme of Medical education and examination, and that the question of holding a preliminary examination prior to the commencement of Medical studies will obtain their careful consideration,' the Registrar informs the University that the Council will hold another session in a short time; and that the Council hope that, previously to the next session, the University will have conveyed to the Council their decision on the question referred to."

Mr. Harorave seconded the amendment.

Sir D. Corrigan said he should vote for neither the motion nor the amendment, and had the resolution stood alone, he should not have presumed to say a single word. An observation fell from Dr. Alexander Wood, that in place of feeling a sense of glorification at the course the Queen's University had pursued in doing what?—in educating men of whom they heard from Dr. Parkes that in the Army and Navy Boards they held a high place—that in place of that he (Sir D. Corrigan) should have a feeling of shame about supporting a course which had enabled the Queen's University to send such men into public competition for the public service—(no)—yes, because the course was one not in accordance with the recommendations of the General Medical Council.

Dr. Alexander Wood: I said the Queen's University should have that feeling for trying to resist this Council, in not corresponding with it in the same spirit in which the Council communicated with them.

Sir D. Corrigan: You used the word "shame," as applied to me.

Dr. Alexander Wood: I did not.

Sir D. Corrigan: You did. You said it ought to have been received with a feeling of shame, and not of glorification, and I won't allow you to get out of it.

Dr. Alexander Wood: I did use the word, and I use it still. I said it should be felt for the way in which the Queen's University refused to correspond with the Council, and was for its resistance to the Council, not for anything that had to do with the education of students there.

Sir D. Corrigan said the word "shame" was now worse than it was before. He did not care so much when it was applied to himself; but now it was said that such men as their present and late Chancellors should have a feeling of shame. Did not that charge come well from the representative of a body that sold 1000 licences without any examination at £10 each, and so made £10,000 in one year? The Council pardoned that conduct, as guilty as ever was committed to the shame of the United Empire and of their Council, and the representative of that body, who, he believed, in his capacity of President, put his name to those lying diplomas, was the last man in the Council who ought to have risen and used the word. It had been said the phrase in the Act of Parliament was objectionable. He thought it was the wisest clause in the whole Act. Suppose the Act of Parliament had said anybody that refused to agree to the recommendations of the Council should forthwith be disfranchised, where was the bounds to the recommendations of the Council? The clause did not say that any body was to be punished that did not agree to the recommendations of the Council; such a despotic power was carefully taken from them. It wisely left to each body in the United Kingdom, as he hoped ever would be left, the uncontrolled power of carrying on education as it liked, and that power should be preserved most carefully in the new Bill. They should never meet as a Council to dictate to any licensing body in the kingdom, that it was to cut and lengthen or to provide courses of study as it pleased, but all the details of education should rest with the licensing bodies. He should have been glad if the Council had passed the original resolution, because then he was sure the Queen's University would have come out of it in triumph.

Dr. Parkes said although he was in no way going to press his motion, he was sorry not to do it. It was possible on a technical view of the question that the Council might have been defeated, but on the real merits of the case the Privy Council must have been with them; and no doubt it would have disposed the Lord President to make the requisite alterations in the clause in the next amended Bill.

The amendment was then put to the Council and adopted.

Dr. Acland then brought up the following report of the State Medicine Committee.

In conformity with the instructions of the General Medical Council, dated July 12, 1869, the report and appendix on State Medicine has been forwarded to the licensing bodies, requesting their observations thereon.

Owing doubtless, in part, to the unexpected meeting of the Council, replies have not as yet been received from all the licensing bodies, but communications have been forwarded to the committee from the Universities of Oxford, Cambridge, and Durham, the Royal College of Physicians, and Royal College of Surgeons of England, the Apothecaries' Hall of Ireland, and the Faculty of Physicians and Surgeons of Glasgow. The University of Dublin has already resolved on creating a qualification in State Medicine.

In every instance, except only the College of Physicians of London, the licensing bodies have expressed their conviction that it is desirable that certificates in State Medicine should be granted and registered.

The observations of these several bodies are, in some instances, coupled with suggestions as to the manner in which the qualifications or certificates should be given. The Committee think that all their suggestions will demand serious attention whenever the Council is prepared to enter into the full consideration of details which they may be called upon to sanction.

Meanwhile, the original documents may be seen at the office of the Council.

The Executive Committee have communicated to the State Medicine Committee a letter from Mr. Ouvry, together with clauses which Mr. Ouvry suggests as proper in respect of State Medicine for an amended Medical Act.

The Committee are unable to adopt these clauses literally; they have therefore printed them below, indicating in italics the changes which they deem to be desirable.

CLAUSES SUGGESTED BY MR. OUVRY, WITH MODIFICATIONS BY THE COMMITTEE, IN ITALICS.

ADDITION TO PREAMBLE.

is

And whereas it [may be] expedient that degrees or qualifications in "State Medicine" should be recognised, and that the General Medical Council should be authorised to register such degrees or qualifications.

CLAUSE A.

"State Medicine" shall include the following subjects, or such of them, or such other subjects as shall be determined upon by the bodies or body which shall be authorised to grant degrees or licences in "State Medicine"—viz., Forensic Medicine, Toxicology, Morbid Anatomy (Human and Comparative), Psychological Medicine, Laws of Evidence, Preventive Medicine, Vital and Sanitary Statistics, Medical Topography, and portions of Engineering Science and Practice.

Proposed Amendment.

The expression "State Medicine" shall be taken to mean the application of the physical and Medical sciences to the safety and well-being of the community; and it shall include Medical jurisprudence and the care of the public health.

CLAUSE B.

That, if at any time hereafter any university of the United Kingdom, or any body in the United Kingdom now authorised, or which shall hereafter be authorised to grant licences in Medicine or Surgery, shall hereafter, either by virtue of the powers now vested in them, or any of them, or by virtue of any power to be conferred upon them, or any of them, by Act of Parliament or by charter, or any other legal means, grant any degree or licence in State Medicine, it shall be lawful for the General Medical Council to insert such degree or licence in the Medical Register as a qualification, in addition to any other qualifications mentioned in the Medical Acts.

Proposed Amendment.

That if, at any time hereafter, any university of the United Kingdom shall grant any Degree or Certificate of Proficiency or University Title in State Medicine, it shall be lawful for the General Medical Council to insert such degree, certificate, or title in the Medical Register as a qualification, in addition to any other qualifications mentioned in the Medical Acts.

CLAUSE C.

That if, at any time hereafter, any two or more of the Licensing Bodies in the United Kingdom, mentioned in Schedule (A) to the Medical Act, not being universities, shall, with the sanction and under the direction of the General Medical Council, unite in conducting or in providing for the examinations to be required for a qualification in State Medicine, and shall be empowered by Act of Parliament, or by charter, or by any other legal means, to grant a Licence in State Medicine, and shall thereupon (proceed to) grant the same, it shall be lawful for the General Medical Council to insert such licence in the Medical Register as a qualification, in addition to any other qualifications mentioned in the Medical Acts.

The Committee submit these clauses to the consideration of the Council, and they beg leave to suggest to the Council that they should have instructions to communicate further with Mr. Ouvry, and to report of the result of their communication, with their deliberations thereon, to the Council.

In making this suggestion for the consideration of the Council, they desire to imply their unanimous conviction that the answers from the Licensing Bodies leave to them no choice but to assume the propriety of recognising qualifications in State Medicine, and this principle being agreed to by the Council, they would propose to proceed and report on details for the further consideration of Council, as well as to provide copies of their reports to the licensing bodies and persons interested in the progress of the question of State Medicine.

Dr. Acland said the committee thought it desirable to separate the qualification as conferred by the universities from the qualification to be conferred, if desired to be conferred, by the corporations; the reason being this, that it was probably the fact that the universities at the present moment had the power of instituting such degrees if they thought fit, and therefore, as a matter of arrangement, the committee conceived that the two classes of licensing bodies, the universities and corporations, should be dealt with in separate classes. But with regard to that point the committee were unanimously of opinion that they should be directed to confer with Mr. Ouvry again on this matter, and to resubmit the clauses to the Council. He therefore moved—"That the report of the State Medicine Committee be received, and that the committee be reappointed. That they further confer with Mr. Ouvry as to the proposed clauses to be introduced into the Act of Parliament, and that they report again to the next meeting of Council."

Dr. Parkes seconded the motion.

Sir D. Corrigan severely criticised the clause proposed by the committee, contending that whatever powers were given to universities should be given equally to the other bodies.

After some further discussion the motion was adopted.

Sir D. Corrigan moved—"That it is the opinion of the Council with respect to proposed arrangements in the Report on State Medicine, having reference to separate regulations for Medical corporations and universities, that there should not be any distinction made between the privileges of the respective universities and corporations represented on the Medical Council."

Mr. Cooper seconded the motion, which was put to the Council, and rejected by a large majority.

The Report of the Finance Committee.

The Finance Committee beg leave to present, in the subjoined table, a statement of the estimated and actual income from ordinary sources, and of the estimated and actual expenditure for the year 1869. The early period of the year, and the uncertainty as to future meetings of the Council, have appeared to the committee sufficient reasons for not offering an estimate for 1870.

It will be seen from the table that the actual expenditure of 1869 amounted to £5489 14s., which exceeds the actual income by £765 15s. 5d. The excess of expenditure is in part owing to the charges for printing and other expenses incurred by the Committees on Education and State Medicine, which came to £381.

The income of 1869 has fallen short of that of the previous year by £405 5s. 11d. Of this difference, £356 5s. is owing to a diminution in the amount of fees received for registration.

A statement of the receipts and disbursements on account of the British Pharmacopœia up to January 5, 1870, has been given in the accounts which appear in the minutes of the Executive Committee, and which will be presented to Parliament and published in the Medical Register as usual. The Finance Committee recommend that the balance in the bank of £337 6s. be applied towards repayment of moneys advanced by the Council for publishing the Pharmacopœia, which will reduce the sum remaining due to the Council to £374 14s. The committee further recommend that for the future the receipts and expenses connected with the Pharmacopœia should not form a separate account, but, like those relating to the Medical Register, should be included in the ordinary accounts of the General Council. If the repayment now recommended be made, it will, with any further receipts for sales, contribute to augment the ordinary income for next year, and will reduce the debt still owing to the Council to £374 14s.

W. Sharpey, Chairman.

	Estimated Income for the year 1869. £	£	Actual Income for the year 1869. £ s. d.	£ s. d.
Fees received by—				
Branch Council for England	2450		2281 15 0	
,, ,, Scotland	700		617 10 0	
,, ,, Ireland	800		732 0 0	
		3950		3631 5 0
Dividends received by—				
Branch Council for England	670		644 18 9	
,, ,, Scotland	65		64 10 10	
,, ,, Ireland	60		64 2 0	
		795		773 11 7
Sale of Registers		280		271 7 6
Penalties		—		47 14 6
		£5025		£4723 18 7

	Estimated Expenditure for the year 1869. £	£	Actual Expenditure for the year 1869. £ s. d.	£ s. d.
Expenses of—				
General Council		4300		4265 13 9
Branch Council for England	700		642 9 10	
,, ,, Scotland	300		286 0 7	
,, ,, Ireland	300		295 9 10	
		1300		1224 0 3
		5600	Total expenditure	5489 14 0
Estimated income		5025	Total income	4723 18 7
Estimated excess of expenditure		575	Excess of expenditure over income	765 15 5

The report of the Finance Committee was, on the motion of Dr. Sharpey, seconded by Dr. A. Smith, put to the Council and adopted.

Dr. Bennett, Mr. Cæsar Hawkins, Dr. Andrew Wood, Dr. A. Smith, Dr. Sharpey, and Dr. Acland were elected to act as the Executive Committee until the next meeting of Council.

The Pharmacopœia Committee, consisting of Dr. Christison, Dr. Sharpey, Dr. A. Smith, and Dr. Quain, was re-appointed.

A communication from the Society of Apothecaries of London having been read,

Mr. Cæsar Hawkins moved—"That the resolution of the English Branch Council and the communication from the Society of Apothecaries be entered on the minutes."

Mr. Cooper seconded the motion, which was agreed to, and, on the motion of Mr. Hawkins, it was resolved that the foregoing resolution be transmitted to the Lord President of the Privy Council.

After the usual resolutions had been passed, the Council concluded its sittings for the present session.

ORIGINAL COMMUNICATIONS.

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
Physician to the Bristol Royal Infirmary.

(*With a coloured Diagram.*)

III.—ENTERIC FEVER (CONTINUED)—RELAPSING FEVER—SCARLATINA.

Enteric Fever.

Case 15 is an example of death on the twenty-fifth day of enteric fever from perforation. The fatal event was rendered probable by a temperature on the seventeenth day of very nearly 106°, and the morning remission of 5° on the eighteenth day was coincident with fifteen stools in the twenty-four hours. The perforation occurred on the twenty-fourth day, and the ascent on the evening of the 25th, just before death, was probably due to peritonitis. In addition to much ulceration of Peyer's patches, one of which, close to the valve, had given way, the whole of the colon was crammed with circular ulcers.

This fourth week is not an unusual period for a fatal termination, and especially for one caused by perforation. But this disease may terminate fatally in many other ways. Death may be early, at the end of the first or in the course of the second week, and be due to intensity of the pyrexia, or to the grave blood-lesion induced by the fever poison. It may depend on exhaustion from diarrhœa, and even then will seldom be accompanied by a low temperature, or from intestinal hæmorrhage, in which case the fatal event will be preceded by a temperature of collapse, or from the effects of secondary infectious absorptions, or from complications, such as peritonitis not preceded by perforation, pneumonia, hepatic abscess, etc.

Perhaps the gravest complication of all is intestinal hæmorrhage of considerable amount. If this is not fatal, the temperature may be only depressed for from one to two days, and may then recur to its former height; and this depression of temperature will often allow us to predict intestinal hæmorrhage twelve hours or more before the blood is passed by stool. If, however, this hæmorrhage is fatal, the temperature goes on diminishing, until, at death, it has reached a point considerably below the normal heat, and even when the fall is not so great, the temperature, as life closes, is much below what it is when death occurs in this disease without hæmorrhage.

In almost all fatal cases without hæmorrhage the temperature is very high.

The first stage furnishes no data for prognosis, unless perhaps, as Thierfelder says, the fever is worse and the prognosis more serious, if there is no transient diminution of temperature in the second half of the first week. The rapidity of the ascending period may indicate a very high acme, but not necessarily a long duration nor a fatal tendency.

In the stationary period the lower the maximum of tem

perature the slighter the case, and the greater the morning remissions the more favourable is the prognosis. A temperature of 106° is always serious—indeed, a case in which the temperature reaches 105° on several evenings in succession must be viewed with anxiety. All temperatures above 106° are highly dangerous, and one of 108° is almost invariably fatal. In the stationary period a sudden fall from 106° or 104° to the normal point or below it is a fatal sign, and indicates cardiac collapse or a great hæmorrhage. At the same period a sudden considerable rise is a fatal sign.

Jaccoud says it is a bad sign if the exacerbation begins before midday, and only ends after midnight; and it is considered very serious if the morning temperatures are higher than the evening; but this latter phenomenon I have not unfrequently met with in cases which, although grave, ended favourably. Smoler says that morning exacerbation shows a malarious element.

The pulse seems to bear a less definite relation to the temperature in enteric fever than in almost any acute disease. The rule is that the pulse is accelerated when the temperature is high; but to this there are very numerous exceptions. As the temperature rises in the first week, the pulse will often be firm, and may not exceed 84 or 90 in the minute. As the disease progresses the pulse will often reach 120, and may remain at this point until defervescence commences; but most Practitioners will acknowledge the truth of Dr. Murchison's observation that at this stage a pulse of 132 may be followed the next day by one of 96, and that it is not unusual to find that the number of beats differs every day. It, however, generally bears this relation to the temperature—that it is lower in the morning and higher in the evening.

The pulse of fatal intestinal hæmorrhage is usually very small and rapid.

In Case 15 a temperature of 106° coincided with a pulse of 84, and on the day of death, from perforation, the pulse only reached 100. The pulse may remain rapid at the beginning of defervescence, and only very slowly subside to the normal point; and in very debilitated subjects the rapidity of pulse may persist during convalescence, when all other abnormal symptoms have vanished. A very rapid pulse whilst the temperature is high will warn us of danger; but danger will constantly be present when the pulse is comparatively slow.

In this disease the thermometer is an infinitely safer guide than the state of the circulation.

There seems no reason to doubt that the amount of urea is increased considerably in the first and second periods of enteric fever, and that there is a close relation (at any rate in point of time) between the temperature and the amount of this substance excreted. In the first period of the disease the urea is exceeded more largely than at any other. There is a diminution of this substance during convalescence. The amount of urea in the pyrexial periods of the disease is not influenced by the diarrhœa. The chloride of sodium is diminished in the two first periods, and the elimination of this salt is very considerable during convalescence. The uric acid is increased in amount at the same period as the urea, and diminishes with it.

Relapsing Fever.

Until the last few weeks this disease has been absent from Bristol for so many years that I have been compelled to solicit help elsewhere for the annexed diagrams. These have been taken at the London Hospital by Mr. G. E. Herman with an accuracy that leaves nothing to be desired, and the use of them in this paper is permitted me by the courtesy of Dr. Davies, under whose care the patients were treated.

The thermometric phenomena serve to distinguish this malady from all others. A rapid, though not quite sudden, ascent, an absence of any distinct stationary period, a sudden critical defervescence, a normal temperature, or even one somewhat lower than normal, for an interval extending over a variable number of days, and then a repetition more or less intense of the pyrexia, with a similar subsidence, are the characteristics by which this disease may easily be recognised; and whilst they seem to show some relationship between relapsing fever and ague, they are sufficient for an accurate diagnosis, in that the whole ascent and descent in ague are included within a period of a few hours, and the intermission in this latter disease is precise, and not variable, in its duration. The ascent of temperature during the first attack of pyrexia will occupy four or five days; indeed, one of the names of this disease—five days fever—marks the usual duration of the first ascent. Morning remissions are either absent altogether or very insignificant. The temperature will rise to 106°, or even to 108°, and the highest point will generally just precede the critical defervescence. In many cases the ascent will be not only from morning to evening, but from evening to morning, and Dr. Weber has pointed out in the first cases reported of the present epidemic that the highest point of each day fell between 4 and 7 p.m. Wunderlich speaks of a high temperature being maintained even for from seven to eleven days, but our experience in England seems to show that there is either no true stationary period, or that, with some morning remission, the evening maximum may be maintained for about forty-eight hours.

Defervescence is by crisis, and so rapid that the temperature may fall ten or twelve degrees in a few hours. Sometimes this critical subsidence is attended with symptoms of grave depression, and although the disease is by no means a fatal one, death may occur at this period from collapse. The crisis is usually accompanied by profuse perspiration.

The peculiar point in the disease is its tendency to recur. The relapse may be after a day's interval, or it may be after fourteen or seventeen days, more commonly, perhaps, about nine days, the intermediate period showing no abnormality of temperature. The interval between the attacks seems to vary in different epidemics.

The ascent of temperature in the relapse may reach a higher point than in the first attack, and this, too, more rapidly; or it may be lower. In a case recorded in the *Medical Times and Gazette* Oct. 9, 1869, the highest point of temperature in the first attack was 106°, and the second nearly 108°. A similar sudden defervescence occurs, and the patient enters on the stage of convalescence. In rare cases, however, as in the first case reported by Dr. Weber, a third relapse is met with, which, though more dangerous, is seldom of so long a duration as the previous attacks; and Wünderlich states that a fourth relapse occasionally occurs.

Death, although an unusual termination of this disease, yet will occur at all periods of its course—in the ascent, when the temperature is at its maximum, during the collapse consequent on the sudden defervescence, and even in the apyretic period. Complications most generally arise during the interval between the attacks. A comparison of the temperature charts will serve to distinguish this disease from any other at all similar—ague, typhus, febricula, enteric fever, or scarlatina.

The absence of true relapse in yellow fever will distinguish it from those forms of relapsing fever that are accompanied by intense hepatic symptoms and jaundice; but in several epidemics relapsing fever has been mistaken for yellow fever. Judging by external appearances alone, the bilious form of relapsing fever would seem to be more closely allied to the so-called yellow fever of the West Coast of Africa, which is a non-contagious intermittent with hepatic complications. The thermometer will distinguish the two diseases.

The pulse bears a definite relation to the temperature in relapsing fever, rising during the ascent, and falling suddenly during the crisis. Dr. Murchison says it is often exceedingly rapid even in favourable cases, but in the three cases here scheduled it does not seem to have exceeded 116°, and in my own case, recorded below, a temperature of 106⅗° coincided with a pulse of 108. The urine is by no means always deficient in quantity, but the urea seems to be diminished during the pyrexial period and in the interval, and to be somewhat increased during convalescence. In Case 18 the daily average of urea for nine days, including the periods of maximum temperature in two attacks with the interval between them, was 479 grains, while for the nine days succeeding the critical defervescence of the relapse a daily average of 681 grains was excreted. The chlorides are generally absent or at least diminished during the pyrexial period.

Complications are less common in this than in most of the other fevers, but various hæmorrhages and a tendency to syncope may coincide with considerable depression of the temperature during the interval, and are most common at the crisis, whilst diarrhœa may occur both at this period and during convalescence, and may be so excessive as to lower the temperature. Peritonitis, on the contrary, a very fatal complication, pneumonia, and erysipelas will cause some elevation of the mercury. I annex a short account of a case that has lately occurred in my own practice at the Bristol Infirmary.

Stephen D., aged 25, states that he has been ill fourteen days, but has been much worse for five days. Admitted February 10 with much headache; insomnia; thirst; dry tongue; bowels regular; no eruption; temperature as below; pulse 120, rather weak. On February 12 the temperature was suddenly lowered, and with the critical subsidence of the temperature all the symptoms were relieved. He continued pretty well for six days, when the temperature again rose, and all the symptoms recurred, with the addition of diarrhœa. A second

subsidence occurred in three days' time, accompanied by perspiration, and the patient was again pretty well.

Date.	Temperature. M.	E.	Date.	Temperature. M.	E.
February 11	104°	105°	February 17	98°	99°
„ 12	104⅘	96	„ 18	99	105⅕
„ 13	98	98⅖	„ 19	105	104⅘
„ 14	99	99	„ 20	105	105⅕
„ 15	98	99	„ 21	106⅕	94⅘
„ 16	98	99	„ 22	96	98

The three cases, the temperature charts of which accompany this paper, all recovered—Case 16, a man of 19; Case 17, a man of 30; Case 18, a man of 30.

Scarlatina.

Cases of scarlatina vary much in intensity, in height of temperature, and in the duration of the pyrexia; but the characteristics of the disease are a rapid ascent, a very high maximum, and an interrupted defervescence.

There may be febrile prodromata from one to four days, but much more usually from twelve to twenty-four hours. The temperature rises very rapidly, and often in the first day attains the height of 104° or 105°. In most cases the rash appears the following day, and the thermometer will go on rising until the eruption is fully developed. The maximum of temperature generally concides with the maximum point of eruption. In cases in which the rash does not appear until later the temperature will still ascend, though more slowly, and with scarcely any perceptible morning remission, and will not reach its maximum until the eruption is fully out. The temperature commonly met with varies from 104° to 106°, but cases are recorded in which 107° and 108° were noted, and that too when no fatal event followed. Others, however, occur in which the rash is almost absent, and here the temperature bears no relation to the eruption, the former being very high whilst the latter is scarcely visible.

The stationary period will generally last about four days, during the development of the eruption, and will terminate in gradual subsidence as a rule. Exceptional cases of sudden crisis are met with when the disease has assumed a very mild form; but usually defervescence goes on from three to eight days, the temperature sinking lower and lower day by day, not wholly unlike the descending period of enteric fever, but with smaller evening exacerbations, and often falling only by night, the morning and evening registrations remaining the same. Dr. Ringer's cases, (*Med.-Chir. Trans.* vol. xlv.) point to a descending period of greater duration.

In case 19 the normal point was reached in four days from the commencement of defervescence, but then the temperature began to rise again, and did not regain the condition of health until thirteen days later.

Although in this respect the temperature of scarlatina is somewhat connected with that of typhus, the mode of ascent and the duration of the stationary period will serve to distinguish them; the gradual mode of descent will differ from the same period in measles, whilst the slight exacerbations will mark the difference between scarlatina and enteric fever.

We must give a guarded prognosis in cases of scarlatina with very high temperature, but unfavourable cases are not always marked by extreme elevation of the mercury. Death will be ushered in by a high temperature, if it occurs during the eruptive period of the disease, but even then the thermometer may fall just before the fatal event. Although a sufficient number of careful observations are wanting, I believe that a high temperature will be found to precede death from complications, such as scarlatinal rheumatism, pneumonia, arachnitis, and nephritis, whilst a fatal termination dependent on septicæmia may be accompanied generally, but not always, by a lower temperature. The pulse bears little definite relation to the temperature in scarlatina. In case 20, a child of 4, the pulse varied throughout the illness from 96 to 132. It was constantly at 120 during the maximum period, and remained generally at 120 during the whole period of defervescence.

The urea is certainly not increased in the pyrexial periods of scarlatina. It is diminished after the first few days of the disease, and seems to bear no relation at all to the temperature. A rise of temperature often occurs during desquamation, but this is not always the case. Acute tubal nephritis, of which albuminuria and hæmaturia are the evidences, will cause a rise of temperature even to the maximum point of the original disease.

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Medical Times and Gazette.

SATURDAY, MARCH 5, 1870.

THE GENERAL MEDICAL COUNCIL.

At the beginning of the year there seemed to be but a very faint chance of any legislation on matters Medical during the approaching session of Parliament. The Executive Committee of the General Medical Council had had an interview in December last with the Lord President of the Privy Council, in order to press upon him the urgent need of a Medical Acts Amendment Bill being passed without further delay, but the result had not been encouraging. His Lordship rather appeared to think, with his colleague the President of the Board of Trade, that Government had already its hands full, and that matters less imperatively urgent and agitated for than Irish Land Bills must wait. But later a most happy change came over the scene. How or when exactly his Lordship's conversion was effected we cannot presume to guess. It may have been caused by the arguments of the Executive Committee of the Medical Council, or by weighty articles in the Medical press. Or it may be that only as the opening of the session of Parliament drew near the Lord President became fully acquainted with the audacity and the greed for work of the government of which he is a member, and that, learning that it considered itself equal to the task of driving not half a dozen only, but any number of omnibuses, through Temple-bar, he took heart of grace, determined himself also to descend into the circus, and start an omnibus as well as his colleagues. Whatever the motive power may have been, the result was that on February 2 his Lordship again addressed, by the pen of the Medical Officer of the Privy Council, a letter to the President of the General Medical Council, stating that he had become more and more convinced of the necessity of Medical legislation, that he thought the pear was ripe, and that he was willing, if properly aided, to bring in a Medical Bill this year.

Our readers have by this time made themselves well acquainted with his Lordship's most important letter, and while recognising that it made an immediate and special session of the Medical Council absolutely necessary, they will feel that their most hearty thanks and acknowledgments are due to the members of that body for the sacrifices they have made in coming together at such an inconvenient time of the year. It is very greatly to their credit that only one of their number, Dr. Christison, has been absent, and we are sure that the Profession at large have fully agreed in the regrets at his absence, and at the cause of it, so gracefully expressed by the President of the Council.

The Council met on Thursday, the 24th ult., and their chief

business has, of course, been the consideration of the letter of the Lord President of the Privy Council, and especially of the most weighty subject treated of in it—viz., "the urgent necessity for consolidation of examining authorities;" and with their discussions and resolutions on this subject we shall occupy ourselves to-day, leaving the notice of minor matters to a future article.

The Council received a report from the Committee appointed to confer with the licensing bodies on the education report, which showed that "in England the desirability of altering the present cumbrous and inefficient system" (of examinations for licences to practise), "by establishing a single efficient examining board, has been acknowledged and acted on; in Ireland it has been acknowledged by two bodies, and virtually by a third; while in Scotland it has not been acknowledged in any case." Reports from some of the licensing bodies had been received since the Committee had reported, and, according to Dr. Alexander Wood, some of these were not in favour of the Committee's scheme; they were ordered to be added as appendices to the report of the Committee. Some other matters, to which we shall recur later, came also before the Council, but the consideration of the Lord President's letter was appointed to "take precedence of all other business whatsoever" on Friday, the second day of session.

When the Council met on that day, Dr. Parkes, after an extremely able and telling speech, moved a resolution for the appointment of an examining board in each of the three divisions of the Kingdom, by which alone entrance to the Profession should be attainable, "full liberty being left to the Universities and corporations to deal as they please with their honorary distinctions and degrees." Dr. Parkes's speech was a most forcible, clear, and exhaustive argument in favour of the principle of the resolution—the necessity of the consolidation of examinations—and in the discussion which followed he was admirably well supported by other members of the Council, and especially by Dr. Storrar, Dr. Quain, and the President. Some opposition was offered, chiefly by Scottish and Irish members, to the passing of the resolution, but it must, we think, be allowed that it was opposed but feebly and with very faint hope of success, the principle of the resolution being almost granted, and effort being concentrated on the attempt only to gain delay on the ground that the universities and corporations had not had proper opportunities of considering the matter in question. Dr. Alexander Wood and Dr. A. Smith moved, as an amendment to Dr. Parkes's proposition, resolutions to the effect that the proposal to establish a general examining board in each division of the kingdom is a very important one, and might seriously affect the interests of ancient universities and corporations, the maintenance of which in unimpaired efficiency is very important to the interests of the Medical Profession, and that, as no opportunity had been given to these universities and corporations to consider the suggestions in the letter sent by authority of the Lord President of the Privy Council, "therefore the representatives of those bodies in the General Medical Council cannot be prepared in this stage, to agree to any proposals for forming such a board, and this Council would deprecate any hasty legislation on so important a subject." Such resolutions could only be upheld by assuming that some of the "ancient universities and corporations," and those certainly not English, had exercised a marvellous power of closing their ears against all that has been going on in the Medical world at large, and in the Medical Council for many weary months, and by considering that the members of the Medical Council are nothing more than mere mouthpieces and delegates of the bodies that elect them. This latter doctrine was boldly and nakedly asserted, indeed, by Sir Dominic Corrigan, but was repudiated with indignation by the President and Dr. Storrar. We have ourselves at times ventured to hint that it was one of the chief faults and weaknesses of the Council that some of its members were prone to act as if they were only rigidly tutored and pledged delegates, but we had not expected to hear any of them openly assume that character.

The opposition was, as we have said, far from vigorous or effective, and the amendment was lost on division by 17 votes against 5.

Dr. Allan Thomson then proposed as an amendment a resolution containing the main principles of the original resolution, but expressing more strongly than it did "the assurance that the rights of the various licensing bodies were not intended to be interfered with in any way." This was accepted by Drs. Parkes and Storrar in the place of their own resolution, and, after short opposition, was carried by 17 votes to 1, Sir Dominic Corrigan remaining faithful to his principles, and enjoying the distinction of forming the glorious minority.

The debate, which resulted in this resolution being all but unanimously carried, had occupied the whole of the Friday and Saturday sittings of the Council. On Monday the time of the Council was chiefly taken up with the discussion of several resolutions which followed, almost necessarily, as complements of the resolution passed on Saturday, and these were agreed to without any very serious opposition. They form together a series of resolutions of such weight and importance that we reproduce them here, instead of leaving our readers to gather them from our report of the debates. They are as follows:—

"That this Council is of opinion that a joint examining board should be formed in each of the three divisions of the kingdom, and that every person who desires to be registered under any of the qualifications recognised in Schedule A to the Medical Act shall be required, previously to such registration, to appear before one of these boards, and be examined on all the subjects which may be deemed advisable by the Medical Council, the rights and privileges of the universities and corporations being left in all other respects the same as at present."

"That the Medical corporations and universities established in each division of the United Kingdom shall be requested to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong, and shall, on or before June 1, transmit such scheme to the Registrar of the General Medical Council."

"That any alterations in the scheme deemed necessary by the Council should be considered by the conjoint bodies, and their opinion reported to the Council, and that, in case of disagreement between any of the conjoint bodies and the Council, the points of difference should be referred to the consideration and decision of Her Majesty's Privy Council. That the same course should be followed if, in process of time, it should be considered advisable to make any alteration in the original constitution of the rules of the conjoint examining boards."

"That the powers required for carrying the foregoing resolutions into operation be sought from the Legislature, and that her Majesty's Government be requested to bring in and carry through Parliament a Bill to amend the Medical Acts, which shall contain the requisite provisions."

"That a clause be inserted giving powers to the Branch Councils to establish boards in each division of the kingdom for examining Medical students in general education."

"That the Executive Committee be instructed to communicate with the Government respecting the amendment of the Medical Acts, and that the Council be summoned to consider the proposed Bill before it passes into committee in either House of Parliament."

No one will be disposed to deny the vast importance of the fact that such resolutions as these have been passed by the General Medical Council. It is the greatest work yet done by that body, and as it has been, in large measure, caused by the letters from the Lord President of the Privy Council, there seems good reason for hoping that a Medical Acts Amendment Bill embodying the principles of the resolutions may really be brought in and carried through Parliament this year. Such a Bill will be the largest and most important measure of Medical legislation carried since the passing of the Apothecaries' Act in 1815, and will, we believe, be of immense benefit to the Profession and the public, and we, of course, should not regard such a Bill with any the less favour because its principles would be

those which we have strenuously advocated. It would be a measure of reform, but not of revolution; and, while putting an end to the "battle of the shops," and doing away with the evils arising, or said to arise, from the "competition downwards" of the nineteen licensing bodies, would utilise the knowledge, experience, and practised skill of the existing corporations and universities in the constitution of the new examining boards. Some of the *esprits forts* of the Profession will no doubt regard such a Bill with extreme dislike and disappointment; for, judging by some of the schemes they have put forward or suggested, nothing less than a clean sweep of all existing corporations and systems would satisfy them. To please *them*, utter destruction must precede reformation, and everything must, to be good, be bran new. We venture to hold that it is far wiser, more statesmanlike, and more congenial with English thoughts, habits, and practices to purify and strengthen, reform and revivify old institutions, keeping in life and use all that is good in them, while enlarging and adding to them, than to sweep them away with reviling and contempt, and then to set to work with the sublime confidence of theorists to rebuild on new principles and with new and untried materials.

The General Medical Council have, under gentle but firm pressure from the Lord President of the Privy Council, and by the guidance of such wise counsellors as Drs. Parkes, Storrar, and Quain, been brought to see that their future existence depended on their at once acting, instead of reporting, talking, and seeming to do, while only delaying action; and now the universities and corporations are given the opportunity of effecting reforms and changes, which will assuredly be carried out without them if they lack the wisdom and unselfishness necessary for mutual agreement and arrangement. The English bodies have already all but settled the constitution of a new examining board for their division of the kingdom, and we do not doubt that the Scottish and Irish bodies will recognise the wisdom and necessity of following the example thus set them.

The Council sat through the Monday and Tuesday, but we must reserve all notice of the rest of their acts till next week.

THE MORDAUNT CASE IN ITS MEDICAL ASPECTS.

In commenting on this distressing case, we shall seek to avoid all reference to its civil aspects, and shall confine our remarks to the purely Medical part of the inquiry. Our object, therefore, is not to inquire whether or not Lady Mordaunt was guilty of adultery, but rather to determine by the evidence adduced in court whether she was or was not insane when her so-called confession was made, as well as at a subsequent period. Even now there are among us those who hold that this unfortunate lady is now, and has been all along, shamming. To these and to others a condensed exposition of the case may be instructive.

Our inquiry begins with February 28, 1869, when Lady Mordaunt gave birth prematurely to a female infant, and the most important evidence relating to this period is that of the nurse Hancox, who states that soon after the child was born Lady Mordaunt inquired whether the child was born with "the complaint," and that a day or two after, when its eyes became bad, she accused herself of being the author of its blindness. From the context it would appear that by "the complaint" she referred to syphilis. Now, we would ask, is it likely that one knowing the site of gonorrhœal infection in a new-born child would be ignorant of the distinction between gonorrhœa and syphilis? It seems to us that the evidence proves too much. This, however, is apart from the main issue.

The theory of the prosecution (so to speak) was that, knowing the child to be affected with specific ophthalmia, Lady Mordaunt was driven to confession of her past misconduct. The fact is, she referred to the paternity of the child when there was nothing whatever the matter with it. On the third day after her confinement she made her so-called confession to her husband, who did not believe it; nor did he till March 14, when certain confirmatory evidence was discovered. There must have been, apart from the natural unwillingness to believe evil of a loved wife, something to induce this disbelief, something to account for the statements being untrue. Now, the verbal evidence given in court does not help us much here. Mrs. Hancox speaks of no particular excitement, or anything else; and she says Lady Mordaunt slept well, and was generally cheerful. From Mr. Orford, her Medical attendant, there could not be much extracted in the witness-box. But Sir Charles Mordaunt's letters to her Ladyship's relations at this time constitute most valuable and reliable, because unbiassed and contemporary, evidence.

The first of these letters, dated March 9, speaks of Lady Mordaunt as being hysterical, and rather nervous and excitable; further, that the least excitement affected her badly. On the 10th, rejecting the passages of the letter explained by Sir Charles in the witness-box, we hear "it is difficult to get her to understand what is said to her." On the 11th, she is described as rejecting food; and he further adds, "She hardly knows me, and seldom understands what is said to her." On the 12th, he writes she "remains quite still, without ever speaking and without understanding anything." In the letter of the 14th, we find that unintelligible condition called "cataleptic hysteria" introduced, and on that date Sir Charles made the discoveries which induced him to introduce his suit for a divorce into court. We may from this conclude that, had no such confirmatory evidence been discovered, the so-called confession would have been treated as a delusion, and accepted as a proof of insanity; does the discovery of evidence tending to show that a portion of the statement is true totally disprove the insane condition? These proofs in no way affect the so-called "cataleptic" condition—was this sham? We think not; but, on the contrary, we think we can show why Lady Mordaunt should at this period be accounted insane.

The primary misconception in this case appears to be that only one kind of puerperal mania is assumed to exist—*i.e.*, where the patient is violently maniacal. Against this windmill Mr. Orford drives his lance. The fact is that there are at least two well-marked varieties of puerperal mania, one accompanied by exaltation, the other presenting the signs of melancholia; and from this last Lady Mordaunt was then and now (in its more advanced stage) is suffering, and from no such absurdity as "hysterical catalepsy," a term utterly unintelligible according to modern Medical nomenclature.

Now, without admitting the truth of Sir James Simpson's opinion, although it carries every weight with it, that Lady Mordaunt was insane prior to her confinement—for on this the facts at *our* disposal are not of sufficient weight to entitle us to speak with authority—we contend that at or very soon after her confinement Lady Mordaunt was attacked with puerperal melancholia. As pointed out by Sir James Simpson, the costive condition of her bowels for a period of six days would be an important predisposing cause to this malady. Delusions of a character similar to those constituting (as have been proved) a portion of Lady Mordaunt's so-called confession are exceedingly common—in fact, almost the rule in such cases. Delusions apart from these, although they are not necessary to constitute puerperal mania, are spoken to by Sir James Simpson and by Dr. Priestley. Another most prominent feature in this condition is unnatural dislike to the child newly born, which was decidedly shown in the case before us; the mother wanted to poison herself and child, insomuch that the nurse had to remove the laudanum bottle from the room, which she would not have done without sufficient cause. A third feature in such cases is a dislike for, or apathy with regard to, former

objects of love or esteem. The latter of these conditions was strongly marked in the present case. Lady Mordaunt is described as apathetic by Sir Charles himself; and, writing to Mrs. Forbes on March 12, he says—"We, who have been so regularly with her, she scarcely knows, and cannot understand a word we say." That there was something very unusual the matter with Lady Mordaunt, compared with other puerperal women, was shown by the application to her condition of that very unusual term "hysterical catalepsy."

Such, then, was the condition of Lady Mordaunt within a fortnight after her confinement.

On April 14 she was seen by Sir James Simpson, who describes her as giving only *one* rational answer during his visit, and as interrupting the conversation to inquire whether he had ever seen a sideboard with "V. C." written on it, and as telling him to send from Edinburgh "the book, glass jar, and new footman he had ordered for her."

The point finally raised was whether Lady Mordaunt was insane, or, at all events, capable of instructing her solicitors, on April 30 when she received her citation to appear in the Divorce Court, it being admitted on the part of the petitioner that she is now insane. On this point the decision of the jury was so decided that we might abstain from comment, were it not necessary for our argument. Almost the strongest evidence brought forward as to her condition at that period is given by Sir Charles's solicitor, Mr. Haynes, who says that, on entering the room to serve the citation, "he was struck with her pitiable appearance," "that he put the papers in her lap," and that "she continued in the same position while he remained in the room."

On May 6 Lady Mordaunt was visited at Walton by Sir James Alderson, President of the Royal College of Physicians, Dr. Priestley, and Dr. Harrington Tuke. Their evidence is strong and unmistakable, and they united in signing a certificate of puerperal insanity. Her bodily condition at this time is of interest, as indicative, or the reverse, of simulation. Sir James Alderson says "she had a very vacant look, cold wet hand, slow pulse, disordered circulation, and white tongue, stained as if with milk, and an atmosphere peculiar to insanity." Now, these symptoms could not be simulated.

On May 16 Lady Mordaunt had left Walton and come to London, whence she wrote a letter to her husband in Scotland. This letter is of undoubted importance; it indicates either that Lady Mordaunt was then utterly unconscious or forgetful of her relations with regard to her husband, or that she was acting the part of a consummate hypocrite. The interpretation must depend on her antecedent and subsequent condition—her antecedent condition we have considered; we must now look to what followed. From London Lady Mordaunt was removed to Worthing, where she was in charge of Miss Jane Lang and Mrs. Carruthers, and was visited daily by Mr. Harris, Surgeon there. In forming an opinion on the sanity or insanity of any individual, it is safer to rely on the statements of those who surround the patient than on those who only see him or her occasionally. Both attendants speak to repeated acts inconsistent with perfect sanity, to loss of memory, a total want of modesty, to prolonged periods of silence, to delusions, to a fear of poison, and suchlike. Now, granting that these attendants were biassed, the one by her previous connexion with Lady Mordaunt's family, the other by being sent as an attendant on the insane, we have yet other evidence. On July 10 Lady Mordaunt was visited by Dr. Burrows and Dr. Russell Reynolds, along with others, on behalf of Sir Charles Mordaunt. No testimony could be more unimpeachable, whether from the high Professional standing or great skill of these gentlemen. Dr. Burrows states that he considered her even then "quite unable to give advice or instructions to a legal adviser," and further, that he was of opinion that her mind had been progressively deteriorating, and that she was at the time of his examination in a state of dementia. Dr. Russell Reynolds is well known as an extremely cautious witness, but under examination he stated that he had finally come to the conclusion that Lady Mordaunt was suffering from extreme disease. Both Dr. Burrows and Dr. Reynolds stated that they were at first puzzled with the inconsistencies of the case.

It was, therefore, highly proper for the court, in order to have evidence unimpeachable in every respect, to remove Lady Mordaunt from the charge of her parents, and to place her in the hands of neutral parties. Accordingly, Dr. Gull, Dr. Russell Reynolds, and Dr. Wood were selected for the purpose, and Lady Mordaunt was removed to Bromley, where attendants selected by these gentlemen were put about her. These were Jane Kiddle and Sarah Barker. On the principle already enunciated, that the evidence of those constantly with a patient is more reliable than that of individuals only occasionally visiting the patient, there being no inducement for them to give false testimony, the evidence of these women should be invincible. Its tendency is certainly unmistakable, and such as to induce an absolute certainty as to the insanity of the unfortunate lady. The evidence of two Physicians has yet to be considered—viz., that of Dr. Gull and that of Dr. Wood. Dr. Gull had the advantage of seeing Lady Mordaunt at a comparatively early period, having visited her in consultation with Dr. Priestley on May 16 and on subsequent days as well as at a later period. We shall only quote one of his remarks; he says, "I have been struck with the uniformity of her state at all my visits"—that is to say, that her symptoms were the same in kind, if not in degree, early in May as at the period of the trial. The evidence of Dr. Wood is that of a specialist well skilled in lunacy practice; now it is rare that such men shine in the witness-box. What is evidence to them to men unskilled in lunacy seems simply nothing; above all, they are accustomed to rely on special tests. Of all these tests the numerical or money one is the most common and the most valueless. In a rather famous Scotch case, that of David Yoolow, this test constitutes really a *reductio ad absurdum;* it long ago should have been abandoned, but it still strikes a jury. Finally, both Dr. Jones and Mr. Orford admit Lady Mordaunt to be now insane.

Of Mr. Orford's evidence we do not care to say much. It took its keynote from his admission, "I took a strong party side from the first." This, together with his admission that he had never seen a case of puerperal mania, would not lead the jury to estimate too highly the value of his evidence.

The *résumé* of this sad case is brief enough. The fundamental mistake is a failure to recognise a condition of puerperal *melancholia* as well as of puerperal *mania*. Such cases do occur in a certain definite ratio, as has been shown by Dr. J. B. Tuke and others. Further, this condition is apt to assume the appearance of *melancholia attonita*, which we take to be equivalent to the "hysterical catalepsy" of the present case. Out of this condition the patient may be roused, and is then capable of considerable intellectual effort, but always lapses back into the rapt or stony condition. This morbid affection is usually progressive; and generally ends in dementia. In such a state Lady Mordaunt is now admitted to be. She has been proved to be incapable of managing her own affairs on April 30, 1869. When did she begin to go wrong? We think we have given sufficient grounds for holding that immediately or soon after the birth of the child Lady Mordaunt became insane, and that the so-called confession, whether partially true or not, it does not matter which, with its concomitant circumstances, was the first evidence of her insanity.

A good deal might be written with regard to other portions of the evidence in this extraordinary case, but from that, for more reasons than one, we refrain.

Could not all this have been settled in private, the question being Lady Mordaunt's sanity or insanity? Would not a writ *de lunatico inquirendo* have met the exigencies of the case as it now stands, and so averted a grave public scandal?

THE WEEK.

TOPICS OF THE DAY.

The Bill introduced by Sir John Gray and Mr. Graves, which is now before the House of Commons, is undoubtedly creditable to Sir John Gray's zeal and industry as a Medical reformer. This, however, is the chief praise which, we think, it is likely to receive. The first matter with which it deals is the constitution of the General Medical Council, which it proposes to increase beyond its present size by the addition of twelve Medical Practitioners registered under the Medical Acts, and elected by the votes of registered Medical Practitioners. Now, one great fault of the Medical Council, as at present constituted, is undoubtedly its size; but Sir John Gray's proposal would make it far larger than it is. Moreover, we entertain strong objection to the principle of representation of the Profession in the General Medical Council except by giving the Profession a voice in returning the representatives of their respective universities and corporations. The Profession of Medicine, we believe, could not be better represented than through the bodies from which they have obtained their public credentials; and to subject it to the excitement and bitterness of a general election at stated periods would, in our opinion, be to inflict an injury rather than a benefit on Medical men. Another of the principal points of the Bill is that there should be an examination and an examining board in addition to the examinations and examining boards at present in existence. This we hold to be an increase rather than a diminution of present evils. The constitution of the board proposed is also, in our opinion, objectionable. It is proposed that twelve of its members should be nominated by the General Council—that is, as we showed last week, they would be culled from existing examining boards. And six are to be appointed by the Crown with the advice of the Privy Council—a provision which would open a door to the interference of Government with Professional teaching, and to much abuse and jobbery. But the functions of these examiners are to be such as no man in practice could perform. The board is to hold periodical examinations in London, Dublin, and Edinburgh, and all candidates for registration are to be examined by it. Now, as there would be probably a thousand candidates in the three kingdoms per annum, when would the peripatetic functions of the board cease? What rest would they find for the soles of their feet? The expense of the whole thing would be something enormous, for each examiner is to be paid not less than ten guineas, and not more than twenty guineas, per day. Their salaries are to be paid by the Privy Council, "as the Lords Commissioners of her Majesty's Treasury shall determine." Here we may safely leave the Bill. We do not think that Mr. Lowe is likely to consent to pay one hundred and eighty guineas a day for examining in Medicine. We are grateful to Sir John Gray for the efforts he has made in the cause of Medical reform, the moral effect of which efforts has undoubtedly been great. But we hope that he will see the propriety of withdrawing his Bill, especially as we are awaiting a substantial and liberal measure from the hands of the Lord President of the Privy Council.

The immediate effect of the most important action taken by the General Medical Council in reference to the conjoint examinations, which it is now tolerably certain will be established in each division of the kingdom, is to turn the attention of all persons who are interested in the status and well-being of the Profession to the scheme which has been proposed for England by the Royal Colleges of Physicians and Surgeons; and which will probably, with some amendments, be accepted by the other examining bodies, and may serve as a model for the Scottish and Irish corporations and universities. We have already expressed our approval of the general structure of the scheme except in one important particular, to which we shall presently recur. The adhesion of the English universities has been obtained on the fair conditions that each is to be represented by a paid assessor or examiner at the conjoint board, and that their graduates in Medicine shall be only required to pass the final examination instituted by the board on the payment of the moderate fee of £5 5s. We think this a perfectly just and equitable arrangement. The point in which the scheme does not satisfy our sense of justice is, as we said last week, the share in the nomination of examiners apportioned to the Society of Apothecaries. The General Council in their late sitting have appended to the resolution which established the principle of conjoint boards a clause to the effect that the rights and privileges of the corporations and universities shall be left the same in all other respects as at present. As we stated in our last issue, the Act of 1815 gave the Apothecaries' Society the right to examine in the science and practice of Medicine. This right they have exercised for fifty-four years, and the result is that the General Practitioner of England is probably a better educated man than the General Practitioner of any country in Europe. It would be a gross act of injustice, which we cannot believe that either Parliament or the General Medical Council would sanction, now to deprive the Society of a function which it has exercised not only to the benefit of the Medical Profession, but of the whole English nation. No one for one instant would dispute that the Royal College of Physicians should have the nomination of the major part of the examiners in Medicine. This is undoubtedly due to its position as a College of Physicians, and to the functions its Fellows have exercised under various royal charters from the time of Henry VIII. to our own. But the monopoly of examining in Medicine was taken from them by the Act of 1815; the body to which a like power was intrusted have exercised it so faithfully, that, as Dr. Parkes has inferred in his recent most able speech, its examinations are more dreaded by incompetent students than those of the sister College of Physicians in the North; and on no showing of right or justice can the Royal College of Physicians of England claim to resume its monopoly. Were the authorities of the Apothecaries' Society, if they could, to yield in this matter, they would damage the position of every general Practitioner practising with their licence in the United Kingdom. The enlightened and liberal views which the Society has always entertained would, we are sure, induce them to accept any fair scheme which does not involve the degradation of their licence, but on this point, in the interest of the general Practitioner, it is clear that they have no right or power to yield. The conjoint board will not have solely to examine Physicians and Surgeons, but it will have to examine the great class of general Practitioners which the Society of Apothecaries may be said to have created. It cannot be for one moment supposed that the Society would appoint, as examiners in Medicine, men unfit for their work. No one doubts that it would nominate the very best men whom it could procure, and, as we said last week, numbers of University graduates and Fellows and Members of Colleges of Physicians are eligible for the appointment. We fail, therefore, to see any shadow of pretence on which it can be maintained that the Society should be deprived of its right, and its licentiates placed in a position below those who have fled from its more searching examinations to the open arms of other and easier examining boards. It is to be hoped that counsels of justice and mutual respect will prevail amongst the English corporations, and that in this respect an example of unanimity will be given to the other divisions of the Kingdom.

The following questions have been addressed to the Registrars and Secretaries of the various licensing bodies by Mr. Simon, acting under the direction of the Lord President of the Privy Council. They are undoubtedly an evidence that in the Bill which we shortly hope to welcome the constitution of the Council will be placed upon a broader basis than at

present. Not, we expect, by giving indiscriminate general representation to the members of the Profession, but rather, as we have already said, by allowing them a voice in the representation of the bodies to which they are affiliated. There can be no doubt, however, that these questions have not been proposed without a serious purpose.

"1. What board or body of persons acts under the 4th Section of the Medical Act as the Royal College of Physicians in choosing a person to act on behalf of the same in the General Medical Council?

"2. Of how many members does this electoral board or body consist?

"3. By what constituency (if any) are the members of the electoral board or body appointed? or what other qualification gives a vote?"

The Profession will thoroughly sympathise with Dr. Williams in the annoyances which the late action against the Duke and Duchess of Somerset must have inflicted on him. We regret especially that the apology was accepted by Dr. Williams's legal advisers before that gentleman had an opportunity of stating his case in the witness-box. This is the more to be regretted, as one of the leading journals published the extravagant libel without any of the comments and denials of fact which fell from the Solicitor-General when reading it. We are, however, in a position to state that an account of the case will be shortly published by Dr. Williams, which will prove to the Profession and public how utterly undeserved were the cruel attacks which have been made upon him. An episode which we could have well spared was a letter by Dr. H. Hardinge, which appeared in the *Times* directly after the trial. That letter asserts that Dr. Hardinge left the Earl of St. Maur *well* an hour after he had been suffering from spasm of the larynx, and on the day of his fatal attack. Dr. Hardinge also is anxious to contradict the Solicitor-General's statement that he was present and consulted as to the operation of tracheotomy. If Dr. Hardinge wished to inform the Profession on these points, and we will not suppose that he wished to inform the general public, we cannot conceive a more unfortunate choice of place for the appearance of his statement than the columns of a daily paper!

Relapsing fever has made its appearance in New York. In the papers of February 11, 166 cases are reported by the Medical Officers of the Board of Health. We hope some pains will be taken to find the mode in which it was conveyed there.

Dr. Lewis and Messrs. Rowlands and Hughes, of Carmarthen, and Mr. Davies, of Llandyssal, have been put on their trial before the magistrates for their share in the inquiry which terminated in the death of the Welsh fasting-girl. We reserve lengthened comments until the termination of the proceedings. But we may here say that, little as we approved of the experiment which was made, we deeply regret that members of our Profession should be singled out for annoyance in consequence of the course—however, in our opinion, mistaken—which they pursued.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

At the annual meeting of the Royal Medical and Chirurgical Society, on Tuesday evening, the retiring Treasurer, Mr. C. H. Moore, made a most important proposition. The Society has been going on accumulating funds for many years, as far as we can see for no purpose on the face of the earth. This last year, although the number of entries in expectation of the proposed amalgamation had greatly fallen off, yet the receipts exceeded the expenditure by upwards of £400. In view of the falling through of the amalgamation scheme, which seems now only too probable, Mr. Moore suggested that an attempt be made to attract to the Society the younger members of the Profession by lowering the annual subscription from three to two guineas. This would undoubtedly do good, but what really stands most in the way of young men joining the Society is the entrance fee, which, together with the first year's subscription, now amounts to six guineas, and many who could afford three guineas cannot afford six. At all events, if the Society adopt this policy, there can be no doubt of the result; the advantages it offers are too great to be overlooked, and a corresponding accession to its ranks is certain to ensue.

SINGULAR AND FATAL ACCIDENT TO AN ARMY MEDICAL OFFICER.

We regret to hear that Assistant-Surgeon John Ffolliott, of the 51st Regiment, died at Portland on 26th ult. from injury to the brain or spinal column, caused by his having been thrown from his horse on 22nd ult. The injury was considered to be so little serious that Mr. Ffolliott continued to perform his duties up to the moment of his death, which occurred quite unexpectedly. He entered the service in May, 1855, and was, we understand, just on the eve of promotion.

THE HEALTH OF ST. MARY, ISLINGTON.

Dr. Ballard's report on the sanitary condition of St. Mary, Islington, for January, 1870, states a mortality considerably below the average. The deaths registered were 379, the mean corrected mortality of the preceding ten Januaries being 434. Yet the sickness table shows a total of public cases rather over that of January last year, and very much larger than was observed in previous years. The general distress among the poor will account for a good deal of this. A great reduction has taken place in the public cases of scarlet fever, the number being 29 in the four weeks, against 50 in the five weeks of December. The registered deaths from this disease throughout the parish have fallen also from 68 to 41. A distressing outbreak of this disease has occurred in Highbury. Complaint has been made of the practice of carrying the bodies of infants to the burial-ground in mourning-coaches, and a special instance was given in which this dangerous proceeding was adopted in the case of a child who had died of scarlet fever. The public and undertakers should both be made aware of the fact that the practice is unsafe and calculated to spread a fatal disease. Relapsing fever has declined in Rose and Crown Court, where only two cases occurred during the month in families previously affected. Two fresh cases also occurred at a house in Windsor-street. They were the parents of a young man, a porter in the City, who first underwent a slight attack; all the four cases are in the Hospital. The difference between the number of cases of scarlet and of relapsing fever is noteworthy.

TOWN MILK.

Mr. Lunn, the milkman of Kensington, dissatisfied with the results of our analysis of his milk, which was published in the *Medical Times and Gazette* for January 15, has sent us what he considers a truer specimen of his ordinary milk supply. The sample bought by our messenger on December 11, 1869, yielded specific gravity, 1028·3; cream, ·055; specific gravity of whey, 1024·6. That sent on February 22, 1870, gave specific gravity, 1032·1; cream, ·125; specific gravity of whey, 1029·9. Our interest in the question is simply that of the public welfare and the health of poor children. The former specimen was not a bad one, though short in cream; but the latter is almost too good. We doubt if any milkman could undertake to supply such milk all the year round, because the cows could not yield it, and we shall be very well content to get a rather less rich milk, so that we get it unskimmed and undiluted as nature yields it. How important milk is to children, and how difficult it is to obtain it pure in towns, will be evident from a valuable paper by Dr. Ballot, which we hope shortly to publish. If Dr. Ballot's buttermilk system should be found to answer well here, it will be a great boon to the poor.

TESTIMONIAL TO DR. EVANS, OF BIRMINGHAM.

We are glad to see by the Birmingham papers that a movement has been set on foot in that town having for its object a testimonial to Dr. Evans, so long Physician to the General Hospital, and one of the foremost Physicians in the provinces. We understand that the public meeting, presided over by the Mayor, resulted in the formation of a committee for the purpose of collecting contributions towards the fund. Already more than £700 has been promised by ladies, noblemen, and gentlemen in the midland district. Many of the most eminent members of the Profession have given their support to the project in order to show their sense of the great abilities and elevated character of Dr. Evans. This gentleman took high honours in the mathematical tripos at Cambridge, and is a Fellow of the College of Physicians. In early life he was a clinical clerk of Dr. Latham's, and studied in the Necker Hospital just before the death of Laennec, where he acquired that mastery of the principles of physical diagnosis which has so much distinguished him throughout his career. We believe that some results of much advantage to the Profession in the midland districts are likely to spring out of the testimonial, should the success achieved be equal to the merits of this eminent Physician.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, February 24, 1870:—

Birt, George Corney, Brixton.
Hill, Thomas, Souldern, Oxon.
Morton, John Henry, New Brompton, Chatham.
Roose, Edward Charles Robson, Brighton.
Thom, George, Tooting-common, S.
Wilson, Richard, Chelsea.

As an Assistant in Compounding and Dispensing Medicines:

Burder, Robert, Barn's-road.

The following gentlemen also on the same day passed their First Professional Examination:—

Morison, Bentham Paynter, Guy's Hospital.
Perkins, Whitfield, Guy's Hospital.
Reed, James, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Carter, Robert Brudenell, F.R.C.S.—Surgeon to the Royal South London Ophthalmic Hospital.

Casson, J. Hornsey.—Medical Officer to the Hospital for Women and Children, Vincent-square, Westminster, *vice* T. M. Harding, resigned.

Flowers, William Field, M.A., M.B. Oxon., M.R.C.S., L.S.A., F.C.S.—House-Surgeon to the Leicester Infirmary.

Harton, Dr. J. Franklin.—Medical Officer to the Hospital for Women and Children, Vincent-square, Westminster.

Kitchener, T., M.D., M.R.C.S.E.—Medical Officer of Health for Chippenham, Wilts.

Taylor, William Bramley, M.R.C.S. Eng. and L.A.C.—Assistant Medical Officer to Camberwell House Lunatic Asylum.

Watson, Spencer, F.R.C.S.—Surgeon to the Royal South London Ophthalmic Hospital.

NAVAL APPOINTMENT.

Admiralty.—The following appointment has been made:—Michael Willing, M.D., has been promoted to the rank of Staff Surgeon in her Majesty's Fleet, with seniority of February 23, 1870.

BIRTHS.

Dickson.—On February 23, at 14, Trinity-square, Tower-hill, the wife of Walter Dickson, M.D., R.N., of a daughter.

Leacock.—On February 2, at Jamaica, the wife of Ch. George Leacock, M.R.C.S., of a daughter.

Picken.—On February 21, at Sheerness, the wife of Dr. Picken, R.N., of a daughter.

MARRIAGES.

Chapman—Tassell.—At St. Gregory's, Wye, John Chapman, M.R.C.S.E., L.S.A., of Smarden, Kent, youngest son of the late Lieut.-Col. George Chapman, to Alice Kate, fifth daughter of William Tassell, Esq., of Coldharbour Hall, Wye, Kent.

Giles—Fry.—On February 23, at Margate, Samuel Giles, M.D., of Upper Lewisham-road, to Caroline, youngest daughter of the late William Thomas Fry, Esq., of Furnival's-inn and Camberwell.

Grant—Torrey.—On February 7, at the British Consulate, Cairo, and afterwards at the American Mission Chapel, James Andrew Sandilands Grant, A.M., M.D., Chevalier of the Imperial Order of the Medjideeh, Egyptian Government Medical Service, and Resident Physician, Cairo, to Ada Northrop, second daughter of the Hon. John Torrey, Honesdale, Wayne, county Penn., U.S. America.

Harvey — Stewart.—On February 24, at St. Saviour's, Maida-vale, John S. Harvey, M.D., of Boulogne-sur-Mer, to Josephine Madeline Stewart, of Bayswater, widow of the late R. W. D. Stewart, Esq., of the Inner Temple, and of Elgin-crescent, Notting-hill.

Hood—Lockwood.—On March 1, at Christ Church, High Harrogate, by the Rev. H. R. Hartley, M.A., William Hood, Surgeon, York, to Fanny Horner, only daughter of Joseph Lockwood, Esq., of the same city.

Johnston—Bushe.—On January 27, at Port of Spain, Trinidad, West Indies, James Crosse Johnston, M.D., Staff Surgeon, to Eliza (Lilla), eldest daughter of the Hon. J. Scott Bushe, Colonial Secretary of Trinidad, and granddaughter of the late Venerable George Cummins, A.M., Archdeacon of Trinidad.

Paley—Riches.—On February 26, at the parish church, Lewisham, James Paley, Surgeon, to Fanny, second daughter of the late Thomas Henry Riches, M.D., of Greenwich.

Rayner—Hartree.—On March 1, at Lewisham Church, Kent, by the Rev. J. S. Clarke, M.A., vicar of Goudhurst, Edwin Rayner, B.A., M.B., eldest son of William Rayner, M.D., of Stockport, to Isabella Charlotte, eldest daughter of the late William Hartree, Esq., of Lewisham.

Smith—Fluder.—On March 1, at the parish church, Boldre, Hants, Walter Smith, M.R.C.S., L.R.C.P., of Ishp, Oxon., second son of William Wyke Smith, Esq., of East Monlsey, Surrey, to Alice Margaret, third daughter of the late Charles Fluder, M.D., of Lymington, Hants.

DEATHS.

Robins, S. Waring, widow of the late Jacob Wm. Robins, Surgeon, of Euston-place, Euston-square, London, at Worthing, Sussex, on February 10.

Robson, Margaretta De L'Angle, widow of the late Dr. Thomas Robson, of the Bombay Artillery, at Cheltenham, on February 24, in her 78th year.

Stephens, John Edward, M.D. at Gothic Lodge, Twickenham, very suddenly, on February 26, aged 50.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Brackley Union.—Medical Officer for the Fourth District. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Arthur Weston, Esq., Clerk, Brackley, on or before the 15th inst. Election on the 16th.

Bradford Infirmary and Dispensary.—Resident Medical Officer. Must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before the 14th inst.

Buckingham General Infirmary, Aylesbury.—Resident Surgeon and Apothecary; must be M.R.C.S. and L.S.A., and be registered. Applications and original testimonials to the Secretary, on or before March 8.

Dorset County Lunatic Asylum, near Dorchester.—Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to the "Committee of Visitors," under cover to Mr. John Brown, Dorchester, on or before March 5.

Dundee Royal Infirmary.—House-Surgeon. Further particulars from the Secretary, D. Gordon Stewart, 18, Meadowside, on or before March 16.

General Hospital, Birmingham.—Resident Surgical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to the House-Governor and Secretary on or before March 10. Election on the 18th.

Hospital for Sick Children, 49, Great Ormond-street.—Medical Registrar. Must possess some qualification. Applications and testimonials to the Secretary, on or before the 9th inst.

Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.—Medical Superintendent; must have Medical and Surgical qualifications. Applications and testimonials to the Secretary, on or before March 11.

Taunton Union.—Medical Officer and Public Vaccinator for the Bishop's Lydeard District. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to H. C. Trenchard, Esq., Taunton, on or before the 12th inst. Election on the 17th.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bath Union.—Mr. J. Lawrence has resigned the Fourth District; area 3393; population 15,093; salary £50 per annum.

Brackley Union.—Mr. D. Freeman has resigned the Fourth District; area 11,510; population 3237; salary £60 per annum.

Holyhead Union.—Mr. Edward Williams has resigned the Bodedern District; area 23,838; population 5336; salary £60 per annum.

APPOINTMENTS.

Andover Union.—Septimus B. Farr, L.R.C.P. Edin., M.R.C.S.E., L.S.A., to the First District and the Workhouse.

Halifax Union.—James Steel, M.R.C.S.E., L.S.A., to the Ovenden District.

Keynsham Union.—Richard Colthurst, M.D. Edin., M.R.C.S.E., L.S.A., to the Keynsham District.

Totnes Union.—John P. Stone, M.R.C.S.E., L.S.A., to the Paignton District.

UNIVERSITY OF DUBLIN.—At the Spring Commencements held in the examination-hall of Trinity College on Shrove Tuesday, March 1, 1870, the following Degrees and Licences in Medicine and Surgery were conferred by the Right Honourable Sir Joseph Napier, Bart., Vice-Chancellor of the University:—*Baccalaurei in Medicinâ:* Edvardus Fawcett, Marcus Antonius Fenton, Rudolphus Harman, Alfredus Hubertus Kelly, Robertus Hemmings Seymour, Gulielmus Thompson, Gulielmus Ireland Wheeler, Cadwallader Brooke Wolseley. *Magistri in Chirurgiâ:* Johannes Craig Boyd, Edvardus Fawcett, Rudolphus Harman, Ricardus Alfredus Lett. *Doctores in Medicinâ:* Henricus Eames, Thomas Evelyn Little (*stip. con.*), Gulielmus Ireland Wheeler. *Licentiatus in Medicinâ:* Henricus Gulielmus Joynt. *Licentiatus in Chirurgiâ:* Henricus Gulielmus Joynt.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK.—The committee have decided to proceed with the erection of a new wing, and thus complete the original plan of the building, £7000 is required for the purpose.

BIRMINGHAM SANATORIUM.—At the annual meeting it was decided that the erection of the new building should be proceeded with without delay, on the site already purchased. A vote of thanks was passed to Miss Ryland for the use of the building at Sparkhill and the handsome donation of £2000.

THE foundation-stone of the new infirmary at Southport is to be laid this day (March 5).

LIVERPOOL NORTHERN MEDICAL SOCIETY.—HONORARY OFFICERS ELECTED FOR 1870.—*President:* Dr. Nottingham. *Vice-Presidents:* E. Parker, Esq., B. Townson, Esq., Dr. Charles Hill. *Secretary and Treasurer:* Dr. Parsons. *Committee:* F. W. Lowndes, Esq., H. G. Samuels, Esq., Dr. O'Connor, Dr. Speer, Dr. Anderson, Dr. A. C. Hughes, Dr. Matthew Hill.

A YOUNG woman, residing at Plumstead, has been committed to prison for fourteen days, with hard labour, for neglecting to report herself for Medical examination after having signed a consent to do so under the Contagious Diseases Act (Women).

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY.—Mr. John Taylor has brought an action against several members of the weekly board for wrongful dismissal, and for not appointing him Assistant-Surgeon, laying his damages at £2000. The trial is expected to come on at the next assizes.

ROYAL COLLEGE OF SURGEONS.—The recent resolution of the Council has been at once adopted, and a report of the proceedings of the last two meetings of that body was suspended in the Hall of the College on Monday. Of this report the following is an abstract of the ordinary meeting of the 10th ult., when the following report of the Committee on Section XVIII. of the Bylaws was read, approved, and adopted:—"(*Private and Confidential*).—Your Committee appointed on December 9, 1869, 'to consider in what way facilities may best be afforded for holding from time to time in the College meetings of the Fellows and Members of the College in accordance with the provisions of the Bylaws, Section XVIII.,' has held a meeting on this date, and has agreed to the following Report, viz.:—That, in the opinion of your Committee, no other facilities are necessary for the occasional meetings of Fellows and Members of the College than that the Council should declare its willingness to convene such meetings from time to time, under Section XVIII. of the Bylaws, when requested to do so for any specific and proper purpose by any considerable number of Fellows and Members, as the case may be, and that also the Council should recognise its power to convene any such meeting of Fellows or Members, when it sees fit, without requisition. That as regards meetings to be convened on the requisition of Fellows or Members, your Committee is of opinion that the number of requisitionists ought to be at least thirty, and that the propriety of the alleged purpose of the meeting should in each case be judged by the Council at its next meeting after the receipt of the requisition. And that your Committe recommends that any meeting of the Fellows or Members be held in the Theatre of the College under arrangements to be made by the President and Vice-Presidents.—GEORGE BUSK, chairman, December 23, 1869." It was then moved by Mr. Quain, and seconded by Mr. Hancock—"That it is expedient that the Council should convene a meeting of the Fellows annually on the day appointed for the election of Members of the Council, for the purpose of discussing such subjects as shall be notified in the paper summoning the meeting." An amendment was proposed by Mr. James Paget, and seconded by Mr. Hewett, "That the foregoing motion by Mr. Quain be referred to the committee on Section XVIII. of the bylaws to consider the same and report thereon to the Council." The amendment was carried. Mr. Gay then moved "That an authorised report of the proceedings of each meeting of the Council, with the division lists, be posted in the hall of the College within five days after each meeting; but that such report be previously submitted to the President or Vice-Presidents for approval." Moved as an amendment by Mr. Humphry, seconded by Mr. Hawkins—"That the minutes of each meeting of the Council of the College be posted in the hall of the College, within five days after each meeting, after approval by the President or senior or junior Vice-President." The votes of the Council were in favour of the amendment. The consideration of Mr. Simon's motion relating to the constitution of the Court of Examiners was postponed to the next ordinary meeting of the Council, when Mr. Hawkins will submit the following motion:—"That the reports from committees appointed for special purposes be forwarded to the members of the Council previous to the meeting of the Council at which the reports are to be taken into consideration." The following is an abstract of the unconfirmed minutes of the extraordinary meeting of the Council on the 22nd ultimo:—"The Council having considered paragraph by paragraph the scheme for an examining board for England prepared by the committees of the Colleges of Physicians and Surgeons, and still under the consideration of the English universities and Apothecaries' Society, adopted the same, and directed that their approval thereof be communicated to the committees of the Royal College of Physicians, and, with the concurrence of that committee, to the representatives of the two colleges in the General Medical Council." Mr. Humphry gave notice of the following motion at the next meeting of the Council:—"That, in the opinion of the Council, it is desirable that one half at least of the examiners in Surgery to be henceforth appointed by this College shall be appointed from Fellows of the College who are not members of the Council, and that a committee, with power to take legal advice, be appointed to consider and report to the Council as to the steps by which effect may be given to this principle." The next meeting of the Council is fixed for Thursday, the 10th instant.

NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

Dr. O'Connor, Mile-end, writes to say that he intends publishing his version of the case of Nancy Bliss. We shall therefore refrain from making any further comment until such time as we have received his account of the case.

P.—Dr. Richardson's "Medical History of England" begins Vol. I. 1864, and continues through Vol. II. 1864, and Vols. I. and II. 1865.

Dr. Clarke, Tweedside, Barbadoes.—Your letter (with enclosure) has come to hand.

A Student.—The Materia Medica specimen case to which you refer is to be obtained from Messrs. Southall, Son, and Dymond, manufacturing chemists, Birmingham.

Ishmael.—Was A. applied to to give a certificate; and, if so, why did he not give it? If he was not applied to, he should have been; if he was applied to and refused, then J. was justified in the course he pursued.

Alpha.—(1) A parish Medical officer must hold a Medical and Surgical qualification. (2) It is absolutely necessary that the qualifications should have been obtained in England, Ireland, or Scotland. (3) One registration is sufficient. (4) If registered and the term "unqualified Practitioner" was used, and can be proved to have been used, we think an action would lie.

PETITION IN FAVOUR OF DR. BRADY'S SUPERANNUATION BILL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I beg to forward you a form of petition to the House of Commons in favour of Dr. Brady's Superannuation Bill, referred to in my letter of the 21st. All that will be required of gentlemen who intend to petition is to copy it on one side of a sheet of paper, sign, and forward it to me, and at the proper time all I receive shall be given into the hands of Dr. Brady for presentation to the House. I am, &c. JOSEPH ROGERS.

33, Dean-street, Soho, February 28.

To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.

The humble petition of the undersigned showeth:

That your petitioner (or petitioners) desire (or desires) to call the attention of your Honourable House to a Bill now before Parliament. The object of the Bill is to provide superannuation allowance to the Poor-law Medical Officers of England and Wales, subject to a grant from the Boards of Guardians and the approval of the Poor-law Board. That the aforesaid Medical officers have hitherto been excluded from the benefits of superannuation allowance accorded to all other officers in the Poor-law service. That the reasons assigned for such exclusion have been that the whole of their time is not given to their official duties. That in the opinion of your petitioners the deprivation of superannuation grant on such

grounds is unjust to the Medical officers, and is practically incorrect, as they are liable to be and are called on at all hours of the day and night to attend to the necessities of the sick poor, and, if incapable by illness or other causes from attending personally to their duties, are required to provide and pay for legally qualified substitutes. That, moreover, such exclusion is prejudicial to the interests of the public and the sick poor, as many Medical officers are now compelled by their poverty or by other circumstances to retain their appointments when, from advanced age or infirmity, they are no longer capable of performing their duties efficiently. Your petitioners, therefore, humbly pray your honourable House that in consideration of the weighty and important public duties performed by the Medical officers, the discomfort and difficulty attending the discharge of such duties, and the great risk of health and life to which they and their families are exposed, they may be considered entitled to superannuation allowance in common with other members of the Civil Service.

And your petitioners will ever pray.

COMMUNICATIONS have been received from—

Dr. Kitchener; Mr. Robert Wilson; Dr. Long Fox; Ishmael; A Student; Dr. Brugger and Dr. Berry; Mr. Rogers; J. L. B.; Mr. Jayakar; Dr. O'Connor; Mr. W. W. Reeves; Mr. G. T. Mockett; Mr. J. Hayward; Mr. G. Gregson; Mr. W. Hoon; Mr. J. Woodcock; Dr. Mitchinson; Dr. Guisan; Dr. Downie; Mr. W. F. Flower; Dr. Letheby; Dr. Heslop; Mr. H. Aanott; Dr. Quain; Dr. Rumsey; Mr. J. Chatto; Mr. G. Cooper; Inspector-General Gordon.

BOOKS RECEIVED—

Wilkinson on Hospital Expenditure—Letters of Sir Charles Bell—Medical Electricity, Theoretical and Practical, by Dr. Julius Althaus—Day on Colour Tests—Hardwicke's Science Gossip—Tyson on the Cell Doctrine—British Journal of Dental Science, March—Pharmaceutical Journal, No. 129—Practitioner, March—Edinburgh Medical Journal, March—New Sydenham Society's Atlas of Portraits of Diseases of the Skin—Food Journal, No. 2—Basham on Renal Diseases—Wilson's Lectures on Ekzema—Statistical Abstract of the Health of the Navy.

NEWSPAPERS RECEIVED—

L'Union Médicale—Nature—English and Foreign Trade Gazette—New York Medical and Surgical Reporter—Gazette Hebdomadaire—Australian Medical Gazette—Gazette des Hôpitaux—Australian Illustrated News—La Tribune Médicale—Birmingham Daily Post—Aris's Birmingham Gazette.

APPOINTMENTS FOR THE WEEK.

March 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Prof. Max Müller, "Science of Religion."

7. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 6.

Medical Society of London, 7 p.m. General Meeting for the Election of Officers and Council.

Odontological Society, 8 p.m. Mr. Coleman, "On the Treatment of Chronic Periodontitis by Replantation."

Royal Institution, 2 p.m. General Monthly Meeting.

8. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Col. A. Lane Fox, "On the Opening of a Cairn in North Wales." Mr. Hodden M. Westropp, "On the Earliest Phases of Civilisation."

Royal Institution, 3 p.m. Dr. Masters, "Plant Life."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Elam, "On Idiopathic General Cerebritis." And other Papers.

9. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society, 7½ p.m.: Council Meeting. 8 p.m.: Mr. Reeves, "On some unusual Cases of Stricture, and their Treatment."

Royal Microscopical Society (King's College), 8 p.m. W. B. Carpenter, M.D., F.R.S., "On some Microscopic Memoranda."

Society of Arts, 8 p.m. Meeting.

10. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

11. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Dr. Wilks, "Cardiac Disturbance in connexion with Nephritis." Dr. Greenhow, "Case of Atrophy of Brain with great Depression of Temperature." Mr. Holthouse, "Case of Inguinal Hydrocele." Mr. Callender, "Cases of Amputation in which the Arteries have been ligatured."

Royal Institution, 8 p.m. Prof. Westmacott, "Art."

VITAL STATISTICS OF LONDON.

Week ending Saturday, February 26, 1870.

BIRTHS.

Births of Boys, 1225; Girls, 1143; Total, 2368.
Average of 10 corresponding weeks, 1860-69, 2124·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	955	906	1861
Average of the ten years 1860-69	742·7	717·2	1459·9
Average corrected to increased population	...	...	1606
Deaths of people above 90	...	...	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	10	2	14	1	3	3	4
North ...	618210	6	6	32	1	12	3	5	1	2
Central ...	383321	...	1	9	...	3	...	1	2	...
East	571158	3	3	19	...	32	3	2	5	4
South	773175	2	6	41	2	18	1	...	2	5
Total	2803989	11	18	111	5	79	8	11	13	15

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·503 in.
Mean temperature	36·9
Highest point of thermometer	52·0
Lowest point of thermometer	24·8
Mean dew-point temperature	29·7
General direction of wind	N.W., W., & S.W.
Whole amount of rain in the week	0·05

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 26, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Feb. 26.	Deaths Registered during the week ending Feb. 26.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2368	1861	52·0	24·8	36·9	2·72	0·05	0·13
Portsmouth ...	122084	32	85	68	50·6	20·8	37·1	2·84	0·19	0·48
Norwich	81087	27	48	37	48·0	25·2	35·5	1·95	0·29	0·74
Bristol	171382	90	142	119	48·1	25·9	37·9	3·28	0·12	0·30
Wolverhampton ...	72990	53	51	34	46·5	24·9	36·6	2·56	0·16	0·40
Birmingham ...	369604	117	264	177	47·8	25·7	37·4	3·00	0·10	0·25
Leicester	97427	75	75	36	...	...	...	...	...	...
Nottingham ...	88888	110	52	39	48·4	23·6	36·3	2·39	0·10	0·25
Liverpool	517567	250	419	289	...	...	...	...	...	...
Manchester ...	374993	207	293	278	46·0	25·0	35·6	2·01	0·37	0·94
Salford	121580	58	92	72	45·3	25·0	35·7	2·06	0·45	1·15
Bradford	143197	54	120	66	44·8	24·3	35·8	2·12	0·32	0·81
Leeds	259527	30	175	134	44·0	26·0	36·2	2·33	0·23	0·59
Sheffield	247378	27	152	157	45·8	24·7	35·8	2·12	0·24	0·61
Hull	130869	91	101	57	45·0	22·0	34·3	1·28	0·51	1·30
Sunderland ...	94257	52	77	43	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	96	66	41·0	24·0	32·5	0·28	0·24	0·61
Edinburgh	178970	100	112	95	44·7	19·0	31·6	−0·22	...	...
Glasgow	468189	228	354	300	45·8	15·6	31·9	−0·06	2·36	5·99
Dublin (City, etc.*)	321540	82	156	198	49·5	27·5	40·1	4·50	0·27	0·69
Total of 20 Towns in United Kingd'm	7209603	83	5232	4126	52·0	15·6	35·7	2·06	0·38	0·96
Week ending Feb. 26 Paris	1889842	242	...	1362	...	...	...	...	...	...
Week ending Feb. 19 Vienna	605200	162	...	345	...	...	36·1	2·25	...	...
Week ending Feb. 24 Berlin	702437	112	639	434	...	...	30·0	−1·12	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·503 in. The barometrical reading decreased from 29·97 in. on Sunday, Feb. 20, to 29·20 in. on Thursday, Feb. 24.

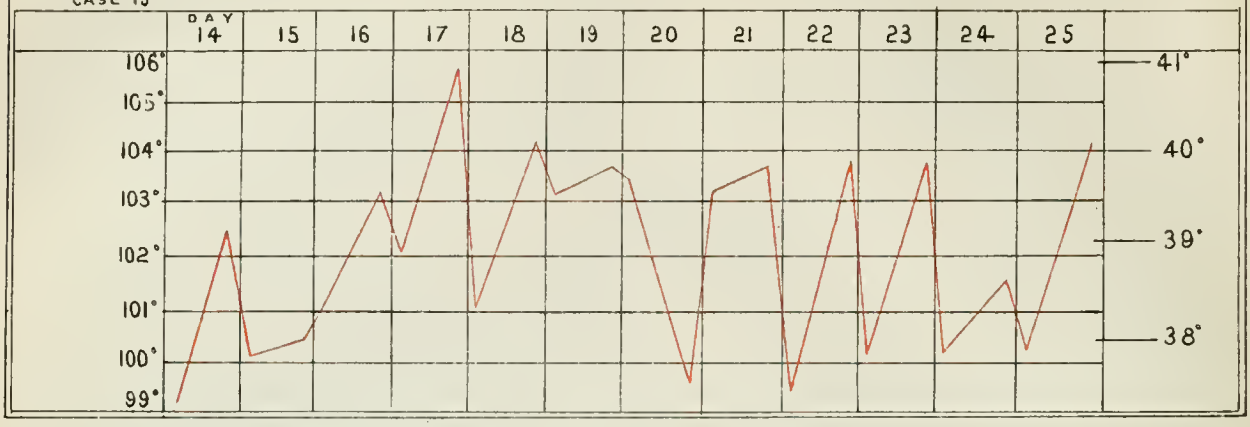
The general direction of the wind was N.W., W., and S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

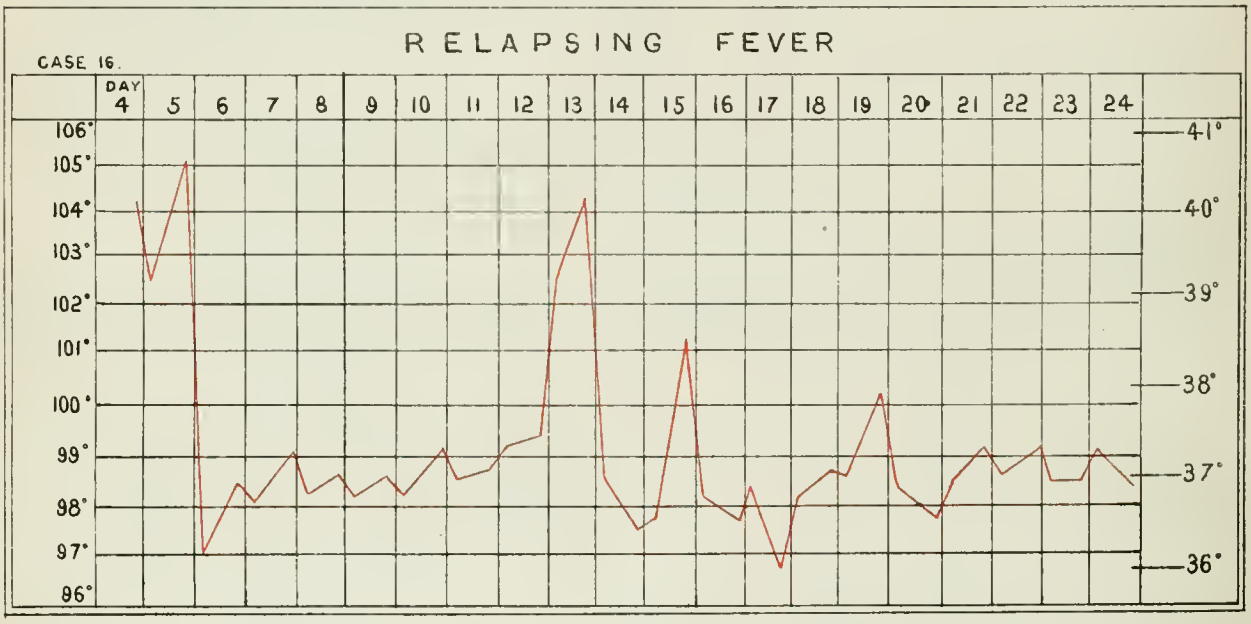
ENTERIC FEVER FATAL

CASE 15



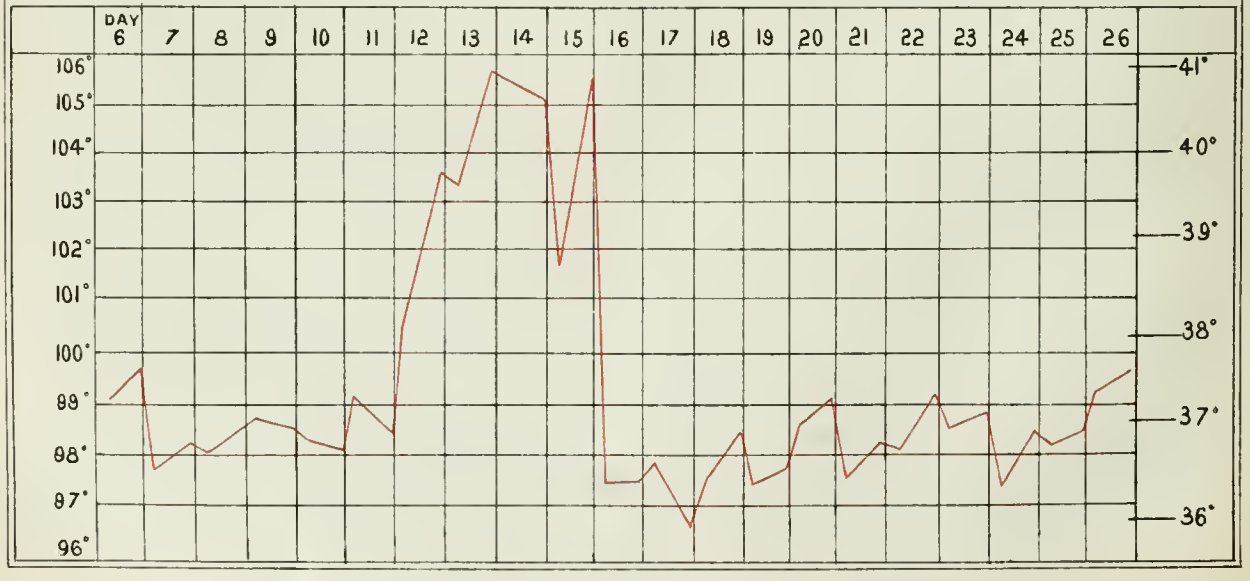
RELAPSING FEVER

CASE 16.



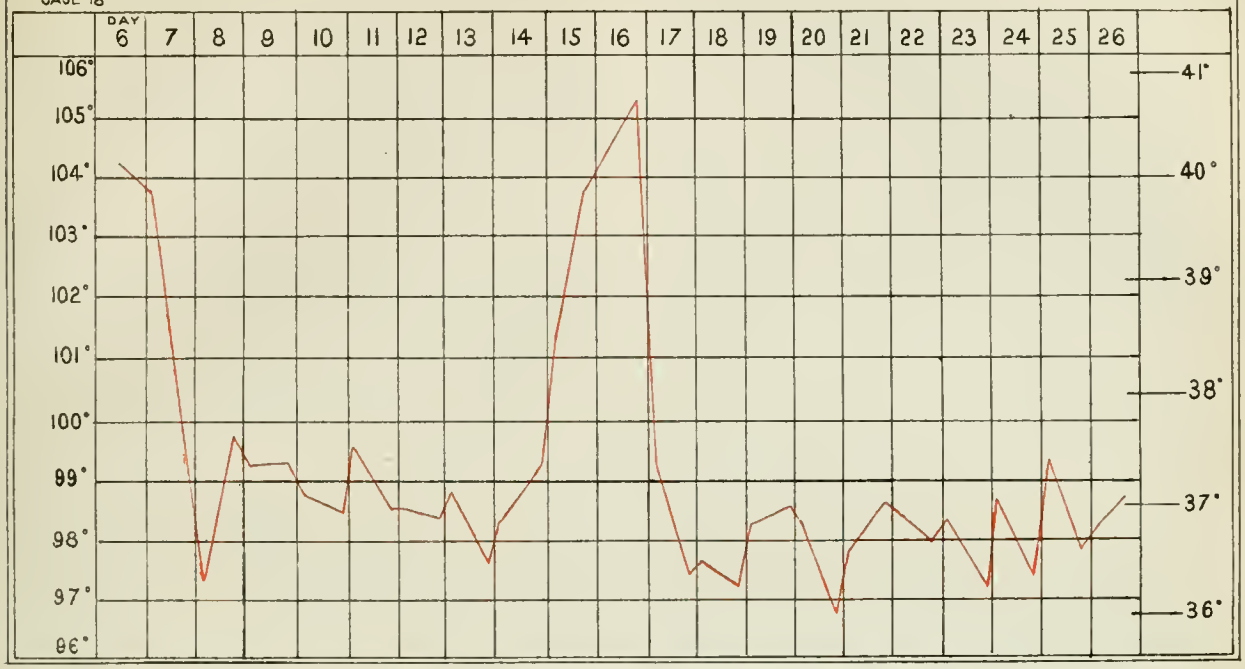
RELAPSING FEVER

CASE 17.



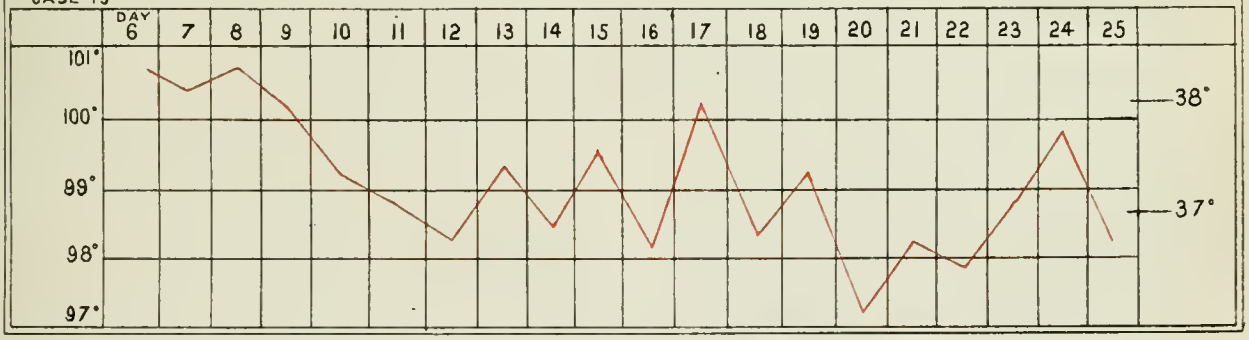
RELAPSING FEVER

CASE 18



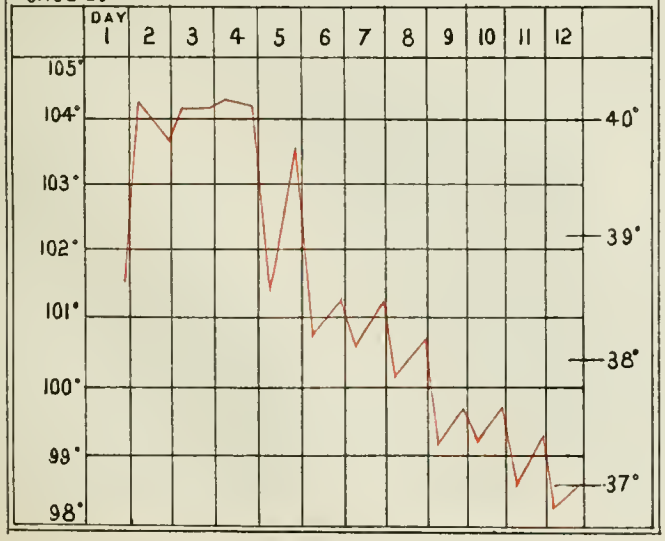
SCARLATINA

CASE 19



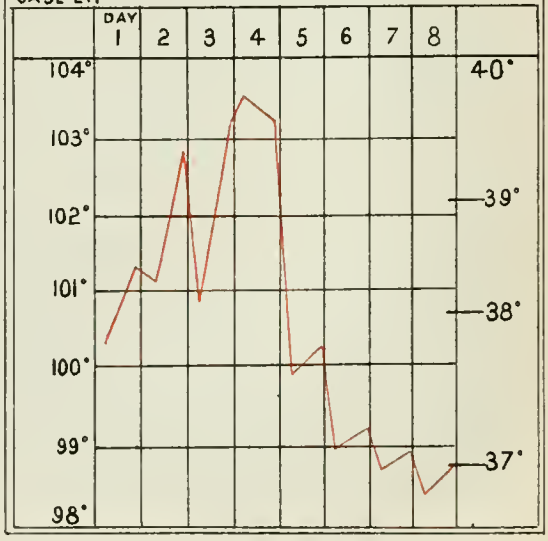
SCARLATINA

CASE 20



MEASLES

CASE 21.



ORIGINAL LECTURES.

CLINICAL LECTURE
ON THE DEVELOPMENT AND SURGICAL TREATMENT OF EPISPADIAS.

DELIVERED BY

Professor BILLROTH, of Vienna.
Communicated by his Assistant, Dr. ARTHUR MENZEL.

GENTLEMEN,—In presenting to you a case of epispadias, I gladly embrace the opportunity to show again, by entering somewhat closer on this deformity, that in our days the separation between theory and practice in Medicine can only exist in unscientific minds, because modern physiology and practical Medicine and Surgery of the present day are but different methods of the study of natural phenomena, that difference merely resting with the different objects of observation.

The anomalous formations of the external genital organs are of great interest to the Surgeon, not merely as objects of rarity or curiosity, but because, if well understood and with patience, they are curable to a certain extent. Many deformed fœtuses destitute of vitality are, of course, mere ornaments to museums and valuable for scientific purposes of anatomists as illustrations of the arrest of development of the organism. We shall here only take into consideration such characteristic specimens as afford some therapeutic interest. But in order to render our therapeutic efforts effectual, a knowledge of the nature and origin of those anomalies is indispensable. Their typical regularity already points to their being governed by certain laws, the acquaintance of which can only be gained by the science of embryology.

The description of the object under consideration renders it necessary to go rather far back.(a) In the fourth week the intestine of the human fœtus is nothing but a simple, rather straight, tube, which is connected to the umbilical vesicle by means of the omphalo-enteric duct, its lower extremity ending into the cloacal cavity. The function of the umbilical vesicle in the human fœtus ceases at an early period, and the duct by means of which it is connected to the intestine soon becomes obliterated. In some instances the process of obliteration stops short at some distance from the intestine, and gives hereby rise to the so-called *diverticulum Meckelii*, a kind of digital eversion of the intestine just at the line of demarcation between the jejunum and ileum. In other instances the duct remains patent up to the opening of the navel, giving rise to a preternatural anus, the mucous membrane of the patent diverticulum protruding outwardly all around, similar to prolapsus ani, the diverticulum itself becoming, as I have observed in a case at Zurich, everted.

The cloacal cavity forms a small space on the lower part of the abdomen, where the intestine, the urogenital sinus, and the lower point of the allantois terminate. During the earliest stages the urine secreted by the primordial kidneys passes through the efferent ducts of the latter into the cloacal cavity, and hence through the openings of the latter outward into the cavity of the amnion. At a later period, when the permanent kidneys have already been formed, the ureters discharge into the lower part of the pedicle of the allantois, which becomes the bladder.

In the first instance the discharge of the embryonal bladder takes place through the umbilical opening into the cavity of the allantois. That part of the allantois within the fœtal abdomen which does not contribute towards formation of the bladder becomes of necessity obliterated, forming the ligamentum vesicæ medium. Meanwhile, the upper part of the cloacal cavity has been transformed into the urethra, so that now the urine is discharged by the latter from the bladder into the liquor amnii.

There are cases in which the corresponding part of the allantois does not obliterate, but remains patent, and the newborn infant passes the urine through a fine opening of the umbilicus. I have only seen one such case, in which the external genital organs, as well as the urethra, were perfectly normal. Froriep, however, has described a case which, from its extreme rarity, has become very celebrated. In this case the urachus terminated in the umbilicus by means of a wide opening, through which the hinder wall of the much-elongated bladder formed a middle-sized prolapsus. All other parts of the urinary organs were likewise normal.

The cloacal cavity does not long remain as such; very soon formation of septa takes place, whereby the anus, the urethra, and in the female fœtus the vagina also becomes separated. The formation and disappearance of such septa may afterwards be observed during embryonal development, although the process itself is not yet quite clear. Let me remind you, for instance, of the formation of the septa within the heart, of the development of the venal valves, etc. Of such septa two are formed in the male and three in the female fœtus. In the former the urinal and seminal ducts remain unseparated, the broad perineum being formed between them and the anus. In the female fœtus the urogenital opening becomes likewise divided into the small short urethra, which becomes connected to the bladder, and the vagina, becoming into connexion to Müller's filaments—the future uterus and Fallopian tubes—luted together at their efferent ducts.

I will not enter into the relation of this process to the deformities of the uterus not uncommonly observed—the uterus bicornis, for instance, or of the vagina duplex, of the different kinds of atresia, etc.—because these deformities do not bear on the question of epispadias. I shall therefore restrict myself to reminding you that the efferent ducts of the primordial kidneys in the female fœtus become the ligamenta rotunda, and in the male the vasa deferentia, whilst Müller's filaments disappear in the male nearly altogether, so that nothing of them remains except the small pouch in the caput gallinaginis known as the "uterus masculinus." From the primordial kidney, according to recent investigations, Gartner's ducts of the ovary, respectively of the epididymis, take rise.

Although you have been made acquainted with all that in the lectures on physiology, yet I felt it necessary to previously remind you of it, in order to fix in your minds the condition of the fœtus in which the development of its external organs now takes place.

In the sixth week of embryonal life, before the cloacal cavity has yet become divided by the septa, a tubercle is formed above that cavity—viz., the so-called *genital tuber*—which, growing on moderately, and forming at its lower part a fold (labia majora or scrotum), ultimately becomes the penis or clitoris. If it is to become the penis, its growth must not only increase, but the urethra must grow in the same manner; the penis must draw the urethra behind, as it were. If the growth of the urethra is more retarded than that of the penis, it results in a deformity known under the name of hypospadias. From this definition you will perceive that the formation of the female external genitals in this respect corresponds with hypospadias, the latter being a simple arrest of development, varying as to degree and shape. The urethra may terminate but a few lines behind the top of the genital tuber (penis), in other instances some inches, in others again it is not visible at all, so as to terminate immediately at the symphysis, in which case the penis is, of course, void of the corpora cavernosa urethræ, and curved downwards; at the same time it is short, and the scrotum divided by a deep grove along the median line, having then great resemblance to the female type. Some of the individuals thus deformed, being possessed of well-developed mammæ, have been looked upon as hermaphrodites.

The explanation of the formation of epispadias is not so simple; this we cannot trace back to a mere arrest of development, for it would by no means be possible to explain why the urethra is situated on the dorsum of the penis. The most plausible explanation seems to be given by Professor Tiersch, who considers the following three points as important and essential to the formation of epispadias:—

a. The pelvis closes too late.

b. The urethra proceeds too rapidly and too early forward and above.

c. In consequence of the too late closure of the pelvis, the genital tube likewise developes too late, and therefore it is situated beneath the urethra.

According to this opinion, the transverse section of an epispadiac penis shows its constituent parts in a reverse situation—the split urethra above, immediately beneath it a rudimentary corpus callosum urethræ, and the corpora cavernosa penis lowermost. This opinion was strongly supported by a case minutely examined and published by Rud. Bergh, of Copenhagen. It was a case of epispadias in which the course of the arteria dorsalis penis went along the lower surface of the penis. Thiersch gives the following figurative representation of the process:—Let the tube, formed by the back of a small thick

(a) The objects of the lecture were illustrated by a large number of diagrams.

book (back downwards) represent the urethra, and each half of the book a corpus cavernosum penis. Now open that book so widely as to bring the two outer surfaces of the covers into contact, and the situation of the tube will be on the top. Let the tube be slit above, and you have the true representation of epispadias.

The glans in epispadias is likewise slit on the top. You are aware that the anatomists define the glans as a swelling of the corpus cavernosum urethræ. The glans would appear similar to the processus nasalis—a simple median formation. To my mind, the corpus cavernosum urethræ seems more probably the product of secondary formation, which only comes into relation to the glans at some later period. From the shape of the many penes slit above which I had an opportunity to examine (I have seen about eight to ten such cases), as well as from the cases of double clitoris in female epispadias, of which I have observed two cases (both combined with prolapsus vesicæ), I am obliged to assume that the genital tuber (future penis or clitoris) is produced by two peg-like prolongations—first separated and afterwards grown together, and that each of these prolongations has one-half of the glans at its top in a similar manner, as is the case with the formation of the velum palati.

According to this description, the rather frequent occurrence of a moderate development of epispadias in which the upper slit of the penis extends from the tip to the symphysis, the latter either not being closed at all, or in a very inefficient manner, would thus be explained. Cases in which epispadias concerns the penis but partly are extremely rare, and some authors deny their occurrence altogether. I am myself only aware of one single authentic case—namely, that depicted by Ammon, in which the glans only was slit at its upper surface.

By far more frequent, perhaps most common, are those types of epispadias in which the bladder is likewise slit. Any explanation of this kind of ectropia, as prolapsus vesicæ, has to overcome great difficulties.

To those of opinion that bursting of the allantois takes place at some early period, giving rise to an opening of the abdominal walls which remains permanent, the question may be put why that bursting should invariably take place at the same spot.

Others, who look at the slit bladder as a mere enlargement of its umbilical opening produced by some retention of the fœtal urine, are opposed by few cases in which part of the normally closed abdominal coverings have been found between the upper margin of the prolapsed bladder and the umbilicus. Inefficient union of the abdominal covering and of the pelvis produces, at all events, the deformity, both of the bladder and penis, and the cause of it may be sought for in abnormal extension of the bladder at an early period; but the connexion of these phenomena in respect to time and relative dependence and causation is by no means capable of so simple an explanation.

After these considerations let us pass over to the following question—Are we in a position to cure persons afflicted with epispadias? Can we get rid of the deformity by Surgical means? The patients in question sometimes attain high ages, but their lives are mere concatenations of sufferings and adversities. The constant dribbling away of the urine renders them disgusting to themselves and others, and debars them from society. The defective development of the penis makes cohabitation impossible, at all events ineffective.

Is it possible perhaps to cover the slit bladder by means of a *pelotte* in order to prevent constant wetting? That is much more easy to propose than to do. In the majority of cases it would be impossible to fix a receptacle for the urine at such a place, of such a size, and in such a manner, as to prevent mischief when the patient is moving. We may try the ingenious apparatus devised for the purpose, but we shall find them inefficient.

More can be done by way of operation. No one of competent judgment will, of course, expect us to form a sphincter for the bladder where none is in existence. If we can only manage to close the bladder and urethra, then we shall be enabled to master completely the incontinence of the urine either by means of a *spring-pelotte*, acting as a sphincter at the root of the penis against the symphysis, either by means of a bottle-shaped receptacle for the urine fixed to the thigh in order to receive the fluid discharged through the penis; such apparatus are constantly worn without the slightest inconvenience by persons of advanced age, and suffering from paralysis of the bladder.

The stain of incontinence will always be attached to the operation of a slit bladder, even if most successful. Epispadias concerning the penis only may be quite cured, as experience teaches, the sphincter, even when slightly developed, coming into action. Professor Thiersch, by an ingeniously devised method and by untired patience, has cured a case in such a perfect manner as to render it impossible to recognise the former deformity in the new-formed penis. But for such an operation patience and unremitting persistence are required by the Surgeon as well as by the patient. Nearly all cases operated on in former times have been either unsuccessful or unsatisfactory, probably because the operators were desirous to gain too much at once. Experience has shown how much surer it is to go on gradation. Thiersch commenced his work by establishing a urinary fistula at the perineum, hoping hereby to drain away the urine from the field of operation. For this purpose he penetrated with his finger into the bladder, pressing the latter against the perineum, which was perforated by means of a trocar. I could never see the necessity for this preliminary act, and Thiersch himself afterwards expressed his opinion to the effect that in analogous cases he would refrain from repeating it, since the expected result had already been frustrated during the patient's being under chloroform, or when performing rapid movements.

Thiersch commenced the operation by closing the urethra at the glans; for this purpose he made two longitudinal incisions laterally of the mucosa urethræ, these incisions being somewhat converging on the lower part of the glans. By this procedure two flaps were gained at the sides of the glans, which were drawn up and united by sutures, bringing the lateral parts of the glans in the shape of an arch above the mucosa urethræ. In this manner the urethra was submerged, as it were, into the substance of the glans. Union took place, and the first part of the operation was completed.

In order to close the remaining part, Thiersch adopted a method similar to that of Nélaton—viz. that of double flaps. I have seen Langenbeck operating for fissure of the bladder according to this method before it had been christened "the French method;" it consists in bringing two flaps over each other in such a manner as to put the one denuded surface over the other, the epithelial surface of the one flap forming the upper wall of the urethra.

Thiersch formed two longish rectangular flaps of the lateral surface of the penis in such a manner as to make the borders of the mucosa urethræ on one side the long basis of the one flap, and on the other the free margin of the second flap—in other words, both flaps had their base at the left side, for instance, and their free margin at the right; both were of equal height and of equal length, and their surfaces were separated from each other merely by the breadth of the urethra.

Now, imagine the left flap, the base of which is formed by the border of the mucous membrane turned in such a manner as to make its epithelial surface face the urethra; let its free margin be fixed to the right border of the mucous membrane; let the right flap, without being turned, be drawn over the left flap, already fixed, the denuded surface of which is uppermost; fix it (the right flap) to the left, and you have bridged over the urethra by means of a double flap. You can easily imagine how subtle and complicated such an operation is, and Thiersch, in fact, did not succeed the first time; he had to perform some little after-operations. The largest part of the urethra was thus formed; but there still remained two openings to be covered—one at the point of contact between the first and second plastic operation—viz. immediately behind the glans; the other at the symphysis. Minute as these openings were, yet for a long time they resisted obstinately all efforts at closing. Repeated application of the cautery, denuding small brims, together with one or two sutures, were unsuccessful. The best means for such instances is transplantation, to which Thiersch, in fact, had to resort. For the opening in front he has done it in a most ingenious manner. The prepuce was, of course, wanting above, but in sufficient quantity present at the lower part of the glans. In that part of the prepuce immediately below the glans he made a button-hole-shaped opening, through which the glans was thrust, just in a manner as a button through a hole, and fixed that half of the prepuce which had thus become the upper half by means of sutures to the defect, the margins of which had previously been denuded. Thus the defect was not only perfectly covered, but at the same time a perfectly normal prepuce was made to the penis. The opening at the symphysis was closed by means of oval flaps taken from the neighbouring parts, and fixed in a similar manner as for the formation of the urethra. Thus the upper wall of the urethra was formed by a hairy surface, which afterwards, however, had no disagreeable consequences. After treatment of eighteen months, the patient was ultimately cured, being possessed of a nearly normal penis and prepuce, capable of micturition in a jet and of performing the coitus in a perfect manner. The ejaculation of the semen only

remained somewhat imperfect, probably from the sperma becoming stagnant at the *cul-de-sac* below the symphysis.

Another method of covering the urethra would be that of one flap of the length of the penis, taken from the abdominal walls above the symphysis, and fixed along the penis in such a manner as to make the epidermis face the urethra. But, in respect to this method, all that holds good which has been said against single flaps generally. The suppurating surfaces (penis and abdominal walls) would, in all probability, unite and fix the small penis to the lower region of the abdomen.

This method of bringing down a flap from the abdominal wall, and to cover it by two lateral flaps, could be made available for the purpose of fissure of the bladder, or of ectopia vesicæ, although, up to the present time, the results have been but unsatisfactory. Better hopes of success seem to await the method practised by Langenbeck and Nélaton, consisting in raising a broad flap, taken from the scrotum, and provided with a bridge to secure nutrition above the penis, and fixing it to the denuded margins of the defect of the abdominal walls. There are a few cases on record in which the defect of the bladder has been successfully covered in this manner; but I am not aware of any recorded case of an individual, as that of Thiersch afflicted with fissure of the bladder and epispadias so perfectly cured, that the genital organs had their normal appearance, and coitus was rendered possible.

These are the principles to be taken into consideration for the cure of epispadias; they are likewise applicable for the treatment of hypospadias. The therapeutical part of this deformity, which by its very nature is not so troublesome as the former, from the frequency of the occurrence of slighter degrees of the affection, is of at least the same practical importance, although slighter in so far as not complicated by fissure of the bladder.

Of one thing you must beware; do not follow the inclination to perforate the glans for slighter degrees of hypospadias in order to form a urethra. That effort will never be successful, because such a canal will always contract again, and besides that the procedure is dangerous. I have seen a young man in full vigour and perfect health, whose only defect was his glans not having been perforated, the urethra terminating immediately behind the glans. It was rather vanity than inconvenience he persisted on an operation. His wish has been complied with, and the consequence was suppuration of the corpora cavernosa penis, the most tremendous pyæmia I have ever witnessed, metastatic sloughing of both choroideæ, and disease of nearly all joints. Such accidents have occurred after operations at the corpora cavernosa, although no explanation can be given for them. Some of these accidents have been recorded, and I am afraid that the number of cases not recorded is far greater. In my own practice one case, in which a most trifling operation had been performed at the penis, had a fatal termination. It was a case of epispadias in which the urethra had been closed so perfectly as to leave only a very fine opening behind, for the closure of which the actual cautery was applied in the shape of a red-hot needle. This caused a fatal result, although, according to some Surgeons, pyæmia is never observed after application of the actual cautery.

I have considered it my duty to make you acquainted with these cases in order that you may not inconsiderately yield either to the fancy or to urgent requests of a patient to undertake any operation for slight deformities in his penis which do not interfere with his life or functions. Your indulgence might otherwise give you cause to repent the consequences. With epispadias it is something quite different; here the sufferings and inconveniences are of such a tremendous nature as to induce one to undertake conscientiously an operation even at the risk of some possible danger.

The scarcity of these deformities is an impediment for the progress of their Surgical treatment, extensive experience being difficult. But the brilliant success which in our days has crowned the operations for vesico-vaginal fistula inspires us with hopes that the time is not far distant in which the cure of epispadias and hypospadias—now vastly admired as a curiosity of particular Surgical skill—will likewise be the rule and not the exception.

Boinet's Iodized Coffee.—Tincture of iodine, fifteen parts; tannin, quarter of a part. From five to ten drops are to be given once or twice a day in coffee with or without milk. To be taken at the end of a repast. Iodized milk is prepared in the same way.—*Union Méd.*, February 15.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

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Lecture II.

I.—DISEASES OF INFLAMMATION.

Inflammation of the Skin from Common Causes.

Mr. President and Gentlemen,—The order which I am about to pursue in the review of the family of diseases of the skin is laid down in the tables before us, the first of these tables—namely, that relating to diseases of inflammation—being as follows:—

I.—Common Causes.

1. *Eczematous Affections.*
   - Eczema, including { Psoriasis. / Pityriasis.
   - Scabies.
   - Lichen, including—Strophulus.
   - Impetigo.
2. *Erythematous Affections.*
   - Erythema, including—Purpura.
   - Erysipelas.
   - Urticaria.
3. *Pilyktænous Affections.*
   - Miliaria.
   - Pemphigus.
   - Herpes.
4. *Dothienic or Furuncular Affections.*
   - Ekthyma.
   - Pustula maligna.
   - Furunculus.
   - Hordeolum *s.* Krithe.
   - Anthrax, including { Delhi boil. / Scinde boil. / Aleppo boil.

II.—Specific Poisons.

5. *Exanthematous Affections.*
   - Roseola. | Scarlatina.
   - Rubeola. | Variola.
6. *Syphilous Affections.*
   - Dermato-syphilis.
7. *Elephantous Affections.*
   - Elephantiasis Græcorum.

III.—Specific Constitutional Causes.

8. *Leprous Affection.*
   - Lepra (Græcorum).
9. *Strumous Affections.*
   - Dermato-struma.
   - Lupus.
10. *Carcinomatous Affections.*
    - Epithelioma.

IV.—Traumatic Causes.

11. *Traumatic Affections.*
    - Ambustio.
    - Gelatio.
    - Pernio.
    - Irritants, chemical and mechanical. { Steatozoon. / Acarus. / Cimex. / Pediculus. / Pulex.
    - Parasites . . . . . { Stings (wasp, hornet, bee, ant, etc.) Œstrus. / Bites (animals wild and domestic) Filaria.

The grand type of inflammation of the skin is ekzema; it is the commonest of the affections of the skin, occurring in the proportion of one out of every three examples of cutaneous disease; it is met with at every period of life, from early infancy to extreme old age; it presents every degree of severity and extent, and it is moreover the disease of the skin that makes the greatest demand upon our resources in our efforts to promote a cure. These are my reasons for opening the investigation of diseases of the skin with ekzema, and initiating our researches with an inquiry into the history of the inflammatory affections of the skin.

In inflammation of the skin, of the *summa cutis* of the early Latins, there are, as in fact is the case with inflammation of other organs of the body, redness, heat, swelling, and pain. If we apply a vesicant to the skin, we produce at first redness,

then a blister; and if we prolong the irritation sufficiently, we shall have a chronic secreting surface; and lastly, we may occasion the death of the part of the skin on which the experiment is made. In these four stages of one and the same irritation, we have brought before us the type of the *four* primary heads under which I propose to consider the inflammatory affections of the skin. The redness or erythema is the type of the erythematous affections; the blister typifies pemphigus or the phlyktænous affections; the chronic secreting surface is the type of ekzema and the ekzematous affections; while the death of a portion of the skin, consequent on inflammation, is the type of furunculus, the furunculous or dothienic affections.

It would seem natural to treat of these four heads or varieties of inflammatory affection in the order just enumerated—namely, erythema, pemphigus, ekzema, and furunculus. But, practically, it will be found to be best to take the most persistent and prominent example of the group—namely, ekzema—first, and make it the standard of comparison for the rest. Ekzema will help us to an understanding of the others, while the reverse of the preposition is not equally true.

Ekzema *is a chronic inflammation of the skin attended with desquamation, exudation, and pruritus.*

The disease is always chronic, for, even when it breaks out suddenly and with some degree of violence, it is slow in its subsequent progress. It always possesses sufficient force to disorder the nutrition of the rete mucosum, and to suspend temporarily the formation of epidermis; hence it is followed by separation and exfoliation or desquamation of the cuticle. Sometimes it is accompanied with effusion of serum, which elevates the cuticle into minute vesicles. Frequently the inflamed skin is denuded of epidermis and converted into a secreting surface, one while pouring out a transparent, colourless ichor or lymph, and another while a purulent fluid; and when the function of epidermis-formation is recovered, it is faultily and intermittingly performed, and gives rise to a desquamation of small scales, which may be continued for a very considerable length of time. Lastly, ekzema is remarkable for the presence of pruritus, which is sometimes excessive, and always more severe in the dry state of the eruption than in its moist and exuding condition.

The *itching* property of ekzema seems most to have attracted the attention of the fathers of Medicine. Hence it was termed by them *psora*, from a verb signifying to *rub;* and this signification was adopted by the Latins in the word *scabies*, from *scabere*, to scratch; the word *ekzema*, from ἐκζεῖν, to boil out, the equivalent of "breaking out," is also Greek, but of later origin. The two conditions of *moist* and *dry* also attracted attention very early; for we find the commentators, at the period of the revival of learning, noting the distinction between psora or scabies humida, and psora or scabies sicca. And they further inform us that psora sicca in its desquamating state, when it is producing and throwing off an abundance of small scales, was termed psora leprodes or rough psora, and, furthermore, psoriasis. Thus are we enabled to trace the genealogy as it were of ekzema, and thus also we meet, in the earliest stage of our research, with the means of explaining some of the *impedimenta* of dermatopathology. We see, for example, three, and in fact four, words applied to the same disease—namely, psora, scabies, ekzema, and psoriasis—and we are enabled thereby to understand the accident by which these terms have sometimes become misplaced in modern times.

One of the most striking and at the same time instructive of the examples of ekzema that we can meet with is ekzema infantile. Infants are very liable to ekzema. A trifling matter of alteration or insufficiency of food is often quite enough to engender an ekzema, which most commonly seizes upon the face and head, but is sometimes thrown out over the greater part or the whole of the body. Whatever may be its extent, our attention is instantly drawn to the fact of a diversity in the eruption, which is due to structure; we detect the pores and the interporous surface, or, as the pores are the mouths of follicles, we might say the follicles and interfollicular surface. It may be thought that this distinction is sufficiently self-evident, and therefore needless of comment; but, in reality, it is much more important than it may seem. If you examine a piece of injected skin under the microscope, you will see at once the distinction to which I refer, and that distinction I press upon you to bear in mind when you come to investigate diseases of the skin. In the interfollicular space, the capillary plexus is spread out superficially; around the follicle the capillary plexus is placed at right angles to the interfollicular plexus; hence congestion of these plexuses must necessarily present some diversity of character. They may be distended separately as well as together, in the one instance giving rise to a uniform redness, in the other to a punctated redness. Another consequence follows upon this arrangement, and it is to it that I wish especially to draw attention—namely, that hyperæmia is necessarily accompanied with increase of bulk. Hence, in the case of hyperæmia of the superficial plexus, the increase of bulk or swelling will be uniform; whereas, in a similar condition of the follicular plexus, there will be an uplifting of the lip of the follicle, forming a conical prominence, or, in dermatological language, a papula or pimple.

Now, in a case of ekzema infantile, we shall perceive a uniform redness or erythema, which we may term *ekzema erythematosum*. Then there will be the papulæ, resulting from prominence of the follicles, or *ekzema papulosum*. In a third place, the cuticle may be raised into minute vesicles, and especially in the neighbourhood of the pores and where the latter are not papulated: this is *ekzema vesiculosum*. Then, in certain parts, the cuticle may be gone, and the denuded rete mucosum may pour out a large quantity of secretion (*ekzema ichorosum*); or the vesicles may be filled with pus instead of serum, and the secretion from the denuded derma be purulent (*ekzema pustulosum*); or, finally, secretion may have ceased, the skin is thickened from interstitial infiltration, and an abundance of small epidermic scales are thrown off, constituting a persistent desquamation: this is the state to which the term *ekzema squamosum* is rightfully due.

Thus it will be perceived that the disease ekzema presents not one, but many pathological lesions—that it is no more vesiculous than it is erythematous and papulous, ichorous, pustulous, or squamous, and indeed it may be stated at once that of all its forms the vesiculous is the least frequent. In this fact are involved the incompetency of the Willanean arrangement to maintain its place as a classification, and the resulting necessity of viewing diseases of the skin in some other way. With the exception of ekzema infantile, however, it is rare for ekzema to manifest on the same patient so great a variety of lesions, and, where one lesion only is present, or where one lesion predominates over the rest, it is convenient to designate the variety or form of the eruption by the subjective term expressive of its chief character. Hence we admit as forms of ekzema—E. erythematosum, E. ichorosum, E. papulosum, E. pustulosum, E. vesiculosum, E. squamosum; to which may be added certain subforms—for example, ekzema *circinatum*, which is a subform of ekzema erythematosum; ekzema *marginatum*, a subform of ekzema papulosum; ekzema *mucosum* and ekzema *crustaceum* seu *scabidum*, subforms of ekzema ichorosum; ekzema *fissum* and *sklerosum*, which are subforms of ekzema squamosum; and also other peculiar but exceptional forms, such as ekzema *œdematosum*, *papillomatosum*, *tuberosum*, *spargosiforme*, and *neurosum*.

Forms of Ekzema.

- Development
  - regular
  - modified
  - accidental
- Distribution
  - general
    - exanthematic
    - successive
  - partial
    - diffused
    - circumscribed
    - serpiginous
  - regional
    - head and scalp
    - face and ears
    - folds of skin
    - flexures of joints
    - pudendum and perinæum
    - mammæ
    - hands and feet.

Regular.	*Modified.*
Ekzema erythematosum	Ekzema circinatum
,, papulosum	,, marginatum
,, vesiculosum	,, mucosum
,, ichorosum	,, crustaceum
,, pustulosum	,, exfoliativum
,, squamosum	,, fissum
	,, sklerosum

Accidental Forms.

Ekzema œdematosum
,, papillomatosum
,, tuberosum
,, spargosiforme
,, neurosum

Besides diversity of form, ekzema also presents differences of appearance which are referable to its manner of distribu-

tion over the surface, and also to its behaviour in different parts or regions of the body. In manner of distribution it may be general or partial. As a general or universal eruption it may burst forth at once like an exanthema, or it may creep on by successive addition until the whole or the greater part of the body is covered. Again, as a partial eruption, it may be diffused or circumscribed, the circumscribed forms being sometimes termed figuratum, and sometimes, from their smallness and uniform roundness, ekzema nummulare. The *regional* distribution of ekzema, in a practical point of view, is of greater importance even than its manner of distribution; for the disease must necessarily present differences of character having reference to its attack upon the hairy or the naked regions of the skin, the covered or the uncovered parts, the folds and creases, the hollows and convexities, surfaces exposed to contact and friction, and peripheral extremities of the body. Hence, in the more minute study of ekzema, it has been found convenient to examine the disease under seven regional groups—for example, the head or hairy scalp, the face and ears, folds of the skin, flexures of joints, pudendum and perinæum, the mammæ, the hands and feet.

In my definition of ekzema, I term it a chronic inflammation attended with desquamation, exudation, and pruritus. The correlation of these three important symptoms is peculiarly interesting. The first sign of an ekzema, as on the fingers, is sometimes nothing more than a mere dryness and exfoliation of the cuticle; but whenever an ekzema has held possession of a portion of the surface for a considerable time, the affected skin becomes thickened and hardened, and with this condition are associated an excessive production of scales, an operation which takes the place of ichorous exudation, and more or less troublesome pruritus. In the state of hardening and condensation, the skin becomes rigid and brittle, and is apt to crack upon the mere flexion or motion of the part, constituting ekzema fissum. And again, when the pruritus is excessive, it may always be mitigated by such an amount of rubbing or scratching as will induce exudation or occasion bleeding, the pruritus being due, as it would seem, to the compression of the nerves of the skin resulting from infiltration. It is to this state of thickening and condensation of the integument, conjoined with a copious formation of small scales, that the term psoriasis is correctly applicable. Psora, in fact, has degenerated, by aggravation, into psoriasis.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

ADDISON'S DISEASE.

By C. A. GORDON, M.D., C.B.,
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At a meeting of the Army Medico-Chirurgical Society of Portsmouth, held on January 5, Dr. Gordon, who occupied the chair, took advantage of the opportunity afforded by reading a report of a case of Addison's disease prepared by Dr. Wales, of the Royal Artillery, to submit a summary of views regarding the disease expressed by various authors whose works were in the library of the Society. Adverting to the nature and diagnostic points of the affection, he observed that, according to Fox ("Skin Diseases," page 379), a form of melasma, especially of the face, may occur in connexion with syphilitic disease, and that the production of the pigment in cases of bronzing is "brought about by imperfect oxidation," the carbon not being burnt off (page 381) as carbonic acid. According to Wood ("Practice of Medicine," vol. ii. page 270), the disease, even where discoloration is not present, is readily distinguishable from almost all other cachectic affections by the absence of any discoverable source of urgent symptoms which characterise it, such as (page 269) the small feeble pulse, great degree of languor, indisposition to exertion, whether mental or physical, impaired appetite, nausea, vomiting, flabbiness or relaxation of the tissues rather than emaciation. In cases where discoloration occurs, it is, according to Dr. Greenhow (*Lancet*, April 1, 1865), very peculiar, giving to the person affected the appearance of belonging to the darker races of mankind; cicatrices and blistered surfaces become darker than other parts; patches of discoloration are found on the lips, gums, and buccal membrane; the conjunctivæ remain uncoloured; the discoloration usually runs insensibly into the normal coloured skin (*Lancet*, April 22); the skin remains smooth.

Before noticing the case by Dr. Wales, he would mention some of the views held in regard to the supra-renal bodies. Dr. Carpenter ("Physiology," p. 465) associated them and the other "ductless glands" as organs specially connected with fœtal life, and observed that "it may be considered next to certain that the matters, whatever their nature may be, which have been elaborated from these glandular organs are received again through capillaries into the venous system." Wood (vol. ii. p. 272) supposes that "the supra-renal capsules have some important function in the animal economy, upon a failure of which the digestive and assimilative processes suffer, imperfect blood is produced, the pigment matter is excessively deposited in the skin, and a general prostration is at length produced incompatible with life. Having made these remarks, Dr. Gordon proceeded to read Dr. Wales's report of his case of Addison's disease. It occurred in a young man of the Battery, Royal Horse Artillery, stationed at Dorchester, its subject being described as a young man of healthy constitution, at one time a coal miner, then an engine fitter on board ship, in which capacity he had been eighteen months at sea in the tropics, during which he had an attack of jaundice, but no other disease. Habits temperate. About seven years before had "pimples" on his penis, which did not ulcerate. His father and sister had died young, their fatal illness sudden and obscure. He was admitted in February, 1869, anæmic, with sore throat, fissures upon the tongue, coryza, and with fissures and condylomata around the anus. At first the case was looked upon as syphilitic, and treated by iodide of potass. He, after thirteen days, returned to duty, but was kept under observation on account of anæmia, taking, while at light duty, quinine and iron. Examination failed to detect tubercular, renal, or other organic disease, and about the middle of April the existence of Addison's disease was detected, the skin being at the time described as of a dirty yellow colour, the sclerotics clear and white, numerous spots of chestnut colour on the scrotum, all of which had appeared during the preceding five weeks. He micturated three or four times during the night; the urine was natural in quantity, and of sp. gr. 1018. Albumen was absent, but a light flocculent deposit appeared after it had stood some time in a vessel. He had slight cough, without expectoration; frightful dreams at night. The first cardiac sound was somewhat rough, but the rhythm was natural; pulse 100, regular, soft; tongue clean, pale, glossy, slightly fissured, but moist; appetite indifferent. There were present languor, a sense of discomfort at the epigastrium, faintness, and breathlessness; latterly uneasiness in loins, but no pain on pressure in the region of the kidneys.

The treatment first employed had consisted of tincture of sesquichloride of iron, with and without quinine, potassio-tartrate of iron in five-grain doses three times a day, with sherry and stout, if the latter agreed.

Towards the end of May he complained of giddiness; more discoloration was observed in the cleft of the nates, discoloration of scars upon the hands and feet, and of the knuckles. He vomited some bilious matter; bowels were tardy. The discoloration appeared to be darker on some days than others, but without apparent reference to his own condition as to feeling better or worse.

Early in June he had a sharp attack of diarrhœa, which was checked by carminative astringents. The sclerotics were brigl t and glistening, but not pearly. A soft systolic bruit was now audible; his vision was becoming impaired: in reading a book he saw the words for a minute, but then "the letters swam away."

At this stage he was treated with cod-liver oil, sulphuric ether, and syrup of iodide of iron, three times a day. He began to complain of constriction across the epigastrium. Vomiting of bilious matter recurred every second or third day. He complained of palpitation of the heart, and the bruit became more and more audible. Discoloration increased in intensity, and recurred in additional places—in the scrotum and in the gums among others.

On June 18, was seized with pain under the right nipple, pain in epigastrium, and diarrhœa. Urine was clear, natural in colour, and of specific gravity 1011; it contained no albumen. Pulse 120, soft. Appetite had failed, and vomiting had become more frequent. In the evening of that day his aspect changed, and the skin assumed a dusky olive colour. He appeared somewhat stupid in manner, and complained of faintness. His expiration was attended by sighing.

On the 20th his aspect was "worn;" retching was constant, his stomach retained nothing; there was much sense of distress at the epigastrium. At last sinking of the powers set in, and he died with the mind clear almost to the last minute of his life.

On the post-mortem examination being made seventeen hours after death, the supra-renal capsules were found about equal in size—namely, $2\frac{1}{2}$ by $1\frac{1}{2}$ inch—and weighed about 70 grains respectively. The right one appeared, if anything, the less normal of the two. It was easily torn (accidentally), and, as compared with the left, presented a rather hard, nodular, and friable condition along its upper margin. It contained a cavity with semi-fluid interior of the usual ochre dark-brown colour. The other body was without a cavity. The kidneys were considerably diseased.

Dr. Gordon, in commenting upon the case, observed that he had communicated on the subject with Professor Aitken, of Netley, to whom Dr. Wales had transmitted the morbid specimens. Dr. Aitken, having read the report of the case, expressed his belief that it was really one of syphilis, treated with iodide of potass and local applications, but without mercury, and that the changes in the colour of the skin are quite accounted for as syphilitic patches. He attached no morbid appearances to the supra-renal capsules, certainly nothing like what is usually found in Addison's disease. There was, he observed, evidence of gastric catarrh, and also of chronic bronchial catarrh, in the history of the case; also of fat over solid organs and abdomen, probably alcoholic.

The views of Dr. Aitken having been communicated to Dr. Wales, the latter expressed himself that he "could not the less think that the severity of the general symptoms and some of the phenomena of this case were due to Addison's disease, or to incipient disease of the supra-renal capsule, and that the anæmia and asthenia were too severe and peculiar to be attributed to syphilitic cachexia alone or to the conditions of other organs (than the supra-renal capsules)." He observed that, with every deference to Dr. Aitken, the discoloration of the skin was considered by all who saw the case as genuine melasma, all the syphilitic symptoms with which the man was at first affected having disappeared while he was under treatment, but at the same time remarked that "we have yet to learn that Addison's disease may not have a syphilitic origin."

The Chairman, continuing his remarks, referred to the views expressed by Professor Aitken in regard to this disease in his valuable work on the "Science and Practice of Medicine." According to them, the exact relationship and pathological significance of bronzing and supra-renal disease are still open questions (vol. ii. p. 274); that bronzing only occurs when the supra-renal disease is chronic; and that the discoloration is a sign that the disease has made a fatal advance. In regard to the morbid anatomy of the disease, Dr. Aitken thus describes the changes which occur in the supra-renal bodies. These are —1. Deposition of a translucent, softish, homogeneous substance. 2. The degeneration of this into a yellowish-white opaque matter. 3. The softening of this into a so-called "abscess," or its drying up into a chalky mass. He adds that some years are necessary for these changes. He alluded to the discussion of the question of dependence of the affection upon degeneration of the supra-renal bodies by Dr. Wood ("Practice of Medicine," vol. ii. p. 271), and to the conclusion arrived at by that eminent authority that "a positive relation of cause and effect has been made out to exist between the cutaneous and capsular affection."

He observed that Dr. Hughes Bennett gives the report of a case of a man in whom disease of these organs existed, but without discoloration of the skin being observable (pp. 685 and 688). The post-mortem appearances in the case in question are thus described:—"The right supra-renal capsule felt thick and hard, and weighed 290 grains. It was everywhere infiltrated with yellow, opaque, tubercular-looking matter, of solid consistence, but friable under pressure. Perhaps about one-tenth only of the gland presented its natural texture. Two tubercular masses the size of filbert nuts were present in the left supra-renal capsule surrounded by indurated tissue. One-fourth of its texture was natural. Other organs normal." This and similar cases are perhaps in some measure accounted for by Dr. Watson by the disorganisation of the supra-renal capsules being partial or recent. According to that authority ("Principles and Practice of Physic," vol. ii. p. 730), "one of them may be affected, the other sound; or each being unsound, may yet retain enough of its proper structure to enable it to fulfil its office, whatever that may be," and he then proceeds to state that "in 500 inspections of the dead body conducted by Drs. Wilks and Habershon, in all of which the renal capsules were examined, disease of those organs was never found without its having been predicted during life, except in two instances. In one of these the skin had shown a slight dinginess, and a large mass of cancerous disease involved the whole of one of the capsules. In the other case also one only of the capsules was affected; a few tubercles grew from its surface." He, moreover, expresses a belief that obscure cases of the disease have in some instances been set down as obscure cases of jaundice. Dr. Watson thus describes (*op. cit.* p. 733) the post-mortem appearances in a well-marked case of the disease:—"The supra-renal capsules were found large, and infiltrated with crude and suppurating matter. In the year 1847 (he died in April, 1857) the patient was near dying from an abscess in the liver. From the cicatrix of this abscess a closed sinus was distinctly traced to the right capsule."

Dr. Addison himself was aware that disease of the supra-renal capsules might occur without the occurrence of bronzing of the skin, and he is stated by Dr. Greenhow(a) to have described as cases of the disease some that manifestly were not so. Subsequent observation seems to have indicated that the bronzing of the skin only attended that form of disease in the supra-renal bodies commonly called "tubercular," although the term is confessedly used for want of a better. In a fatal case related by Dr. Greenhow, the post-mortem appearances are thus described:—"The supra-renal capsules were much enlarged; they were of very firm consistence, and on section no difference was visible between cortical and medullary substance, the whole organ being converted into masses of firm yellowish-white tissue, in parts semi-transparent. Scattered throughout these masses were numerous opaque, yellow deposits, varying in size from a hempseed to a small bean, of cheesy consistence, mixed with gritty matter.

Dr. Gordon then alluded to a case by Assistant-Surgeon Power, of the 13th Regiment (*Lancet*, December 11, 1869), in which, although the supra-renal capsules were diseased, no bronzing of the skin existed. In the post-mortem examination the following appearances were found:—The right supra-renal capsule was irregularly enlarged, normal shape quite lost. "On section, patches of tough, yellow, cheese-like material." Left supra-renal capsule in a similar state, but larger and more rounded. And, bringing his remarks down to the latest practicable date, he alluded to a letter in the *Lancet* of January 1, 1870, in which Dr. Clarke, of South Molton, observes, with reference to the last quoted case, that there are many diseases of the supra-renal capsules which never produce discoloration, and cannot be considered in the least specimens of Addison's disease.

Note.—Dr. Purdon (*Medical Mirror*, January 1, 1870) observes that "there may be bronzing with lesion of the supra-renal capsules; secondly, bronzing without lesion of the supra-renal capsules; and thirdly, lesion of the supra-renal capsules without bronzing of the skin." That author endeavours to show that bronzing does not depend upon disease of the supra-renal capsules, but upon disease "of that part of the ganglionic system called the solar plexus," in accordance with the views expressed by Damon and Jaccoud.

From the cases and remarks made the following are the conclusions drawn, namely:—

a. It is a matter of doubt whether "Addison's disease" may not at times be hereditary.

b. It is equally so whether, under certain conditions, it may not be connected with syphilitic cachexia.

c. It has no necessary connexion with pulmonary tubercle.

d. Nor with albuminuria.

e. The presence of the characteristic disease of the supra-renal capsules is not necessarily attended by regional pain.

f. In only one of the cases described did Medical treatment appear to retard the disease. (See Bennett, page 685.)

g. The symptoms of the disease are, for the most part, peculiar and characteristic.

h. Bronzing of the skin may occur where "tubercular" matter is not after death found in the supra-renal capsules.

i. It may be matter of doubt whether in some cases the bronzing of the skin, described as Addison's disease, may not really be the discoloration which attends secondary syphilis.

j. The exact relationship between bronzing of the skin and supra-renal disease are still open questions.

k. There is some reason to believe that Dr. Addison himself was aware that the connexion between the two conditions was not invariably found to exist.

l. The most frequent morbid appearance in the supra-renal capsules, when disease of these organs is discovered in cases of bronzing, is "tubercular" deposit.

m. It is possible that, as suggested by Dr. Watson, bronzing only occurs when disease of the supra-renal capsules is far advanced, or where both these organs are much disorganised.

n. So far as observations have yet gone no connexion has

(a) Lecture on Addison's Disease, *Lancet*, April 1, 1865.

been traced between bronzed skin and disease of any of the other ductless glands.

o. And finally, it seems reasonable to believe that the true nature and associations of this affection, known as Addison's disease, have yet to be established.

ON

PROF. VON PETTENKOFER'S THEORY OF THE PROPAGATION OF CHOLERA AND ENTERIC FEVER.(a)

By GEORGE BUCHANAN, M.D., etc., etc.

In investigating the local circumstances under which cholera became epidemic in Bavaria in the year 1854, Professor von Pettenkofer observed a certain relation of its distribution to river valleys and natural drainage areas; and his observations were confirmed by those of other inquirers in Saxony and elsewhere. The notion was not a new one, but Professor Pettenkofer brought new facts into evidence concerning it, and connected the prevalence of cholera with particular conditions of soil-water. Accepting the necessity of human intercourse as one element required in the production of cholera, he found another element—equally requisite for the development of the disease in its epidemic form—in the fluctuations of water in the soil upon which people dwelt. The condition of place and time in which Pettenkofer found cholera to diffuse itself with greatest facility was a porous soil, saturated in its lower parts with water, when this water was rapidly falling, after having risen to an unusual height.

As confirmatory of these experiences about cholera in Munich and other parts of Bavaria, Pettenkofer quotes the observations of Macpherson as to the relation of cholera to season in Calcutta, where in the hot and wet season the tendency to cholera on an average of years proves to be less than in the hot and dry season. And more recent and exact observations on the measurement of water in wells are also quoted by Pettenkofer from Indian experience. Dr. French, at a station on the Ganges, observed the depth of water in the porous soil; it overflowed the surface during the rainy season of 1868, and afterwards fell very rapidly. Cholera occurred at the end of March with the beginning of the dry season, and from that time to its cessation in the middle of May the level of the soil water in the wells was ten feet below the ground level.

Similar observations, but relating to enteric fever, have been made for Munich by Professor Buhl. From a series of careful measurements (extending over nearly ten years) of the height of the soil-water of that town, placed side by side with the deaths from enteric fever, he draws the conclusion that the same connexion subsists between these two as Pettenkofer had announced for soil-water and cholera. His diagrams, which are shown in the *Zeitschrift für Biologie*, appear to be conclusive as to the fact of such connexion. Herr Seidel, in a paper to the Royal Bavarian Academy, has examined, mathematically, the degree of probability which is, by Buhl's figures, established between the sinking of soil-water and the prevalence of enteric fever in Munich, and finds that, as regards this town, the chances are 273 to 1 in favour of the two conditions standing to each other in the relation of cause and effect.

I think it will be conceded that a theory of causation of cholera and enteric fever which has this kind and variety of proof in its favour is not far from being certainly proved for the places in question. Venturing, therefore, to take the fact of a connexion as established, the object of my paper is to consider what are the mediate states operating in the production of the relation of soil-water to disease.

Here I find Professors Pettenkofer and Buhl cease to give assistance, beyond indeed supplying incidentally a number of facts which are pertinent to the question. The influence of soil-water on health remains for them a something positively existing, but unknown in nature; it is an action of the atmosphere upon the water, or upon impurities of the water in the loose soil. Particularly they deny that the effect of soil-water fluctuations is produced by fluctuations in the facility with which poisonous matters can enter drinking water derived from the soil.

I have taken considerable pains to understand what is the nature of the evidence upon which Pettenkofer has persuaded himself that it is not by pollution of wells that the subsidence of soil-water comes to have its relation to cholera and fever, and it seems to me that all, or nearly all, the evidence which he adduces tells in the opposite direction. I cannot find in his papers, or in those of Buhl, any reference to the coincidences in question in any town which, being situated on porous soil, has its water-supply furnished to it from without. On the contrary, many of Pettenkofer's illustrations represent the water-supply of towns as being from wells, which are exposed to the readiest sources of organic contamination; or, again, in regard of the places quoted, we may learn from other sources that the water, with which Pettenkofer only concerns himself because it is there present in the soil, does actually furnish the drinking supply of the population, and is of the most dangerous quality. Anyone who will read Pettenkofer's account of cholera in Malta and Gibraltar, observing his careful mention of the height of water in the wells, will not fail to be struck by the absence of any mention of the quality of the water regarded as a drink; and the reader of Buhl's paper will notice how, in view of the established connexion, the advice is given not to befoul the soil with excrement, but the special meaning which this advice may have in relation to supplies of drinking water is not touched upon.

Now it seems to me, that so far from being satisfied with general statements that the distribution of fever and cholera has not in the cases examined coincided with the distribution of bad drinking water, we are entitled from *à priori* considerations to demand very strict proof that this coincidence has not existed. For (1) the question is of two diseases which more than any others are communicable by excremental matter in drinking water, and (2) the least reflection will show that it is precisely at the period when soil water is sinking that wells sunk in porous soil must, if ever, furnish impure supplies. A well in porous soil gets its water in two ways; water stands in it up to the level of the water in the soil, and also drains into it from every source (from rain, from slops, from cesspools) on a higher level than that of the water of the soil for many yards around. In other words, besides receiving water from the general waterflow through the soil, it receives the local soil water soaking from a cone of ground of which the surface of water in the well is the apex. Let the level of water in the soil be high, and the base of this cone is small; let the level of the soil water be low, and the base of this cone (at the surface of the ground) is large. In either case the saturated soil is comparatively impervious to more water, and approaches the condition of a non-porous stratum. When the soil water is at its highest, therefore, impure slops and excrement that may be on or in the ground tend to run horizontally away. When the soil water, on the contrary, is low, such matters tend to soak downwards; and when the soil water is actually falling, the greatest of all facilities are given for such matters being washed down to a lower level, and for wells becoming befouled by them in their most intense form. I think, therefore, that even on *à priori* grounds we may say, that until the contrary is shown, the presumption, as regards the coincidence of cholera and enteric fever with sinking soil water, is, that it is directly operative through drinking water supplied by wells.

There is no occasion, however, to be satisfied with *à priori* reasoning in support of this view; I believe I can give a series of facts in its favour, and first I quote the experience of a village in Essex where I was lately investigating a serious outbreak of enteric fever. The village is in a valley of gravel over chalk, and a brook runs through it. In May, 1869, after great falls of rain, and up to the middle of June, this brook was running in its whole course through the village. In the latter half of June the brook subsided, and ran — as such streams do—underground in the greater part of its course. Evidently the soil water was then rapidly falling, and in the comparative absence of rain for the next few months it fell more and more, until in November it stood in the wells of the village twenty to thirty feet below the surface. There had been no enteric fever in the village for a long time, but a case occurred on June 24, and the disease extended so seriously that by the end of November forty-five persons had been attacked out of a population of 200. Two cases of enteric fever had been imported into the village on the last day of May. Here is a case perfectly illustrating Pettenkofer's theory — intercourse of infected persons, sinking of soil water, epidemic of enteric fever.

But no "unknown influence" had here to be invoked. A great deal more could be made out of the facts of this Essex village. Within the period in which fever, to have been directly communicated by the imported cases, must have shown

(a) Read at the Association of Medical Officers of Health, February 19, 1870.

itself, only one person was attacked by the disease in the village. The way in which he contracted his fever is obscure, and has little bearing on the present question; it is enough to say he was attacked on June 24. No one else fell ill in the village till July 25, and then a rapid succession of cases occurred. Now there are eleven wells in the village, but, of the forty-five cases that had happened up to November, forty persons had drunk from one only—the public parish well. Of the remaining five patients two had just before their illness changed house, having before then drunk the parish well-water, and two others of the five were of new occurrence in November, when, as subsequent facts proved, the disease was taking a new start, and when, it may be noted in passing, there was no likelihood of any change in the level of the soil water. Forty-two persons, therefore, out of eighty-eight who used the parish well-water, got fever, while up to November only one person out of 118 who presumably had not drunk the parish well water was attacked. The soil water must, at the end of June, have been sinking everywhere throughout the village; nevertheless, only the drinkers of one particular sort of water were affected with fever.

It happens that it was easy to show how this particular well got contaminated. It was receiving in June, not only the water of the general waterflow through the chalk, but, especially as the water was falling, the drainage of a large and increasing circle of land, the base of the cone of which the well-shaft was the axis. Thirty-five yards off the well was the privy into which the stools of the first indigenous case of fever were, without previous disinfection, thrown. The flow of liquid from this privy was directly towards the well, peculiar facility for the horizontal conveyance of such liquid being afforded by the interposition of a scarcely pervious layer of clay between the gravel and the chalk. There can be no doubt that, except for the circumstance of this well-water being drunk, the sinking of the soil water would, as the experience of those using other wells showed, have been without effect in the production of fever in the village.

But the facts to which I would chiefly appeal as showing that soil water is influential over typhoid fever, only or mainly by reason of its internal use, come from some investigations, which were entrusted to me a few years ago, respecting the changes in public health consequent upon various sanitary works in English towns. I have said that the instances cited by Prof. Pettenkofer appear to have exclusively been those of places which derived their water supply from the ground beneath them, and that he adduces no proof to show that this water was not peculiarly exposed to contamination in the sinking of water in the soil. I am able to give numerous cases of towns where, a water supply from external sources having previously been furnished, works, which had for one effect a considerable lowering of soil water, were undertaken, without in any real instance having an outbreak of enteric fever as their consequence.

Of the twenty-five English towns to which I refer, I may set aside eight of the smaller ones, Dover, Warwick, Banbury, Salisbury, Ely, Rugby, Penrith, and Ashby-de-la-Zouch, inasmuch as they changed their water supply about the same time that their soil water became lowered, and cannot therefore afford evidence of the influence of the one change apart from that of the other. All these places, however, had less mortality from enteric fever in the years when the soil water was being reduced than in the average of previous years. Again I set aside Penzance, Chelmsford, Alnwick, Brynmawr, Morpeth, and Ottery as having had no artificial change made in their subsoil water; only observing that in two of these towns there was great decrease, and in one a slight increase of enteric fever. Cheltenham has also to be set aside, as its statistics are taken for periods which do not bring out any evidence on the question. But seven of the largest of the towns, comprehending a population of nearly half a million persons, will give us, as I think, much information in the present matter. Reserving three places for special comment, these towns complete the list of places visited. They are as follows, with the dates of their receiving external water supply, and the dates of the works to which they owe the fall in their subsoil water:—

Town.	Introduction of water.	Drainage works.
Bristol	1847	1854
Leicester	1852-5	1856-61
Merthyr	1861	1862-5
Cardiff	1850-55	1854-7
Carlisle	1848	1854-7
Macclesfield	1851-2	1853-6
Newport	1846-8	1856-9

All these towns had their subsoil water lowered to a more or less considerable degree during the years that drainage works were being carried on; and it will be seen that they were so circumstanced that their drinking water could not be affected by the operation. The following shows the mortality from enteric fever in each town before and during the years when the soil water was sinking, the figures representing in each case a death-rate per 10,000 of population yearly:—

	Before.	During.
Bristol	10	8
Leicester	15	$10\frac{1}{3}$
Merthyr	$12\frac{2}{3}$	$8\frac{2}{3}$
Cardiff	$17\frac{1}{2}$	$4\frac{1}{2}$
Carlisle	10	$8\frac{2}{5}$
Macclesfield	$14\frac{1}{4}$	14
Newport	13	$12\frac{1}{4}$

Of these towns the lowering of soil water was most considerable in the cases of Leicester and Cardiff. It may be well that I should guard against misapprehension by stating that, in the period after the execution of the works here considered, the reduction of mortality from enteric fever was, with scarcely an exception, greatly more conspicuous than in the time during which the works were being done.

It appears, then, from the experience of these seven large towns, that when lowering of soil water is brought about, while drinking water is being supplied, not from the soil of the place, but from pure external sources, Pettenkofer's experiences, obtained from places which do derive their water supply from their own soil, fail of application. It is probable that if closer inquiry were made into the sequence of sanitary improvements, some or all of the towns which were first set aside might afford further evidence adverse to the general expression of facts given by Pettenkofer—at all events, none of these towns afford any colour to the supposition that sinking of soil water exercised appreciable evil effect against the good effects that were being gained in other ways.

The three towns which I have left for further mention are Croydon and Worthing, where during the years of soil water reduction there was an increase of fever; and Stratford-on-Avon, where, with considerable reduction in the level of soil-water, great reduction of fever also took place, and this although the source of water supply remained what it had always been—the porous ground upon which the town stands. The case of Stratford is the only one which appears to me antagonistic to the whole of Pettenkofer's theory. Its fever death-rate was $12\frac{1}{3}$ yearly before drainage works were begun in 1854. The construction of the sewers reduced the level of the subsoil water, intercepting springs, and drying wells, many of which had to be deepened. Yet, while these works were going on, the annual fever death-rate was only $5\frac{3}{4}$. The other two instances, Croydon and Worthing, appear at first sight to bear out Pettenkofer's views in their entirety, for both of them, having pure water supplied to them from sources out of the reach of contamination, got their soil water much reduced during the time that certain drainage works were being made, and at the same time got a considerable increase of fever; in the case of Croydon from $16\frac{1}{2}$ to 19 per 10,000, and in the case of Worthing from $7\frac{1}{2}$ to $9\frac{1}{4}$. But in each of these places it is known that arrangements intended for the removal of excrement had for their result the free discharge of sewer gas into houses, and the evidence connecting the outbreaks of enteric fever with this defect is so conclusive as to obscure altogether any causative conditions relating to the soil.

Admitting, then, Professor von Pettenkofer's thesis that subsidence of soil water is a condition favourable to the epidemic prevalence of enteric fever, I think it has been shown that the qualification is wanted "where in the town or place the supply of drinking water is derived from the soil upon which the town stands;" and then the conditions to which Pettenkofer calls attention will range themselves under the more general etiological head of circumstances assisting in defiling supplies of drinking water. I have not much doubt that what is true, in this regard, for enteric fever, is also, in its degree, true for cholera; but upon this point, remembering the varied character of the statements connecting cholera with soil, and feeling the need of wider and more exact experience, I cannot venture to speak with certainty.

I know that Professor Pettenkofer would point, as being opposed to this view, to the observations of Wagner on the chemistry of the wells in Munich. This observer found that the shallow wells were much more free from potash (and, as he presumed, from organic impurity) after a season of drought than at the beginning of a wet season. There is every reason, both from Wagner's observations and from general experience,

to conclude that the first rainfall after a dry season washes soluble impurity into wells; and also for believing that, after a time of drought, the wells, which then are being almost exclusively fed from the horizontal waterflow in the soil, should have least of those impurities which are derived from near the surface of an inhabited town. But neither Wagner's observations nor any other considerations that occur to me seem in any way to weigh against the belief that after rains, and when wells are drawing most upon upper layers of befouled earth, organic matters in their most dangerous state have particular opportunities of entering wells, and that drinking water derived from such wells is then particularly likely to produce disease. And in this connexion it is to be held in mind that the assumption running through Wagner's papers, that potash salts may be taken as the measure of excrementitious impurity generally, may very likely have no application for those particular excrementitious impurities which are productive of epidemics of cholera and enteric fever, and of which it is not the quantity, but the quality and probably the special stage of decomposition they are in, which is of consequence.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CASES OF EXCISION OF THE KNEE.

Since the commencement of the present session, there have been five cases of excision of the knee-joint in the wards, all of which have been followed by success. The most remarkable and interesting of these cases was that of a little boy, aged 12, who was discharged in the last week of January. He was a wretched, strumous, half-nourished boy, who had some years since suffered from antero-posterior curvature of the spine, but when he was admitted the deformity alone remained without any other symptoms. He was, however, suffering from disease of the left knee, which was contracted and painful, and sinuses led down to diseased bone. Mr. Henry Smith kept the boy under observation for some time, with the view of getting his health into better condition. Still the knee became worse, fresh sinuses occurred, and accordingly on October 2, Mr. Smith excised the joint, taking care to remove only about one third of the epiphysial extremities of the bones. The operation was not followed by any shock or constitutional disturbance, and notwithstanding the wretched state of the boy's health, the wound healed kindly, and he soon began to gain flesh. Early in December he was enabled to get up on crutches, but as the union between the bones was only fibrous, his limb was encased in a leather splint, and he was discharged January 12 in capital condition. The wound quite healed, and the limb little shortened.

Another case of a lad, aged 13, was operated on by Mr. Wood on the same day. Here the patient was in a fair state of health, but the knee was bent at right angles, greatly enlarged and painful, and his limb quite useless. Mr. Wood took out a block of bone and got the limb straight. This boy has done very well, but has been confined to his bed somewhat longer than usual in consequence of some ulceration of the flap having taken place; at the present time, however (January 24), the wounds have almost entirely healed, perfect anchylosis has taken place, and ere long the patient will be discharged.

A third case is that of a boy, aged 14, who was operated on by Sir William Fergusson on December 1. Here the knee was much in the same state as Mr. Wood's case, much contracted, greatly enlarged, and limb perfectly useless. Sir William took out a block of bone and got the limb straight. No disturbance followed the operation, rapid healing of the wound took place, and now firm union between the bones has taken place, and the boy is allowed to get up on crutches, the limb having been previously put up in a dextrine bandage, six weeks only having elapsed since the operation.

The last case was performed by Mr. Henry Smith, and is of a very interesting character. The patient is a woman, aged 20, who had extensive disease of the knee. The mischief, however, so far as the bone was concerned, seemed to be confined to the head of the tibia, and Mr. Smith was in hopes that, by the removal of the diseased bone, he might prevent an excision of the entire joint; but, on the patient being brought into the theatre on Saturday, January 8, it was found that the probe passed freely through the head of the tibia quite into the joint, and, under these circumstances, Mr. Smith excised the entire joint. This step was found to be absolutely necessary, as, although there was no disease of the end of the femur, there was, independent of the extensive disease in the tibial extremity of the joint, much pulpy degeneration of the synovial membrane.

In this case, although very little blood was lost, there was considerable shock, and about the sixth day an anxiety of countenance and hurried respiration betokened some mischief; but there had been no rigors, and by careful stimulation and the injection of small doses of morphia by the skin, the symptoms passed away, and the patient is now doing admirably, the wound is rapidly healing, and the limb is in excellent position.

In the fifth case, which was lying in one of the wards for some time till lately, there had been a previous excision some two years since, with a sound and useful limb resulting, but some sinuses had reformed, which led to a cavity at the seat of junction between the bones, which was very firm. Mr. Henry Smith, therefore, opened up the wound and removed the diseased bone from the cavity in question. This case did well, and was discharged from the Hospital in three weeks with a remarkably useful limb, although bowed out.

In addition to the cases to which we have referred, a sixth case was operated upon by Sir W. Fergusson, on Saturday, February 5. The patient was a young woman of about the same age as Mr. Smith's last case, and was the subject of an anchylosed, distorted, and useless knee, the result of old-standing disease. The girl was in very fair health and anxious to get rid of her deformity. Sir William removed a wedge of bone from the knee, and got the limb perfectly straight without any difficulty. This case also has progressed most favourably, the wound being nearly healed.

HOSPITAL SHIP "DREADNOUGHT."

PARAPLEGIA ASSOCIATED AT THE EIGHTH WEEK WITH HEMIPLEGIA ON RIGHT SIDE—DEATH—POST-MORTEM APPEARANCES.

Mr. Harry Leach has kindly afforded us opportunities for obtaining a clinical record of the following case:—

B. P., aged 23, an emaciated and anæmic sailor, was admitted into the *Dreadnought* Hospital on July 26, 1869. He was suffering from extreme prostration and loss of mobility in the lower limbs.

Previous History.—Has been a sailor for eight years. General health good before the commencement of the present disease. States that he has had the "bad disorder." Seven weeks since, when in the West Indies, he strained his back from lifting a coil of heavy rope. This was followed by severe and persistent pain, and fourteen days afterwards by weakness in the legs. The motor power of the lower limbs was gradually lost, and at the end of the next three weeks the fæces and urine were passed involuntarily. This motor palsy was associated with slight loss of sensation in the integument of the lower limbs and with severe pain along the spine.

State on Admission.—There are no symptoms of abdominal or thoracic disease. The superficial glands, the bones, and the testes are normal, and there are no external signs of constitutional syphilis. Lower half of right iris adherent to a dense white cicatrix on cornea. This condition, the patient states, was the result of an accident in childhood. There is complete paralysis of movement of the lower limbs, with slight impairment of sensation. Active reflex movement on pinching the integument, the legs, or feet. Thighs and legs always flexed; the flexor muscles very rigid, and their tendons very tense and prominent. Painful convulsive movements and muscular twitching frequently occur in both lower limbs during the twenty-four hours. Urine turbid and ammoniacal, contains a quantity of mucus and altered pus, and presents under the microscope a plentiful deposit of phosphate of lime. No œdema, either general or local. The patient, though very weak and emaciated, does not suffer much constitutionally. He sleeps well, and his appetite is good. Pulse 96; temperature in axilla, 98·6°; between toes of right foot, 97·1°. Ordered acid. nitro-muriat. mxv., ad aquæ ʒj. t.d.

During the two months following the day of his admission there was no great change either for better or for worse in the condition of the patient. There were no signs of restoration of mobility in the lower limbs, and the sensation was still re-

tained. The man, however, was somewhat reduced in consequence of suppuration from large sores which had formed over the back, hips, and knees, in spite of great care in nursing and the constant use of a water-bed.

September 17.—In the evening the man had for the first time a short fit, marked by convulsive action of the right arm and leg. This was immediately followed by a temporary loss of consciousness and by facial paralysis on the right side.

19th.—In the morning had another fit similar in character to that of the 17th, though longer and more severe. This was followed by marked and abiding facial palsy on the right side, loss of memory and impairment of speech, the voice also being thick and indistinct. The patient, though perfectly conscious and seemingly ready in comprehending what is said to him, hesitates very much in his answers to simple questions, breaking off in the middle of a short sentence, and frequently before he has finished a word.

21st.—At 7.30 a.m., the man suddenly lost the use of his right arm. Can move the limb at the shoulder-joint, but cannot extend or flex forearm. There is now well-marked hemiplegia. The facial paralysis, however, is passing off. Bowels much constipated. At night slight wandering delirium. In the evening profuse perspiration; a well-marked hectic flush occasionally presented during the day. Pulse 96; temperature in right axilla 98·2°, in left axilla 97·3°, between toes of right foot 97·2°.

October 2.—Somewhat better since last report. Has had a good night, and this morning, when spoken with, answers more readily and with more distinct articulation. Face and right arm covered by a profuse perspiration, rest of body, and especially the lower limbs, hot and dry. Iodide of potassium was ordered to be taken in ten-grain doses three times in the day.

6th.—Has improved slightly since the first administration of iodide of potassium. The facial palsy has passed off, and the speech, though slow and hesitating, is now intelligible. Paralysis of right arm still persists.

For the following two months no fresh symptoms have presented, save those indicative of extreme exhaustion. In the third week of November he had regained the use of the right arm, and could move the hand to his mouth without assistance. The paraplegia still persisted, and the patient was much troubled by frequent convulsive movements of the lower limbs. The hips and knees were much contracted, and the hamstring tendons were tightly stretched. The bedsores had a great tendency to increase in superficial extent and in depth, but presented healthy granulating surfaces, from which much healthy pus was discharged. The patient was put on a nourishing diet, with twelve ounces of wine.

On December 7 the patient was extremely low, and at times delirious, and on the following day, at 6.30 p.m., succumbed.

During the month of October and the first week of November the temperature of the body varied from day to day. The lowest point during this period was 96·2°, and the highest 102·4°. The temperature taken in the axilla on the right and paralysed side was generally higher than that on the left, and in most instances to the extent of one degree. From November 11 to the day of the patient's death there was a gradual elevation in the temperature of the left side, that on the opposite side gradually falling from 101° to 97°. The pulse increased from 96 to 120; the respirations were usually about 32.

Post-mortem, Forty-four Hours after Death.—No cadaverie rigidity. Upper extremities unaffected by rigor mortis; lower limbs maintained in extreme flexion by rigidity of tendons and ligamentous structures. Head: No thickening of bone or pericranium; dura mater healthy; arachnoid opaque; surface of brain very moist; the veins and sinuses filled with black fluid blood; no disease of cerebral arteries; weight of brain, 42 oz.; the convolutions small and very distinct; tissue at the surface of the brain white and firm, and that on the front of the pons and the medulla oblongata very tough and resistent. On slicing the hemispheres above the level of the corpus callosum, there was found in the left anterior lobe a narrow and irregularly shaped patch of softening, which passed directly from without the left corpus striatum to the grey matter at the surface of the brain. The brain tissue at the base of this patch was shreddy, and of a pinkish colour. The left corpus striatum was congested, but firm; both lateral ventricles contained some clear fluid, and were much dilated; the whole of the white substance of the brain was very firm, and the tracks of white fibres were well marked, and contrasted strongly with the grey substance. Spinal Cord: Membranes perfectly healthy; the cord in the cervical and lumbar regions was tough and resistent at the surface, and the horns were somewhat contracted. At the part of the cord corresponding to the third dorsal vertebra, and about two inches below this, there was marked softening, the white tissue being soft and pulpy, and readily yielding to slight pressure. The membranes at this part were not affected. Chest: Lungs anæmic and œdematous. Heart small; the inner surfaces of its cavities stained by blood. Abdomen: Liver congested; weight 4 lbs. Spleen large and nodulated. Small intestines anæmic and contracted.

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Medical Times and Gazette.

SATURDAY, MARCH 12, 1870.

GENERAL MEDICAL COUNCIL.

Resuming our summary of the proceedings and conclusions of the Council during their late short session, we note that on the fourth day they passed the resolution, "That if powers should be given to the General Council to register, under certain restrictions, foreign or colonial degrees or diplomas, the holders of such foreign or colonial degrees or diplomas should undergo, previous to their registration, the same examination which will be necessary in the case of every person who desires to register any of the qualifications recognised in Schedule (A) of the Medical Act." This seems only justice and common sense; due care must be taken to prevent imperfectly educated persons from gaining admission on the Register, while it is liberal and generous to admit all holders of foreign or colonial qualifications on the terms of a "most favoured nation" clause. It was also proposed to omit from Clause XI., in the new Bill, the words "provided that such persons"—*i.e.*, the holders of foreign or colonial degrees or diplomas, "shall be resident in the United Kingdom for a period of not less than twelve months immediately previous to making application to be registered." This, however, was objected to on the ground that such a provision was considered necessary because, otherwise, persons who had been guilty of misconduct in the colonies might come over here and at once get admitted as registered Practitioners, and that it might then, when their former misconduct became known, be impossible or difficult to remove them from the Register. The objection was, very properly we think, admitted, and the proposal withdrawn.

The Council received from the King's and Queen's College of Physicians in Ireland a letter earnestly recommending the issuing of a Royal Commission "to inquire into the working of the several Medical Acts," without which, in the opinion of the College, any new Medical Bill "would almost certainly prove unsatisfactory, and would probably be opposed." Sir Dominic Corrigan, approving of this recommendation, moved

that "it appears desirable, before proceeding with any new legislation, that a Royal Commission of inquiry should issue to take evidence from such members of the Medical Council and such other persons as the Commissioners may see fit to examine, with the view of furnishing evidence and a report, which it is hoped will prove a sound basis for legislation." The proposal was supported by Dr. Rumsey, but was rightly rejected. Such a resolution could only have been regarded as an expression of the "how-not-to-do-it" method, or a means of delaying action, and as a confession of incompetence or strangely wilful ignorance on the part of the Council. But it would be absurd to suppose that the Council now, after twelve years' experience and inquiry, and after all the memorials they have received from various and many, large and small, bodies of Medical Practitioners, can be ignorant either of the working of the Medical Acts or of the opinions and wishes of the Profession. The Government has at its command the knowledge and opinions of the Council, and it has also received memorials setting forth the wishes of very considerable numbers of the Profession, so that we do not see how any good could possibly be gained by the issue of a Royal Commission.

The Committee appointed by the Council to confer with the licensing bodies on the Education Report made a short report on the subject of "Teaching," stating that though "in the absence, at present, of sufficient detailed criticism on the educational matters discussed in the report of the Committee of last year, it is impossible to recommend the Council to take complete action in this matter," yet there appeared to be sufficient unanimity on some points to warrant the Council in at once proceeding to legislate. The report then stated that the Society of Apothecaries of London had at once acted on the recommendation "that written class examinations should be enforced in all cases, and that the certificate of attendance on lectures should bear evidence to this," and had ordered that after June, 1870, this regulation should be enforced on all who seek its licence; that the same Society had ordered, in obedience to another recommendation of the Committee on Education, that "after June, 1870, any candidate for its licence shall have served for at least six weeks the office of clinical clerk;" and that as the College of Surgeons of England has had for some years a regulation of this kind, and the system of written class examinations is already in use in several of the Scotch and Irish schools, and that evidently both these orders must now be carried out in all the English schools, "it is recommended that the Council should make them current throughout the United Kingdom." The committee considered also that the Council might at once require that the teaching of therapeutics should be separated entirely from that of pharmacy; and make clinical examinations in Medicine and Surgery imperative. The Council, however, declined to enter into these matters during its present short session, and simply resolved "that the committee appointed to confer with the licensing bodies on the report of the Committee on Education be reconstituted, and be termed the Committee on Professional Education."

The Council took into consideration a correspondence between their Registrar and the Queen's University in Ireland; and, it appearing that the University still declines to adopt the recommendation of the Council with regard to the preliminary examination in general education, Dr. Parkes moved that the Executive Committee be instructed to communicate the correspondence to the Privy Council, and "to urge upon the Privy Council the necessity of refusing registration to the graduates of the Queen's University till the University complies with the recommendations of the General Medical Council on the preliminary examination of Medical students." This led to a rather smart passage of arms between some of the members of the Council, in which, of course, Sir Dominic Corrigan took a prominent part, trying, but without much satisfaction, to get up a special fight with Dr. Andrew Wood. The Council in general seemed to think it hopeless to proceed in a logical manner with the Queen's University, and as they had been informed that the senate of that University "are engaged in revising the whole scheme of Medical education and examination, and that the question of holding a preliminary examination prior to the commencement of Medical studies will obtain their careful consideration," the Council deemed it most discreet to content themselves with again addressing to the University a courteous letter, expressing a hope that before their next meeting "some reply would be made to the point" in question. To the remark that this would be "the fourth letter," Dr. Parkes replied, with admirable resignation, "I do not know; it may be the fiftieth. I dare say it will be fifty before they reply."

Some other matters came before the Council, but none of such importance as to require notice here. The great work of the session was done when the Council agreed, by an overwhelming majority, "that the present system of Medical examination entitling to registration requires amendment," and "that this may be best accomplished by the formation of a conjoint examining board in each division of the kingdom, such board being constituted by a combination of the present licensing bodies on a plan to be hereafter determined." To give effect to and carry out these resolutions, the Council then appointed the Executive Committee to confer with the Lord President of the Privy Council, and to bring before him, for his consideration, the various provisions which it will be necessary to introduce into an amended Medical Act in order to carry out the desired objects.

There appears to be in some quarters an idea that the examination by the conjoint board is to be an additional examination to those already necessary to entitle a man to registration as a properly qualified Practitioner; that passing it will only confer the right to be examined by one or more of the licensing bodies; and that by this last process only can a qualification to practise be obtained. This is, we take it, altogether a mistake. We understand that the conjoint board will be not merely the first, but the only board which must be passed in order to obtain a right to practise; that the *testamur* of that board will confer on its holder a right to diplomas or licences, from one or more of the bodies constituting it, to practise any or every branch of the Profession, and that by the qualifications thus obtained will Medical men be registered. Other examinations will only be requisite when higher and more special qualifications are sought, such as degrees in Medicine or Surgery, diplomas in State Medicine, diplomas of Fellowship, and the like.

What shall be the fee for examination by the conjoint board, how the fees shall be divided among the various bodies constituting the board, and so on, are matters of detail that have yet to be determined on. But the fees must be large enough to provide properly handsome fixed salaries for the examiners, and pay all the other expenses of the board, and, further, to supply funds for in some degree supporting those institutions by which the honour and dignity of the Profession are upheld. For example, we think the funds thus obtained may be very justly made to contribute towards the maintenance of the Hunterian Museum, hitherto supported by the College of Surgeons. Without some such aid, the museum must either decay, or fall into the hands of the Government and become national property. Now, though it may even now be said that it is in some degree a national museum, yet it is in a far greater degree a Professional glory; it is the only great scientific boast of the Profession in England, and we should be very unwilling, to say the least, to see it pass under Government management, and become, as it very probably would become, merged in the British Museum. We do not believe that the Profession will think it in any way a hardship or an injustice if they are in this way "taxed" in order to keep the Hunterian Museum as a Professional property, and under Professional management and care.

It will have been noticed that the letter from the Lord President of the Privy Council contained no hint of any intended

alteration in the constitution of the General Medical Council. But it appears that on February 25 his Lordship addressed to each of the bodies named in Schedule (A) to the Medical Act, a letter containing the questions published in our last week's number.(a)

It is certain, therefore, that the Lord President has some intention of, in some way or other, changing the constitution of the Medical Council, or the mode of election of its members, or at least has the matter under consideration in connexion with the probable amended Medical Acts Bill. We have more than once enlarged on the necessity of some reform in the constitution of the Council, and are glad to observe that the Lord President's questions point to a reform in the direction and of the kind which we ourselves have urgently recommended—viz., that the election of the representatives of each corporation or university should be vested in a much larger body than at present is the case; that the franchise should be extended to all the Members or Fellows, or both, of each licensing body. Whether his Lordship entertains any idea of also giving representatives to the Profession at large, independently of the universities and corporations, we have no means of knowing at present. Should his Lordship see reason to believe that many of the Council hold and act on the doctrine set forth by Sir Dominic Corrigan—viz., that the members of the Council are merely the mouthpieces of that fraction of each licensing body that returns them, and can only act in accordance with the instructions of that electing fraction, then his Lordship will in all probability feel it imperatively necessary and just to provide for the representation of the Profession as a body; and we might be led to agree with his Lordship. But as at present we are confident that the vast majority of the Council, the bodies that elect them, and the Profession generally, believe that the members of the Council are sent there as independent men, and are expected to act for the good of the Profession at large and for the public good, we do not see that any advantage is likely to arise from adding to the Council a few men to be elected by the Profession generally, as distinguished from the Profession massed as members of the several licensing bodies.

LEGISLATION FOR HABITUAL DRUNKARDS.

No one, for a moment, would question the position taken up by Mr. Dalrymple that drunkenness is, of all bad habits that can be contracted, the most degrading and the most refractory. Medical readers do not require to be told that it is the prolific mother of poverty, vice, and disease, and that the habitual drunkard, of all classes of evil-doers, is the least likely, and perhaps the least able, to reform himself. Viewing the case philosophically, then, we cannot be surprised that Mr. Dalrymple, in concert with a good many more persons who have thought more or less deeply upon the subject, is of opinion that some measures should be taken to rescue the person and family of the drunkard from the ruin which he is bringing on both. Regarding habitual drunkenness not only as a bad habit and a vice, but as a disease, the tendency to which is, like insanity, transmissible to offspring, he thinks that the legislature should interfere directly in order to mitigate the sum of human misery thus caused; and, in his speech on Friday last, referred to the experience of establishments in America, indicating a success in restoration of drunkards amounting to from 30 to 50 per cent. His proposition was that reformatories should be set up, which, he believes, might be made self-supporting, to which individuals conscious of their want of self-restraint might go of their own accord, or to which they might be sent by their friends, and detained until a Medical certificate is obtainable that they have re-acquired the power of self-control. He proposed, further, that magistrates should have power to commit habitual drunkards to such an institution, and that the property of these persons should be placed for protection in the hands of trustees appointed by proper authority.

We admit that, with the large majority of habitual drunkards, the only direct method of reclaiming them effectually is one in which their own will may be forcibly made subject to that of another, and that the plan of retreat promises better than any other that has been yet proposed. There are persons who, no doubt, are so impressed in their sober moments with the sense of their degradation, that they would gladly welcome the assistance which such restraint would afford them, and for such arrangements might be made with good prospects of success in an institution founded and maintained by private effort. But when it is suggested to detain such persons against their will for the benefit of their families, which they are bringing to disgrace or beggary, and to protect society from mischiefs which are by no means certain to accrue, it becomes a question whether such interference on the part of the State would not bring with it greater evils than those which it is intended to obviate. The disease of the habitual drunkard, if a disease at all, must be one allied to insanity; it must be a perversion of the moral sense or an incapacity to give effect to the resolutions which it inspires when temptation is present to the mind. But it is not easy to see how this condition, except when conjoined with other evidences of insanity, differs from the perversion of moral sense which renders a man insensible to the moral wrong of habitual lying or promiscuous fornication, and to legislate for such a person would be to introduce a principle which is new to British jurisprudence. The State, as Mr. Bruce pointed out, only interferes to restrain lunatics when they are violent and dangerous; otherwise it lays restrictions upon their detention, surrounding that which is effected for their good by friends with every available safeguard, and showing the utmost jealousy of any meddling with individual freedom. It only steps in for direct action when a low morality issues in the commission of crime. Were it to adopt any other course, were it to attempt to anticipate social evils by the restraint of the personal freedom of those from whom they are likely to originate, there is no seeing the limits of the interference it would be called upon to exert. At the same time we confess that there are circumstances in which the State might interfere both with advantage and propriety, such as where a man is frequently brought before the magistrates for disorderly conduct as the result of inebriation. To punish such a man with a fine of five shillings on such occasions is not only a mockery of justice, but produces no good effect either for the reformation of the offender or as an example to others. The reply of the Home Secretary that Mr. Dalrymple would learn the difficulties of the course to which he wished to pledge Parliament, if he would try and construct a Bill in the sense of his motion, clinches the arguments against it. We agree with him that at present indirect means of operating against intemperance are those which are most full of promise. "The cure for drunkenness," he said, "must be the moral one; the perception, which was fortunately spreading throughout all classes, that the vice was disgraceful. During the course of the session the Government proposed to bring forward two measures which would, he trusted, have a marked effect in checking the abuse of intoxicating liquors. By one they hoped to place mechanical difficulties in the way of procuring intoxicating drinks; but he trusted that far greater effects would result from the measures introduced by the Vice-President of the Privy Council which would spread throughout the country sounder opinions and sounder knowledge, and which would therefore be the means of checking the mischiefs arising from drunkenness." We should have been glad to hear also that an attempt was about to be made to facilitate further the destruction of the dens in which the poor live in our great cities, and the erection of wholesome dwellings in their place, as well as for the *domestic* education of the girls who are in the future to become, for good or for evil, the wives of the labouring classes. Many and many a man

(a) *Vide* page 273.

becomes an irreclaimable drunkard by being driven from a miserable home, where his surroundings are all of a depressing tendency, to find solace in the glare and companionship of the neighbouring gin palace.

REORGANISATION OF THE ARMY MEDICAL DEPARTMENT.

We understand that the changes in the construction of the Army Medical Department, which were lately foreshadowed in the Army Estimates, are likely soon to appear in bodily shape in a new Warrant, the main features of which will be that Medical officers, instead of being appointed to individual regiments as a part of the regimental staff, shall for the future, as a distinct and separate corps, be more directly under the control of the Director-General, and shall only be attached to regiments for the definite period of five years, at the expiration of which they shall be available for duty elsewhere, or, we presume, for reattachment to the same regiment, as a premium to efficiency, when such course may not be detrimental to the general interests of the service. All Medical officers belonging to regiments at date of publication of the Warrant will, we believe, be permitted to retain their appointments for five years, if they desire to do so.

The only other change in the new Warrant will probably be an alteration in the titles of the respective ranks. Surgeon-General, Deputy Surgeon-General, Surgeon-Major, and Surgeon are to replace the designations of Inspector-General and Deputy Inspector-General of Hospitals, Surgeon-Major, Surgeon, and Assistant-Surgeon. All Medical officers on entering the service are to be called Surgeons, and on promotion Surgeons-Major, and thus will be abolished the title of Assistant-Surgeon. No changes will be made in the daily rates of full or half-pay. A Surgeon will rank as lieutenant, and after six years' service as captain; a Surgeon-Major, on promotion, as major, and after twenty years' service as lieutenant-colonel, but junior of that rank; the relative ranks of Surgeon-General and Deputy Surgeon-General will remain the same, and advance by the same rules as those of the present Inspectors and Deputy Inspectors-General of Hospitals. Although a rose by any other name may smell as sweet, it must be admitted that the new titles of Surgeon-General and Deputy Surgeon-General have a more Professional sound than those for which they are to be substituted. The department generally also is badly off for a name, and the present would, we think, be a favourable opportunity for fixing on one. The "Royal Medical Staff" would sound well, and carry with it a *prestige* which would raise the department in the public estimation.

The great desiderata, however, of the department—namely, an improved scale of retirement for all ranks, and the limitation of tenure of office in the administrative ranks—the necessity of both of which measures we pointed out in an early number of this year's volume as the means of promoting the flow of promotion by "tapping the top"—have not, we hear, obtained a place in the new scheme. We hope, however, that something in this direction may ultimately be decided on; otherwise, the prospects of promotion to the junior ranks will continue very remote indeed.

THE WEEK.

TOPICS OF THE DAY.

By the time that this journal is in the hands of our readers, a deputation, headed by Dr. Bell Fletcher, of Birmingham, will have been received by Mr. Bruce, the Home Secretary, and will have presented to that gentleman a numerously signed petition, praying for the amendment of the Medical Acts. In the general object of amending the Medical Acts we need not say we heartily sympathise. We regret, however, to observe in the circular of invitation to join the deputation, issued by the Honorary Secretary of the Medical Reform Union, that a party character is given to the deputation and its object, with which we cannot in any degree sympathise. In the circular to which we refer, the Medical corporations are accused of "combining for the protection of their own interests," a charge which, if it refer to the present movement in favour of a conjoint board in each division of the United Kingdom, is simply an unfounded and unjustifiable assumption. In no sense can it be fairly affirmed that the movement has been made by the Medical corporations for the protection of their own interests. It is a patent fact that of the three corporations, two, the Royal College of Surgeons and the Apothecaries' Society, have nothing to gain, and may lose considerably by the combination. The fact is that the movement was inaugurated by the Lord President of the Privy Council, it has been urged on the examining bodies by the Educational Committee of the General Medical Council, and it is under the immediate suggestion or direction of the General Medical Council—we care not which word is used—that a scheme for conjoint action is likely to be perfected. But besides all these causes, there is another which, it is only fair to believe, has powerfully influenced the examining bodies. It is that there is a general belief abroad that a union of examinations, and a single portal to Medical and Surgical practice, would confer a large benefit on the Profession and on the public. It is but fair to give the corporations credit for being influenced by this belief when we find they are coming forward loyally to act upon it. To say only that they are now combining for the protection of their own interests seems to us a gross libel upon bodies which have for a long series of years constituted the Profession of Medicine in the eye of the public. The corporations and universities are willing to combine in the interests of the Profession of Medicine, in the interests of the students of Medicine, and, in obedience to the General Medical Council, to carry out the expressed wishes of Government. We believe that, with one exception, each body that enters into the compact is very likely to lose by its bargain. But, in the circular we are noticing, the Medical corporations are not only accused of combining for the protection of their own interests, they are also charged with combination for the purpose of excluding the great body of Practitioners from representation in the Medical Council. We should like to ask where is the proof that the bodies in question, singly or conjointly, have ever opposed the representation of the Profession in the Medical Council. It is easy to make accusations, but reasonable men will say, Where is the evidence? We have always doubted the wisdom of a direct representation of the Profession in the Council, because we believe it is likely to interfere with rather than promote the harmonious working of the Profession, and we hold it as a measure not calculated to improve the character or composition of the Council. We should be heartily glad, however, to see the Profession substantially represented by the representatives of the corporations and universities, from which they hold diplomas. Is there a shadow of a proof, we again ask, that any one of the corporations has ever taken any measure or shown any disposition to prevent the Profession obtaining representation in either of these ways. As the answer must assuredly be in the negative, we cannot but think that the Medical Reform Union have risked the serious damage of their cause by so reckless a statement.

There is but little to report as to the progress of negotiations for the perfecting of the scheme for conjoint examinations in each division of the kingdom. In England, the difficulty which has arisen in consequence of the Royal College of Physicians having advanced a claim to nominate all the examiners in Medicine is the sole obstacle, we believe, to the ratification of a treaty which, in all other respects, we look upon as a fair and equitable one. We hope, however, that, at the approaching meeting of the contracting parties, which, we understand, is to take place at an early date, a good understanding on this point will be obtained. As we have before stated, we

look upon the claims of the Apothecaries' Society to nominate a certain proportion of examiners as indisputable. The power to examine in Medicine has been granted to them by two Acts of Parliament; it has been exercised in a manner which has compelled the respect of their bitterest enemies for fifty-five years, and their examinations in Medicine have been the sole test whereby the public have been enabled to estimate the Medical pretensions of the great mass of the Profession. That this test has been a satisfactory one is proved by the fact that even to the present day many public institutions throughout the country refuse to appoint any Medical officer but one possessing the qualification of the Apothecaries' Society. At the present juncture that Society cannot withdraw its claims to examine in Medicine, for, did it do so, it would damage the position of every Medical man who is now practising with its licence. To raise the general Practitioner of Medicine in knowledge and in the status which knowledge gives, was the work of the Apothecaries' Society long before the Royal Colleges awoke to any sense of their duties. We do not hesitate to say that a board composed of pure Physicians and Surgeons without any of the element which the Apothecaries' Society may be held to represent, would not be the best adapted for examining the great mass of general Practitioners. In Medicine, however, as in all other subjects, there can be no question that the Apothecaries' Society—unless it were to belie all its antecedents—would nominate the very best men whom it could appoint as Examiners. Amongst those who would be eligible for such appointments are numbers of practising Physicians, graduates of Universities, or Fellows and Members of Royal Colleges. To attempt to refuse the Apothecaries' Society, therefore, some share in the nomination of examiners in a subject which has been for fifty-five years, *par excellence*, its own, would be an exhibition of narrowness and injustice on the part of the Royal Colleges of which we will not believe them to be capable, and which we feel certain neither the Privy Council nor the Legislature would sanction.

The Edinburgh University Court has placed a judicious check on the rapid advances made by the Senatus Academicus of the University led by the gallant Professor of Botany. Professor Balfour, it seems, desired to convey the dew of scientific learning to the female human flowers which the University of Edinburgh has consented to receive and nurture, at the same time that he watered, metaphorically speaking, the male saplings who, every summer, are transplanted into his nursery—in other words, he proposed to instruct together in the same class-room female and male Medical students in the mysteries of vegetable anatomy and physiology. Botany is doubtless a charming subject—it is generally allowed to be the property of both sexes—but we doubt whether either would learn it better for studying it together, to say nothing of the questionable taste of entering deeply into all the subjects and explanations required in a university course of botany in the presence of both. Professor Balfour's wish, however, was granted by the Senatus Academicus; but Professor Muirhead lodged an appeal against the resolution of the Senatus with the Edinburgh University Court. This latter body has had the good sense to sustain the appeal, and to recall the resolution in so far as it authorised Professor Balfour to enrol women studying Medicine in the University in his ordinary class. We do not care to disguise our opinion that the University of Edinburgh committed a great mistake when it undertook the Medical education of women at all, but to associate them with men in its Medical classes would undoubtedly, in the long run, lead to grave evils, and would prove fatal to the maintenance of the position and reputation of the University as a school of Medicine.

Dr. Henry Maudsley has been elected to the Professorship of of Medical Jurisprudence in University College.

The fact that two of the attendants of the Lancaster Lunatic Asylum have been convicted, and sentenced to seven years' penal servitude for maltreating a lunatic named Wilson, who died in consequence of the injuries they inflicted, will, it is to be hoped, prove a check upon the reckless abuse of force which many recent cases prove to be too common in our lunatic asylums. The evidence on which the jury founded their verdict was, it is true, in part that of a lunatic patient, who deposed to having seen the deceased kicked on the chest and stomach by one of the prisoners, "who struck him with his knees, and jerked his right knee into different parts of his side." But the damning proof was given by the post-mortem examination, which showed fracture of six ribs on one side and of three on the other. The Medical officer of the Asylum, indeed, thought that the injuries might be accounted for by a fall on the frame of the crib on which, in a single-bedded room, the deceased slept. But it would be very difficult to suppose that such a fall would break ribs on both sides of the body. Moreover there was no evidence that any patient had ever before broken a bone in the manner suggested. Indeed, Dr. Russell, who had made the post-mortem examination and had seen 5000 cases in the Asylum, said he could not recollect a single case of a patient getting a broken bone in a single-bedded room. We apprehend that there can be no reasonable doubt that the jury returned a correct verdict, and that the sentence is a just one. We are glad that this case did not follow the same course as that of Nistri, in which it will be recollected similar injuries were inflicted, but by whom or how there was no satisfactory evidence. The only remedy for these occurrences is the better education and training for their business of lunatic attendants, and more vigilance on the part of Medical officers and superintendents of asylums.

We recently noticed a report of the Court of Examiners of the Royal College of Surgeons on Professional education, which has been adopted by the Council, as affording good proof that the authorities of the College are setting themselves in earnest to improve, as far as their influence extends, Medical education. With the greater part of the report, which is occupied with suggestions for making Medical education more practical and real, we agree most fully. Fewer set lectures and more practical instruction, both in the class-room and in the Hospital, is undoubtedly the want of the present day. To carry this into effect should be the work of the Medical Teachers' Association. The College of Surgeons, following in the steps of the Apothecaries' Society, we hear, has determined to require from its candidates for diplomas evidence of having attended class examinations. But to insure the adequacy of such examinations cannot be within the province of examining boards. It must be done by the teachers themselves, and we know of no better and more practical work that the Medical Teachers' Association could perform than that of raising to a fair and uniform standard the class teaching and examination in the Medical schools and Hospitals of London.

The Beaumont Medical Society have passed a resolution acquitting Dr. O'Connor of any unprofessional or ungentlemanly conduct in the matter of the inquest on the child of the girl Bliss. We publish to-day an important letter from Dr. Bathurst Woodman, also exonerating Dr. O'Connor. It seems clear that what was said at the inquest by Dr. O'Connor was wrongly represented.

PROTRACTED GESTATION.

THE week before last an action for seduction—Renouf *v.* Eden—was tried in the Court of Queen's Bench, before the Lord Chief Justice. The case was one of great importance with respect to the duration of pregnancy, inasmuch as the defendant denied that he could be the father of the child born to the plaintiff, inasmuch as she was not delivered until 301 days after their last interview. The Medical history of the plaintiff may be thus stated:—She was seduced at the age of 19,

between September 20 and 26, 1866; intercourse only occurred once until April 13, 1867; and this again on the 14th, when she expected her monthly illness, which, however, did not occur. At the end of April she had a slight hæmorrhage, which only continued part of a day. There was no appearance of any monthly period, or of any hæmorrhagic discharge, until the end of July, and then there was a slight loss for a few hours only. She came to London in the early part of September, and lived with her seducer for a fortnight. She did not notice that her abdomen was swelling until the end of October, when she thought she was stouter. She never felt any decided movements of the child. She never had any morning sickness. In fact, until her confinement she did not think she was pregnant. About January 26, 1868—she forgets the exact date, but says it was about a week after the midwife told her she ought to be confined—she had a dreadful pain in the bowels, running round to the back. The midwife went to the Doctor, and brought back some medicine. This was taken, and it stopped the pain. She got well, and then (about February 9) the same kind of pains returned. This February 9 was a Sunday. The pains continued on and off until Tuesday, February 11, when the membranes broke and a great deal of liquor amnii came away. On Wednesday night she was so ill that the midwife and two women sat up with her all night. Then the pains stopped until Friday, when they returned, and about 8.30 p.m. on Saturday she was delivered of a strong big boy. The after-birth was said by the midwife to be very large. This Saturday was the 15th of February. She was examined by Dr. Tanner (to whom we are indebted for the foregoing particulars) on February 14, 1870, for the purpose of the trial. He found that the perinæum had been torn up to the sphincter ani, the parts were firm and rigid; there was evidence of her having had a hard labour. She has never had intercourse since the birth of the child. On the trial the question for the jury to decide was, was it possible that the child born on February 15, 1868, could have been the result of an intercourse on April 14, 1867? It is not necessary to go into the other points of the case, either as regards the plaintiff or defendant. We may remark, however, that the plaintiff gave her evidence remarkably well, and all attempts to rebut her statement in cross-examination failed. Nothing could be proved against her general character. Now it will be observed that the interval between April 14, 1867, and February 15, 1868, both days inclusive, is 308 days; between April 14, 1867, and January 26, 1868, when there was an attempt at labour, the interval, including both days, is only 288 days. The interval between April 14, 1867, and February 9, 1868, when labour actually began, is 300 days. Evidence in support of the plaintiff's case was given by Dr. Tanner and Mr. J. F. Clarke. Dr. Tanner had never seen a case in his own practice in which pregnancy had been protracted beyond 293 days, but he had recorded a case of that duration, and he saw no reason why a child should not be born 300 days after impregnation. The opinion of the Profession generally was in favour of protracted gestation, which might be one, two, or three weeks beyond the 275 days. The fact of the plaintiff's whole sexual life having been an irregular one influenced him in his opinion. Her catamenia had commenced late, had always been irregular as to time, and always of variable quantity. Moreover, he regarded the pain which took place on January 26 as having been an attempt at labour. Mr. Clarke endorsed the opinion of Dr. Tanner, and cited several recorded instances of protracted pregnancy, one of 310 days, one of 300, and one of 297 days. The opinion of the Profession generally was that gestation might be protracted, but much difference existed as to the extent of the protraction, some believing that it was limited to days, others that weeks might elapse. Dr. Barnes and Dr. Tyler Smith were examined for the defendant. Dr. Tyler Smith admitted that gestation might be protracted, but within certain limits. He did not state what those limits were. Did not think reported cases of protracted gestation reliable when the calculation was from last menstruation, and did not think recorded cases of protracted pregnancy after "a single intercourse" could be believed. Would not say it was impossible that defendant could be the father of the child, but thought it was in the highest degree improbable.

Dr. Barnes said that he had a large practice amongst the Jews, whose reckoning was more to be relied on than that of other persons, owing to there being certain religious observances commanded by the Jewish laws. All recent experience had tended to narrow the limits of belief in protracted gestation. Cannot say it is impossible for the defendant to be the father of the child, but it was so highly improbable that he did not believe it himself. The balance of opinion in the Medical world was decidedly against protracted gestation.

It was assumed by the Lord Chief Justice, who referred to several cases in Taylor's "Jurisprudence," that it was possible the defendant might be the father of the child, and he summed up on the question of seduction and loss of services. The jury gave a verdict of £200 damages, thus virtually endorsing the opinion that the defendant was the father of the child.

Any lengthened comments on this case are unnecessary. If the plaintiff's statement was a true one, and it was decided to be so, pregnancy was protracted to the 300th day.

LONDON HOSPITAL.—NEW OPERATION ON THE LOWER JAW—LITHOTRITY—BY MR. MAUNDER.

To-day (March 9) we saw Mr. Maunder remove one-half the extent of the lower jaw through the mouth, without cutting the skin at all, and preserving a good share of the original periosteum. A mycloid tumour occupied the interior of the bone in the person of a girl 10 years of age. The bone was severed opposite the right canine tooth, and through the middle of the left ascending ramus.

The value of lithotrity was shown in the case of a man who, in eight sittings, had been relieved of two calculi; one had measured one and a half inch, the other one and three-eighths of an inch.

HEALTH OF THE NAVY FROM JULY 1, 1868, TO JUNE 30, 1869.

The statistical abstract of the health of the Navy during the above period has just been published. It is an elaborate and exhaustive document. The report embraces the home and all the foreign stations, and deals with the subject at each station under the following heads:—Number and class of vessels employed on the station; ratio of cases for thirteen years—during the present period—in the different classes of vessels; invaliding; mortality. With the exception of certain epidemic diseases to be enumerated hereafter, the health-state of the different squadrons was very good, and, compared with the preceding twelve months, there was in the total force a decrease in the rates of cases entered on the sick list to the extent of 99·4, of invaliding of 3·7, and of mortality of 2·7 per 1000. The death-rate was, in fact, the lowest that had occurred for many years. With respect to the epidemics that had prevailed, on the home station, within one month 234 cases of measles occurred in the *St. Vincent* at Portsmouth. On the Mediterranean station febrile catarrh was epidemic in a new ship's company sent out from England to recommission the *Caledonia*. On the North American and West Indian station there was a sharp epidemic of remittent fever in the *Phœbe*, while stationed in the Gulf of Honduras. On the south-east coast of America the vessels employed in the River Paraguay suffered a good deal from malarial fevers and from bowel complaints. This occurred at a time when cholera was epidemic in the Brazilian army engaged in offensive operations against the Paraguayans, and in the merchant vessels in the river. Fortunately, only three cases of that malignant form of disease occurred in the British squadron there, but of these two proved fatal. On the Pacific station an extensive epidemic of remittent fever occurred in the *Pylades*, consequent upon com-

munication with Manzanilla, a seaport on the coast of Mexico, and a notoriously unhealthy locality; and on the China station the *Serpent*, while employed in surveying duties in the Eastern Archipelago, was visited by an outbreak of cholera, fortunately not very extensive, but proving fatal in five of the seven cases recorded under the head of that disease. Choleraic diarrhœa was, however, also prevalent among the ship's company at the same time. The iron-clad vessels, as a rule, held a favourable position, compared with other classes, of ships with respect to disease and mortality. The highest ratios of cases were in the gun-vessels, sloops, gun-boats, and troop-ships. Compared with the preceding twelve months there was a reduction in the ratio of mortality on every station, and in the irregular force. The greatest reductions were on the West Coast of Africa and China stations. On the home station the greatest mortality was from diseases of the respiratory organs; on the Mediterranean, from continued fevers; North America and the West Indies, from diseases of the respiratory organs, fevers, and diseases of the brain and nervous system; on the South-east Coast of America, from fevers and diseases of the lungs; on the Pacific station, from diseases of the respiratory organs; on the West Coast of Africa, from diseases of the heart and blood-vessels; on the Cape of Good Hope and East Indies, from diseases of the alimentary canal; on the China station, from diseases of the respiratory organs and the alimentary canal; on the Australian station, from diseases of the brain and nervous system; and in the irregular force, from diseases of the organs of respiration. The "Abstract," on the whole, is highly satisfactory and very creditable to its compiler, Dr. Alexander E. Mackay.

ROYAL VICTORIA HOSPITAL, NETLEY.

We have heard on good authority that Major-General R. Wilbraham, C.B., in consequence of the withdrawal from the army estimates for the ensuing year of the pay and allowances for the Staff Captain and Assistant-Commandant of the Royal Victoria Hospital, Netley, considering himself unable alone to carry on the military duties of that institution, has sent in the resignation of his appointment as Commandant, thereby affording to Mr. Cardwell an opportunity, of which we trust he will not fail to avail himself, of still more completely fulfilling his expressed intention of placing the staff of general hospitals more under the management of the Medical officers. We have always been of the opinion that the strictly military duties and discipline of the Royal Victoria Hospital, even including the command of two or three hundred men of the Army Hospital Corps, could be arranged for without any loss of efficiency, and much more economically, by an officer of considerably lower rank than that of a major-general; indeed, we see no reason why the Major-General commanding the South-Western District should not have the invalid troops at Netley under his supervision, the general administration and internal economy of the Hospital being carried on by the principal Medical officer, and matters of local discipline looked after by a staff captain.

DR. GEORGE JOHNSTON'S CLINICAL REPORT OF THE ROTUNDA LYING-IN HOSPITAL FOR THE YEAR ENDING NOVEMBER 5, 1869.

In the February number of the *Dublin Quarterly Journal of Medical Science* there appears a paper by Dr. George Johnston, the present Master of the Rotunda Lying-in Hospital, in which he undertakes to show that the accusations lately brought against that Hospital of causing the deaths of eight out of nine patients, whose lives could have been saved if they had been confined in their own homes or in isolated cottage Hospitals, are incorrect. He gives a plan of the Hospital, showing that each patient has 2000 cubic feet of air, and maintains that the utmost cleanliness prevails, that the atmosphere is free from any impure air, and "that such a thing as a loaded state of the atmosphere does not exist." There were 1159 deliveries, 25 deaths, or 2·15 per cent., from all causes, 12, or 1·03 per cent., being from zymotic diseases. The cases presented an average amount of difficulties and complications. On examining the table of deaths from zymotic diseases and the plans of the Hospital, we find that eight of the deaths from zymotic diseases occurred in the wards on its northern aspect, which fact appears to us to become of considerable importance when taken in connexion with the present construction of the Hospital, the main building of which faces north and south, and consists of two floors, containing respectively four wards, two on each aspect, separated by a long corridor running east and west, into which corridor each ward has one door in direct line with that of the opposite ward. It would also appear that during the year under report the death-rate from zymotic diseases on the first floor of the main building exceeded that on the upper by ·24 per cent. So far, therefore, as the clinical history of the Rotunda Lying-in Hospital for 1869 goes, there appears to have been a remarkable excess of mortality in the lower floor of the Hospital, and still more remarkable along the northern side of that floor. To Dr. Johnston's table showing the numbers of patients admitted into the Rotunda Lying-in Hospital from each municipal district, the number of deaths from zymotic diseases which occurred amongst them, and the number of deaths from the same causes in the districts from which the patients came, we do not attach much value, for the simple reason that it gives us no means of knowing whether it compares like with like. The absence of information as to the relative population of the districts at different ages and of each sex, the sex and age of those whose deaths are given in the table, how many of the deaths were from the zymotic diseases of childbed, and the number of births in each district, renders the table for the purpose to which Dr. Johnston applies it utterly valueless. Since the above was written we see that Dr. Evory Kennedy, giving up his plan of detached cottages for lying-in women, lately proposed at a meeting of the governors alterations of the present Rotunda Hospital itself, but that his motion, not having even been seconded, fell to the ground, without any discussion having taken place on it.

COMMON LODGING-HOUSES.

We must call attention to a section of the last quarterly report of Mr. Liddle, the Health Officer of Whitechapel, upon the subject of common lodging-houses, because it deals with a delusion rather widely prevalent, that since the Act of 1851 was passed these places have become in all sanitary respects everything that can be desirable. The Acts in force require that they should be registered by the police, and an officer of police, usually a man of intelligence, is detailed to superintend them and to see that the requirements of the law are carried into effect. And no doubt great good has been effected; but it is not true, as has been popularly believed, that fever, of which they were formerly the hotbeds and principal propagators in the metropolis, has been entirely banished. It is, we believe, commonly considered that the Medical Officers of Health are superseded by the police in dealing with such houses, but in reply to a letter addressed to the Privy Council Office, Mr. Simon states it as his opinion "that the Medical Officer of Health is not absolved from his sanitary duties in regard to a house in his district because it is registered as a common lodging-house, and that he is the most proper person to advise the police acting as local authority as to the course to be pursued for preventing the spread of disease." Acting upon this opinion, Mr. Liddle has recently made an inspection of those in Whitechapel, and, while he bears willing witness to the general cleanliness and provision for decency, complains of the existence of sanitary defects which require attention, and more particularly of the overcrowding. We may as well quote his own words:—

"It appears that the rooms are measured by a surveyor, who fixes the number of persons who may be permitted to sleep in each

room, but the space allowed for each bed is too small; for a very few if any of these sleeping-rooms is the cubic space more than 250 feet (per bed?). In one of these common lodging-houses, in a room having the cubic dimensions of about 4500 feet, there were twenty-one beds; this allows only a cubic space of 214 feet to each; and in another lodging-house the cubic space allotted to each bed was only 200 feet. Now, however competent a surveyor may be to discharge all the duties of his profession, he is not the proper authority to fix the number of persons who can, with a due regard to health, be allowed to pass seven or eight hours at night in a room, the ventilation of which can at any time be so interfered with as to prevent to a great extent the entrance of fresh air and the exit of the foul air which is generated by the congregating together of so many persons in a limited space. In short, a surveyor is legally incompetent to give an opinion upon the matter. This important subject ought to be entirely under the direction of the Medical Officer of Health for the district. But I may here observe that many of the houses which are used as common lodging-houses are totally unfit for that purpose; they are so old, ill constructed, and slightly built, that the ventilation of them cannot be much improved without endangering the stability of the building. In some of these houses, every available space is used for increasing the number of lodgers; the staircases are made so narrow and steep that they are difficult to ascend and dangerous to descend; and the passages in those rooms which are allotted to married couples are extremely narrow, and in many instances very dark."

He mentions, too, the faulty arrangements for the storage of water, etc. From a return of fever cases sent from the Whitechapel Union to the Hospital between October 1 and December 31 last, we find that of 128 cases, 67, more than half, were sent from common lodging-houses.

FROM ABROAD.—HYPODERMIC INJECTIONS IN SYPHILIS—THE MARINE CHILDREN'S HOSPITAL AT BERCK.

Professor Thiry, in a recent clinical lecture at the St. Pierre Hospital, Brussels, protests against the hasty adoption of the new method of treating syphilis by hypodermic injections of corrosive sublimate. He observes upon the facility with which statements of its efficacy are received as a mere matter of course, without due examination. Of course, every one will admit that syphilis may be cured by this mode of administering mercury; but the true question is, whether so employed it acts more rapidly and efficaciously than when used internally or epidermically, and whether its use in this manner is more agreeable and attended with fewer inconveniences. A careful trial of this method leads him to the following conclusions:—1. It acts neither better nor more rapidly than when administered by other methods. 2. Individuals are not guaranteed by it from the various accidents ensuing upon the use of mercury, especially salivation. 3. It induces accidents proper to itself, such as suppuration and fever, which may be attended by serious effects. By the continuance of its application it induces a constitutional debility and an impoverishment of blood not observed under ordinary treatment, the immediate result of the latter being, that while the syphilitic poison is destroyed, the system is invigorated. 4. The number of injections may have to be very numerous, proportionately to the period and intensity of the disease, so that for the action of the mercury to be sustained they may have to be continued at short intervals for months. This is a dangerous practice, and the patient who is the subject of this lecture, although thirty-two injections have been practised, is at the present time the subject of well-marked relapsing syphilis. 5. All the cases that have been treated at St. Pierre furnish a similar result, for in all relapses have taken place. The injections at first seem to produce excellent results, but, in proportion as they are multiplied, such effects diminish and disappear, in consequence of the disorders they give rise to. 6. In fine, these injections cannot replace either the internal or epidermic employment of mercury, which constitutes the most certain method of treating syphilis, while they give rise to far greater inconveniences. Their effect is very uncertain, but they are capable of being employed as an auxiliary under certain circumstances, as in infantile syphilis and when mercury is not otherwise tolerated. Also in some cases of inveterate syphilis they may be used in combination with other methods of treatment.

In our number for August 14 we gave an account of the new, or rather the enlarged, Marine Hospital for Children at Berck-sur-Mer, near Boulogne. It contains 800 beds for patients and officials, and no expense seems to have been spared to render it the most efficient sea-side Hospital in existence. M. Jules Simon, one of the Physicians of the Paris Hôpital des Enfants, published at the time a very interesting account of its inauguration in July, and in a recent communication he describes the impressions he derived from a second visit. He says that, owing to its elevation on one of the immense *dunes* or sandhills which abound on this part of the coast, it is effectually secured from damp and organic emanations; while, with a vast plain of sand before it, it is admirably suited for bathing. At his first visit, in summer, M. Simon was much struck by its excellent placing and almost majestic appearance, while its various internal arrangements seemed admirable; but he felt somewhat at a loss to know how its sickly, scrofulous, rickety little inhabitants would benefit by their sea-side residence, exposed to the bitter blasts of the season. Especially, how could 300 or 400 children be bathed at such a season without the greatest danger from cold? M. Husson, the indefatigable Director of Public Assistance, assured him that all had been provided for, and invited him to be present at his inspection in last January.

As to the bathing-question, he was soon satisfied, for he found 100 boys bathing in the salt-water pool, soon to be followed by 100 girls. The pool was contained within a spacious glass saloon laid out as a winter garden, and was from 60 to 80 centimetres in depth, having a wooden flooring, beneath which ran the hot-water pipes which warmed it. The basin is surrounded by a broad quay, where the children, assisted by fifty or sixty *religieuses*, undress. At a signal they rush into the water, the feebler children under the guardianship of the stronger; and during the eight or ten minutes they are in the bath display wondrous muscular activity. The temperature of the bath, which does not contain less than 100 cubic metres of water, is kept at 32° C., that of the atmosphere of the *salon* being 19°. In this way, in the very depth of winter, the scrofulous subjects are in the enjoyment of all the benefits of sea-water bathing. The expense incurred, after the necessary fittings have been provided, is trifling, since the pumping in of the water and keeping it at a temperature of 32°, for the bathing of 200 children, only costs 20 francs—*i.e.*, 10 centimes per head. During inclement weather, the sea air only reaches the children in their schoolrooms and sleeping-rooms, when its temperature has been somewhat mitigated. As soon as the weather permits, and with the first rays of sunshine, the children are encouraged to bathe on the open sands, for it is remarkable how speedily they become accustomed to the breezes there met with.

One objection to the locality is that, owing to sand always held in suspension by the air, it is unsuited to children having the catarrhal or granular ophthalmias, which are so common in scrofulous subjects. It becomes necessary, therefore, that these should be treated and cured before sending their subjects to Berck. So, also, as no rickety children are admitted unless able to walk, with or without the aid of apparatus, it sometimes happens that, in hip-joint disease, the little subjects are stimulated by their companions to make exertions that prove prejudicial. Careful proving of their powers is therefore required before sending them to the establishment. Upon the whole, M. Simon speaks in terms of the warmest admiration of the establishment and its management; and we recommend a visit to it to any of our readers who may happen to be in the locality.

PARLIAMENTARY.—HABITUAL DRUNKARDS.

In the House of Commons, on Friday, March 4,

Mr. D. Dalrymple asked the House to agree to a resolution affirming the expediency of legislating for the proper reception,

detention, and management of habitual drunkards. He did not seek to interfere with the convivial proclivities or social enjoyments of the people, but with the abuse and not the use of stimulants. There were some things which the law could not do. It could not prevent the production of alcohol, or the thirst of the human stomach for stimulants, or the craving of the human brain for excitement. But he regarded habitual drunkenness as not only a bad habit and a vice, but also a disease, which took hold of the vital powers, which got possession of the nervous centres, and was capable of being transferred from the parents to the offspring. There was a passage in Aristotle to this effect:—"Drunken women do produce children like unto themselves." Habitual drunkenness was a disease which was curable in as large a proportion as those diseases for which Parliament made provision, such as the insane, the idiotic, the deaf and dumb, and the blind. No provision, however, was yet made for the victims of intemperance, who were larger in number than any of these classes. It was said that the remedy was not complete, and that the relapses were frequent. He could bury the House with statistics to the contrary, but he would only quote one fact, namely—that in one establishment in the city of Boston, where 2000 cases of habitual drunkenness were treated, no less than half of them had been perfectly cured. (Hear.) In other establishments, 30 and 50 per cent. of the patients were permanently and happily restored to their families. His idea was that an establishment or reformatory should be set up, to which individuals might be sent, and where they might be kept a sufficient time to obtain the requisite control and mastery over themselves. In support of his proposal he quoted the opinion of Mr. Mill ("On Liberty") that society has a right to interfere with the regular drunkard, and he proposed to detain him as long as might be necessary, under Medical certificate, for his reclamation. If necessary, the property of drunkards would be vested in trustees during the period of their seclusion, and the reformatories would be made self-supporting by the labour of the inmates. The resolution was seconded by

Mr. Miller, who said that he had presented a petition yesterday, signed by forty-five of the leading physicians of Edinburgh, praying that some legislative steps might be taken to subject persons afflicted with the disease of drunkenness to certain restrictions. The petitioners complained very much that although they often saw the necessity of placing drunkards under restraint, they had no power to exercise control over them.

Mr. Bruce, while sympathising with the object Mr. Dalrymple had in view, characterised it rather as a dream of a benevolent enthusiast than a practical proposition, and said that if Mr. Dalrymple had only tried to put his plan into a Bill he would soon have discovered how enormous were the difficulties in his way. The great safeguard against drunkenness was the growing opinion that it is a disgraceful habit; but this proposal, instead of taking hold of the young man when some good could be done, only dealt with those on whom the habit had become almost, if not quite, inveterate. The idea was totally alien from our ideas; the law did not even compulsorily lay hold of lunatics unless they were violent or criminal, and if drunkards were to be shut up, why not erring wives, young men who were ruining their families, and the infamous persons who ministered to the vices of youth?

Mr. Dalrymple did not press the motion, but announced that he should take Mr. Bruce's hint, and bring in a bill.

On Monday, March 7,

Mr. Raikes asked the Secretary of State for War what steps, if any, would be taken to secure to Medical officers serving on the West Coast of Africa those advantages which were guaranteed to them by the warrant of 1858 and the Medical regulations of 1859, afterwards embodied in the warrant of 1866, but of which they have been deprived by the construction now put upon the warrant of 1867.

Mr. Cardwell: There has been no change in the practice which ever since 1858 has permitted Medical officers on the West Coast of Africa to count every year for two towards promotion and retirement. The rule never extended to allowing him to count it so for the advancement to the style of Surgeon-Major, and it is not any construction of the warrant of 1687, but the express words of that warrant, which establish the rule, in accordance with what has always been the practice.

Mr. Raikes: I beg to give notice that upon an early day I shall take an opportunity to call attention to the hardships endured by these Medical officers, and to move a resolution upon the subject.

REQUISITION FOR A MEETING TO CONSIDER OUT-PATIENT ADMINISTRATIVE REFORM.

*** The following requisition has been sent us for publication:—We, the undersigned, being of opinion that it is desirable to hold a conference on the subject of the present state of out-patient administration, hereby invite attendance at a meeting of the staffs of the metropolitan Hospitals and Dispensaries, to be held at the rooms of the Royal Medical and Chirurgical Society, Berners-street, on Thursday, the 24th inst., at eight o'clock p.m.

George Burrows.	J. Burdon Sanderson.
Protheroe Smith.	R. Brudenell Carter.
William Bowman.	Henry Power.
T. Spencer Wells.	Alfred Meadows.
George Critchett.	Gustavus C. P. Murray.
William Adams.	Francis E. Anstie.
J. Harrison Stallard.	Thomas Buzzard.
Holmes Coote.	

Sir William Fergusson, Bart., will take the chair.

GENERAL CORRESPONDENCE.

IRON IN PREGNANCY.—THE RECENT INQUEST.

Letter from Dr. W. Bathurst Woodman.

[To the Editor of the Medical Times and Gazette.]

Sir,—You will much oblige by inserting this brief communication in your next issue. Dr. O'Connor having given me both public and private assurances that he was not actuated by any personal or unworthy motive in giving his evidence at the late inquest, I shall be very glad to let the personal question rest, though the general question of the propriety of administering chalybeates in pregnancy still deserves discussion. As, however, nearly all the Medical journals have commented somewhat severely on Dr. O'Connor's evidence, I wish, in justice to him, to make the following corrections in my statements:—

1. It appears from the depositions that I was wrong in saying that Dr. O'Connor used the word "abortion" in his evidence. (I was not at the first inquest, and reported from what others told me.)

2. The reason alleged by the coroner for adjourning the inquest was the evidence of the girls Bliss and Turner, and not that of Dr. O'Connor.

I am, &c.

10, Finsbury-pavement, E.C. W. Bathurst Woodman.

PUERPERAL MANIA.

Letter from Dr. J. W. M. Miller.

[To the Editor of the Medical Times and Gazette.]

Sir,—Your analytical comments on the Medical evidence given at the trial of insanity at the recent case induce me to furnish you with a case which came under my notice in 1864 which did not seem to have any particular bearing at the time, but has recurred to my mind as one which might lead us to suppose that puerperal mania exists in an insidious form, and may be sometimes ingravescent. A most respectable servant was engaged to an equally respectable man, but was unfortunately seduced by him. When both became cognisant of the existence of pregnancy, the man entreated the girl to marry him to cover their mutual shame. The girl was, and continued to be, deaf to all his entreaties, and would not be married. She at length gave birth to a child, which was found dead in her room; but as it did not show signs of having existed, the girl was tried at Lewes for, and convicted of, concealment of birth, and sentenced to a term of imprisonment, one month of which had expired when she was found to be a lunatic, and handed over to her friends. On inquiry it transpired that the girl, while residing at Southsea, had been most particular in her inquiries of the situation of the drains of the house, the cesspool, etc. The family unexpectedly removed to Reigate, in Sussex, and there she set up similar inquiries, evidently with the view of making away with the infant on its arrival. Her lover all this time was urging her to be married, and, when her misfortune came upon her, he at once declared himself and his intentions. There was some interval elapsed between the birth

of her child and her conviction. What could have given rise to her perversion of thought, as exhibited in her reluctance to marry, her intentions to destroy the child, and the actual concealment of its birth, but functional disturbance of the brain arising from her child-bearing condition? Her actual lunacy was only discovered during the term of her imprisonment. One swallow does not make summer, but I wish to record this case as one which may recall to other Practitioners similar cases, and to express the impression which it has produced in my mind that the girl showed symptoms of mania early in pregnancy. In conclusion I have only to thank you for alluding to the term "cataleptic hysteria," which was so often alluded to in the recent trial. The absurd questions I have been asked on my daily rounds, to describe the disease, the community are ever alive to catch at a "new disease," or an old complaint under a new name. Many of my patients are sceptical of my acquaintance with the nomenclature of disease, when I have told them no such disease existed.

I am, &c. J. W. M. Miller, M.D.

Southsea, March 8.

THE DEBATE ON THE AMENDMENT OF THE MEDICAL ACTS.—CORRIGENDUM.

Letter from Dr. H. W. Rumsey.

[To the Editor of the Medical Times and Gazette.]

Sir,—As your reporter, who is generally so accurate, failed to catch either my words or their meaning when I seconded Sir Dominic Corrigan's motion for a Royal Commission on March 1, I beg to correct an erroneous report which appears in your number of this day, by explaining that, on that occasion, I briefly stated my belief that a thorough and impartial inquiry by a commission would prove the best method of arriving at a safe conclusion on many points to be settled in an amendment of the Medical Acts. I said that it was not only important that the Medical Council should pronounce an opinion on the question at issue, but also that the views of Medical men outside the Council, and of publicists out of the Profession, should be ascertained on a subject so deeply affecting the public welfare. I think that I also expressed a doubt whether any legislation would be satisfactory without formally eliciting the opinions of leading Practitioners throughout the country. Trusting that you will allow this explanation to appear in your next, I am, &c. H. W. Rumsey.

Priory House, Cheltenham, March 5.

ON THE FORMATION OF A ROYAL ACADEMY OF MEDICINE.

By Dr. J. Braxton Hicks.

Letter I.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the present state of the question of the amalgamation of the Medical societies, I hope I may not be considered presumptuous in offering some remarks, which perhaps may bring out opinions, and direct attention to the important points which should guide us in the proper direction when seeking to form a society which should deserve the name of Royal Academy of Medicine. I do not pretend to be able to elaborate a definite scheme, but rather to indicate the direction we should avoid on the one hand, and might advantageously follow on the other. I have not been able to meet with any arguments on the general question. The discussion upon the amalgamation of a few of the London societies can scarcely be considered as being more than an assent to the principle that junction of them would be an excellent thing. But any real arguments for or against have escaped my observation. There can, however, be no doubt but that a considerable number of the Profession are desirous of uniting the various societies of the Medical Profession meeting in London. But the exact number of those wishing it there is difficulty in ascertaining, because in all movements—social, political, or religious—a small and active minority, intent on a definite object, possesses the power of influencing, with their own views, a number who, without that influence, would not have stirred. Still, making considerable allowance for these latter, there is doubtless a proportion, not small, who are really anxious that some such union should take place.

When inquiry is made for what reasons this union is desired, the answer seems to be—1st, that the influence of the Medical Profession on the general public may be extended; 2ndly, that the aggregate of the subscriptions may be lessened. These are apparently the principal reasons brought forward. It may be that in addition to these there is a kind of indefinite hope that the general dignity of the Profession may be to a certain degree increased, and its social status and influence augmented by having an all-embracing society.

One seems to gather from the remarks of some speakers an idea that general assistance and advance in knowledge will be gained by the combination. But, on the whole, the idea does not seem very clearly expressed: indeed, it might be termed rather the dawning of the idea than a clearly perceived one. Let us examine these points in succession—

1. How far the union of the societies will influence the Profession in its position with the public. In its purely Professional work a Medical society or academy is seldom brought into contact with the public, and therefore any advance in this respect by reason of combination will have but little influence externally. It is principally in relationship with social questions that its influence is felt to any appreciable degree, as in such questions as would be taken under the consideration of the section of State Medicine.

It must be admitted on all hands that the combined voice of the Medical Profession on any such subject would have large weight with legislators, and so far unquestionably the progress of State Medicine would be enhanced, and the influence of the Medical Profession externally as a body increased, in proportion to the vigour with which the new Society took up the subject.

Again, let us consider how much the general dignity of the Profession would be enhanced by the union of the societies included in the scheme. As a general rule, the public are simply mystified by the numbers of initials any member of the Profession can produce, whether derived from examinations passed, or from societies he has joined, and therefore a fresh one will do but little more than add to the confusion. Just consider what any man of moderate pretensions may possess—L.A.C., M.R.C.S., M.D., M.R.C.P., F.L.S., F.O.S., F.P.S., F.R.I., etc., to say nothing of F.R.S., F.R.C.P., or F.R.C.S. To take out one and put F.R.A.M. would, I am sure, be admitted as of little weight with those outside the Profession. But if the society, through its executive, sought to influence the public on all matters of State Medicine, then that influence would be directly proportionate to the number and variety of the elements of which the society was composed—in other words, its power would be so much the greater as the society itself was the real representative of the whole Profession. But if it were known that the members were but a limited proportion of the Profession, although, so far as it went, it was composed of a great many active and influential members of it, and still further that the numbers were largely dependent on the amount of subscription required annually, and if it were known that the amount fixed was such as to preclude many from joining, it appears to me that the addition of dignity gained would be rather the greater the less the constitution were inquired into, and that its influence would be, though not much at best, chiefly dependent on the magnificence of the title with which it was clothed.

If this be so, then any comprehensive society, which would be influential in questions of State Medicine, should be one really representative of the general Profession, based upon as broad foundations as possible, and the permission to enter should not be dependent upon the monetary capabilities more than is strictly necessary for the working of the Society. It should be made to include as many of the collateral branches of science as bear upon the knowledge of the Profession, and every endeavour be made to draw into its service men who are at present not included in any of our Medical societies.

I am, &c. J. Braxton Hicks, M.D., F.R.S.

Contracting for the Doctor's Services. — The Berlin correspondent of the *Manchester Guardian* writes:—"I am reminded by the beginning of the new year of a practice which prevails throughout Germany, and which is attended by so many advantages that I should like to say a few words respecting it. I allude to the custom of insuring the doctor's bill, or, what comes to the same thing, paying the doctor by contract. All families who do not live from hand to mouth, but are in receipt of something like a regular income, send their Physician a certain fee on New Year's Eve, or a day or two later, as remuneration for his attention during the previous year. The amount is determined by mutual agreement at the commencement of the engagement, and is estimated with reference to the means of the patient rather than the services he is likely to require."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The annual meeting of this Society was held on Tuesday the 1st inst.; George Burrows, M.D., President, in the Chair.

The Treasurer's account showed the ordinary income of the Society for 1869 to have been £1392 8s. 7d.; besides which there was a sum of £10 10s. from composition fees, and a balance of £70 6s. from the last account, making altogether £1473 4s. 7d. The expenditure (including the purchase of £400 stock) amounted to £1374 6s. 6d.; leaving a balance in hand of £98 18s. 1d. The total amount of money invested by the Society is £3800. Dr. Webster moved the adoption of the report, which he considered very satisfactory. Mr. Heath seconded the motion, which was carried unanimously.

The Report of Council was read. The number of members at the end of the year was 667. There had been fewer deaths and resignations than usual; but there had also been a falling off in the number of new members, probably on account of the uncertainty as to the success of the proposed scheme of amalgamating the existing societies. During 1869, 414 new books (exclusive of journals) had been added to the library, 152 by donation, and 262 by purchase. Of these books, 210 were English and 214 foreign. The collection of portraits and of Sanitary Reports had also been increased. The appeal made some time ago by the Librarians to the Medical Officers of Health had been but inadequately responded to; and the Council hoped that the Fellows of the Society would use their influence towards obtaining Health-Reports for the Library. Among the books presented to the Library was a copy of an anatomical work after Vesalius, containing, it was believed, the earliest specimen of copper-plate engraving applied to anatomical figures printed in this kingdom.

Mr. Savory moved, and Dr. Drage seconded, the adoption of the Report, which was carried.

The President delivered an address. The present might, he said, be considered a critical period in the history of the society, one marked by no common events, and marking a transitional stage. Transition in development, whether in individuals or in bodies of men, was always attended with risk. Progress might be interrupted for a time by the change, however beneficial this might be; and agitation, if too long continued, had a tendency to produce depression and languor. He then gave sketches of the several Fellows who had died during the year —viz., Dr. Henry Lee; Mr. W. Birch, of Barton-under-Needwood; Mr. Thomas Callaway; Sir W. C. Hood; Mr. W. A. Russell, of St. Alban's; Dr. E. Archer, of King's Lynn; and Mr. Alexander Bruce. Returning to the state of the Society, he said that, when he entered on office last year, he found that a scheme for amalgamation of the societies had been proposed. This had been carefully discussed in the Society; and he must express his admiration of the disinterested and patriotic spirit displayed by the Fellows. The scheme, after discussion in a committee appointed from the several societies, had come back much altered. He congratulated the Society on its decision not to sever Medicine from Surgery. Such a decision would have tended virtually to encourge specialism. In this instance, as in many others, history repeated itself. The Society was nearly in the same state in which it was several years ago, when the late Dr. Babington referred to a proposal for combining the societies as being under consideration. Insuperable difficulties then presented themselves, and the proposal fell. *Absit omen!* Should the present attempt fail, he hoped that the Fellows would exert themselves to promote the usefulness and welfare of the Society. He had some misgiving that the meridian splendour of the Society had passed away. When founded in 1805, it was almost the only medium by which the original and scientific workers in the Profession could communicate their information for the common good. Some years afterwards, there sprang up a weekly Medical press offering temptation for the publication of cases and comments. By many this more easy way of appearing before the public was preferred; and the weekly journals must be regarded as withdrawing much from the cognisance of the Societies. More recently, too, the publication of annual reports by the Hospitals had done much to engross the energy of those who would otherwise be contributors to the Society's *Transactions;* the younger members would naturally be anxious to enrich the reports published by their own Hospitals. Lastly, there was the formation of new societies, in which attention was directed to special branches of Medical knowledge. All these influences might be conceived to have had a deleterious influence on the Society. But it was to be hoped that through their agency the domain of Medicine had been enlarged and its salutary influence more widely diffused than could be done by the Royal Medical and Chirurgical Society alone. If this were the case, then a private loss had been a public gain.

Mr. Curling proposed a vote of thanks to the President for his address, with a request that he would allow it to be printed. Dr. Pitman seconded the motion, which was unanimously carried.

Mr. Birkett proposed, and Mr. Noverre seconded, a vote of thanks to Mr. C. H. Moore, retiring treasurer; Mr. Gascoyen, retiring secretary; and the Vice-Presidents and members of Council who retired from office. The motion was carried unanimously; and the vote was acknowledged by Mr. Moore and Mr. Gascoyen.

Dr. Fisk and Mr. Forbes, having been nominated scrutineers, reported as the result of the ballot the following list of officers and other members of Council for 1870-71:—*President:* George Burrows, M.D., F.R.S. *Vice-Presidents:* *Henry Alfred Pitman, M.D.; *George Johnson, M.D.; *George David Pollock; *John Ashton Bostock. *Treasurers:* Patrick Black, M.D.; *John Birkett. *Secretaries:* William Ogle, M.D.; *Thomas Smith. *Librarians:* Thomas King Chambers, M.D.; Charles Brooke, F.R.S. *Other Members of Council:* John Hall Davis, M.D.; Samuel Osborne Habershon, M.D.; *Charles Murchison, M.D., F.R.S.; *John Russell Reynolds, M.D., F.R.S.; John Burdon Sanderson, M.D., F.R.S; Timothy Holmes; *Jonathan Hutchinson; *James Robert Lane; *Arthur Noverre; *Thomas Spencer Wells. Those gentlemen to whose names an asterisk is prefixed, were not on the Council, or did not fill the same office last year.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 1, 1870.

Dr. Peacock, President, in the Chair.

Mr. Balmanno Squire exhibited two cases of Elephantiasis Græcorum. Both patients, although born in tropical climates, were of European descent. The one, a girl aged thirteen (her father an Englishman and her mother a Canadian), was born in Trinidad, in the West Indies, where she remained until she was eleven years old, the disease first appearing in her at the age of eight years. The other, a boy aged nearly sixteen (his father an English Jew, and his mother a native of India, of French parents), was born in Calcutta, where he remained till the age of nine, the disease not appearing in him until he had been two years in this country. In both patients the disease was most developed on the face, where the patches were tubercular, and, moreover, more decidedly anæsthetic than elsewhere; less developed on the limbs, where the patches were merely flat stains, and less abundant than on the face; and still more scanty on the trunk, where the patches were also flat stains. In both cases the eruption appeared first on the limbs, and in both, also, the parents of the patient had resided many years in the native country of the patient previous to his or her birth. None of the relations of either the girl or the boy had ever been affected with anything at all resembling this disease. The cases were interesting, as throwing some light on the remarkably obscure etiology of "the leprosy of the Greek writers." It had been much debated whether the disease were the result rather of diet, of climate, or of hereditary diathesis. In these two cases climate appeared to be the chief cause. Reference was made by Mr. Squire to a recent paper of Mr. Hutchinson's in the *Medical Times and Gazette*, which was illustrated by Bidenkap's leprosy-map of Norway and Sweden. Mr. Squire dissented from Mr. Hutchinson's view that the geographical distribution of leprosy in Norway was determined by diet—viz., a fish-diet—but supported the "Gulf-stream theory." The disease in Norway appeared to be almost rigidly confined to those parts of the coast that are washed by the Gulf-stream, and fish was too general an article of diet in all parts of the world to permit of a strong case being made out for the fish-diet theory. In the West Indies, where pigs are plentiful, the disease is commonly attributed to a pork-diet. It appeared from the cases now brought forward that hereditary predisposition was far from being an essential in the causation of the disease. Prolonged subjection to the influence of certain climatic conditions appeared to be the

prime cause of the disease, and it was not unreasonable to attribute the prevalence of the disease in Norway to the convection, so to speak, of the essential conditions of the West Indian climate, by the medium of the Gulf-stream, to the shores of Norway.

Mr. Squire also exhibited a case of the so-called "Spurious Ichthyosis," or the "Sebaceous Horny Acne" of M. Hardy. This rare disease, although resembling ordinary ichthyosis so closely in appearance, differed from it in several important particulars. In the first place, it was much more localised; in the second, it was much more abruptly circumscribed; and lastly, it was not a congenital disease. Mr. Squire proposed, as the best designation for this cutaneous affection, the term "Accidental" Ichthyosis, by way of distinction from the ordinary Congenital Ichthyosis. He thought this preferable to the term "spurious," inasmuch as the adjective he proposed conveyed definite information respecting the history of the disease. He preferred it also to "Sebaceous Horny Acne," since it was not altogether clear that the disease was essentially a sebaceous disease.

Dr. Tilbury Fox had seen half a dozen such cases as those first exhibited within a year. In the early stage they had been mistaken for syphilis, owing to the brown staining present. As to the second case, he objected to the title ichthyosis.

Dr. Hilton Fagge asked if the microscope had been used in the last case, as many assumed that it was a sebaceous secretion. In certain cases he had seen something quite different—epidermal plates moulded on the papillæ. It was so in many cases of false ichthyosis. In certain cases nothing was seen till some months after birth.

Dr. Tilbury Fox said in certain cases the appearance was due to epithelium, in others to collections of sebaceous matter.

Mr. Squire had not examined this case microscopically. He thought the title ichthyosis best.—Referred to Drs. Hilton Fagge and Tilbury Fox.

Mr. Pick read a report on Dr. Tuckwell's specimen of Lympho-sarcoma, perfectly agreeing with that gentleman's description. The diseased conditiou extended along the vessels in a curious fashion.

Dr. Hermann Weber introduced the question of the Dependence of Tuberculosis on the existence of Caseous Deposits in the Body. He communicated the history of the case of a man who had died from tubercular meningitis six months after having had typhoid fever. The post-mortem examination showed the cicatrices from the typhoid affection of the intestines, enlarged caseous mesenteric glands, and the phenomena of tubercular meningitis, and of miliary tuberculosis of the lungs and pleura. Dr. H. Weber then discussed the connexion between the caseous mesenteric glands and the tuberculosis as cause and effect. After having given a short sketch of the views of Dittrich, Buhl, Virchow, Niemeyer, and C. E. Hofmann, he mentioned that in all the cases of tuberculosis of the serous membranes which had come under his own observation during the last five years—viz., eleven cases of tubercular meningitis, and four of tubercular peritonitis—caseous deposits were found in the body; and he added that the dependence of tuberculosis on the previous existence of caseous affections in the body had so impressed itself on him, that in the last three cases of tubercular meningitis which had occurred to him, he had to a great degree been guided in his diagnosis by the history of previous affections likely to leave behind caseous deposits, as of catarrhal pneumonia, pleuritis, measles. In five out of eleven cases of tubercular meningitis, the caseous deposits had existed in the lungs, in two in the pleura, in one in the mesenteric glands after typhoid fever, in one in the cervical glands after scarlet fever, in one in the same from impetigo capitis, and in one in a scrofulous knee-joint; in all the four cases of tubercular peritonitis, the caseous masses had existed in or near the abdominal cavity—viz., in the mesenteric glands, the kidneys, the lumbar muscles, and the ovaries. In some of the cases the tubercles were most abundant and of greater size and age in the immediate neighbourhood of the caseous focus; but in others the adjacent tissues were almost or quite free, whilst remote parts, as the meninges of the brain, were the seat of tubercles, showing that the disease need not spread by contiguity, but may at once be carried to distant organs. The author alluded to the important relation between this question and the experiments on artificial tuberculosis in animals, especially those by Villemin, Sanderson, Wilson Fox, and Waldenburg, and he requested the members of the Society to examine in how far the following proposition be correct—"That miliary tuberculosis is produced by the introduction (generally through absorption) into the circulation of minute corpuscular elements from caseous and allied pathological products, and by the migration of these particles to numerous points of different organs, there giving rise to the formation of nodules and further changes."

Dr. Wilson Fox had already alluded to effete matter as a cause of tubercle, and he confirmed the views of the Germans, particularly Hoffmann, but in Clinical Medicine he thought the necessity of having caseous matter might be pushed too far. He rather looked on the caseous matter in the glands as an expression of the tubercular diathesis, of a past attempt on the part of the subject to become tuberculous. Such do not easily become caseous, but show the tendency to tuberculosis. A secondary outbreak might prove fatal. This showed that tubercle was a curable disease, that the patient might have several attacks, only yielding to the last of them. He had some doubt as to the caseous gland as a source. In experimental inquiry the disease was never at a standstill; from the site where it was caused by local irritation, where there was almost invariably lymphatic change, the same as that internally, extending to the internal organs affected, there was a continuous chain, and both spread by continuity. There was not this connecting chain between the caseous gland and the tubercular deposit in Clinical Medicine. He thought there was still something behind all this. Only certain animals were susceptible of tubercular inoculation, and that might be by local injury. This was not so with man.

Dr. Burdon Sanderson said tuberculosis could be produced in some animals by feeding them on tubercle. The researches of Chauveau, not yet published, proved this. He selected heifers in good health, tubercle from the lungs of men and animals was pounded in water and given to these one, two, three, or four times. After from one to three months their trachea and bronchi became the seat of granulations under the epithelium close to a mucous gland, extending along its duct and round about it, but not in it. In the lung the granulations were subepithelial, others were outside the bronchi. Besides these there were nodules like infiltrated tubercle, and having the same structure. In the intestines were sub-epithelial granules, and even collections in the villi. The liver was also tuberculous. These animals were liable to a disease similar to that of man, and the tubercles acted in exactly the same manner in both. The granules were formed from the normal adenoid tissue surrounding the vessels, etc.

Dr. Murchison said, with regard to Dr. Weber's reference to his specimen shown last year, there was an ulcer of old standing in the duodenum, and the patient was cut off by tuberculosis. There was no tubercular predisposition, but there was great enlargement of the glands near the duodenum and at the root of the lung.

Dr. Langdon Down, referring to Dr. Wilks's observations as to marks on the nails as indicative of former disease, showed his own fingers in a great measure verifying this conclusion. Last year, at the close of the summer session, he broke completely down, and was seized with ulcer of the cornea. He went off to the country, but did not remain long enough, so that after a time he relapsed, and was obliged to lay up for a long time. Two white marks now remained on each finger nail to indicate these two periods of ill-health.

Mr. Howard Marsh exhibited a Congenital Cystic Tumour of the Cheek removed from a child eleven days old. Such tumours, he thought, ought to be removed as early as possible. In this instance the child could not close its mouth, and the tumour was growing rapidly. It was tapped, but with no benefit. In the removal there was not much hæmorrhage, and the child gradually recovered. The scar was not so bad as might have been expected.

In reply to Mr. Arnott, Mr. Marsh said the tumour had not been examined microscopically, but appeared to be exactly like those already described.—Referred to committee.

Dr. Beigel exhibited a specimen of Aneurism of the Aorta from a woman, aged 51, who had been healthy; but for three years her breath had been affected, and she had noticed a slight swelling at the top of her chest. Still, she had not been laid up. When seen, the swelling was well marked, and there was considerable dyspnœa. Her uneasiness was so great that one evening she attempted to cut her throat. The bleeding seemed to do her good, and afterwards she could eat well; but one day after a full meal she suddenly expired. The aneurism had destroyed the manubrium sterni.

Mr. De Morgan exhibited a specimen of Malignant Disease of the Thigh. A man came with a feeling of giving way in the thigh, for which he had to leave his work. A very large tumour was discovered, and amputation at the thigh performed. The man had done well. The tumour began higher

up than usual. There were some cysts in the centre, and a mass of calcareous matter under the periosteum. The tissue was mostly connective, with some spindle cells.—Also another, for which Mr. Nunn had amputated through the thigh. This patient died of pyæmia. The tumour was a spindle-celled sarcoma. There was no clear connexion between these and accident, although the latter often called attention to them. They used to be called medullary and osteo-sarcoma, and to be counted malignant. His own experience showed that amputation in the continuity of the bone was perfectly safe in such cases. This would not be so were they cancerous.—Referred.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

SATURDAY, FEBRUARY 19.

Mr. LIDDLE, President, in the Chair.

DR. STALLARD was elected a member of the Association.

Dr. WOODFORD brought up a report of the visits made by himself and Mr. Liddle to Messrs. Fraser's works to test the working of their disinfecting apparatus. After sundry experiments and modifications, the apparatus proved successful, inasmuch as a thermometer placed inside one of the beds subjected to the apparatus registered a temperature of 273° without the articles being scorched or injured. In other respects also the apparatus seemed to work well. A conversation arose as to whether it would be possible to prevail upon the Legislature to remedy certain defects in the Building Act; and it was eventually determined that the General Purposes Committee should meet to consider the subject.

Dr. E. BALLARD next read a paper on Suggestions made by Mr. James Lewis for National Sickness Returns, in which he stated that what was proposed by Mr. Lewis had been carried out by him for several years in his own district. His form also would be found on examination to tally with that of Mr. Lewis. Dr. Richardson proposed to go further, and give particulars as to age, sex, occupation, &c.; but he (Dr. Ballard) thought the simpler plan ought to be preferred. He agreed with Mr. Lewis that the returns, to be made valuable, should be issued weekly. With regard to the returns being forwarded to a central office, he wished for further information as to what office was proposed, whether an existing one or one to be created. His own opinion was that the office to which the returns should be sent ought to be the office that is most intimately concerned with the sickness of the country—whatever that may be. He thought, however, that the returns ought not to be sent to the central office first, but to the local health officers, in order that the information might be made available for the speedy prevention of disease.

Mr. JAMES LEWIS, of the Registrar-General's Department, said he had not specified what central office he had in his mind, because he considered he had no authority for mentioning the name of the office with which he was officially connected. He agreed with Dr. Ballard and Dr. Rumsey that the local health officers should see the returns first, and, in order to do this, he thought the detailed return should be sent to them and only a summary be forwarded to the central office. He thought that returns taken from the books of the Poor-law Medical officers and from public institutions would supply sufficient data on which to work. The schedule must not, however, be too detailed; otherwise they would not be got out in time to be of service. On the ground of economy and on other grounds, existing machinery ought to be made use of, and this was ready to hand in the General Registry Office.

Dr. RICHARDSON strongly urged the necessity of a national scheme, and of complete returns instead of partial ones. There were many geographical and other details which it was of great importance to know in connexion with disease. The best plan, he thought, would be for the Medical officers to send the daily sheet out of their books to a central office. This would be the easiest and most expeditious plan, and no extra labour would be imposed upon the Medical officers.

A paper by Dr. GEORGE BUCHANAN was then read by the Secretary on Professor Von Pettenkofer's Views of the Relation of Subsoil Water to Enteric Fever, which appears in another page.

SMALL-POX IN PORTUGAL.—Small-pox is very prevalent in Lisbon and Coimbra. The seamen of the British fleet in the Tagus are not allowed to go ashore at present.

OBITUARY.

GEORGE WILLIAM LAWRENCE, M.D.,

DIED last week at Layer Breton Hall, at the early age of 37. He was educated at King's College, London, of which he was an Associate. He became M.B. Lond. 1857, and M.D. 1859. He was formerly House-Physician to King's College Hospital, Lecturer on Botany at the Middlesex Hospital, and subsequently Resident Physician at the Camberwell House Lunatic Asylum. He afterwards obtained the appointment of Medical Superintendent of the Cambridgeshire Lunatic Asylum. On account of ill health he was superannuated therefrom in 1867.

DAVID MACLOUGHLIN, M.D.,

DIED in Maddox-street, on the 1st inst., at a very advanced age. Dr. Macloughlin was originally in the army, and was present at many engagements in the Peninsula. He was taken prisoner, and was for a considerable time in charge of a French Hospital. The services he rendered were so highly esteemed by the Emperor Napoleon that he made him a member of the "Legion of Honour," the first Englishman, we believe, on whom this distinction was conferred. Of late years Dr. Macloughlin's name has been identified with some peculiar views regarding the venereal poison. He has been indefatigable in promulgating these opinions in memorials to the Government, in petitions to Parliament, in pamphlets, and in letters to the journals. No one could doubt his honesty of purpose and purity of motive, but he was unquestionably in error. Though upwards of 80 years of age, Dr. Macloughlin retained his vigour to the last.

DR. GUAZZARONI

was for many years Medical officer of the Kensington Union. He was found dead in his bed on Saturday morning last, having died from disease of the kidneys.

NEW INVENTIONS.

THE NAUTILUS LIFE-PRESERVER SWIMMING-BELT.

WE had an opportunity of seeing this admirable invention in use on Thursday at the Endell-street Swimming-baths. This trial had no doubt the advantage of bringing home more directly to the understanding the merits of the invention, but its usefulness has already been sufficiently attested by competent authorities. Its materials are india-rubber and canvas, held in proper position by a steel spring. The air by which it is distended, and to which it owes its buoyancy, is readily admitted, but does not readily escape, any more than water can readily enter when the belt is injured. The fastening is simple and complete. The apparatus is manufactured and sold by Maw, Son, and Thompson, Aldersgate-street, London.

NEW BOOKS, WITH SHORT CRITIQUES.

*** We are indebted to the courtesy of several of our contemporaries during the past year for interesting enclosures and issues of their periodical publications. Many of these on perusal have been found of great interest, but the pressure of home materials has prevented our doing them anything like justice. Among recent acquaintance we may notice the *Pabellon Medico* as conducted with much spirit, and some numbers of the *Gaceta Medica de Granada*, just received. Spain has now about half a score of Medical publications which follow pretty closely in the track of science. Of those of our contemporaries whose appearance we miss during the current year we may mention with regret the *Escholiaste Medico*, the best known Medical periodical of Portugal, which has come to an end after a career of twenty-six years' duration under the auspices and support of Government, and under very talented direction. We can say scarce less of the *Hygiene Militar* in Madrid, also in connexion with the army, which, after a shorter term of existence, came to an end in Spain a year previous, though maintained throughout with much ability. Both these Governments deserve credit for advanced undertakings, in which we lament to have seen less perseverance in their original views.

A Treatise on Intraocular Tumours, from Original Clinical Observations and Anatomical Investigations. By H. KNAPP, M.D., Late Professor of Ophthalmology, and Surgeon to the Ophthalmic Hospital in Heidelberg. Translated by S. COLE, M.D., of Chicago. William Wood and Co., New York.

*** We commend this book to our readers as a capital translation of one of the best works upon intraocular tumours which have appeared. Dr. Knapp's name is a sufficient guarantee for the accuracy and excellence of the pathological observations recorded, and he must be well pleased to be able to present to his new friends in America so able a translation of his book. The illustrations of the forms of glioma and sarcoma are the most beautiful drawings of the minute structure of these growths which have yet appeared, and should be well studied by English students, to whom as yet the important distinctions between certain tumours which we have been accustomed to group together as cancers, are by no means sufficiently well known. It is a striking fact that Dr. Knapp has so far met with no undoubted instance of true cancer occurring in the eyeball, founding the diagnosis upon anatomical structure as defined by Virchow, nor has he yet met with a trustworthy description of such a growth. This observation alone should impel the student who fancies "intraocular cancer" to be a common disease, as we in England have until lately imagined, to investigate minutely the structure of these growths, and in this work he will derive the greatest assistance both from Dr. Knapp's valuable plates and letterpress.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, March 3, 1870 :—

Blencarne, William L'Henreux, Notting-hill.
Carter, Alfred Henry, Pewsey, Wilts.
Cartwright, James Henry, Chelsea.
De Lietle, John, Tavistock-row, Covent-garden.
Gibson, John Charles, Somerset-place, Brixton.
Paramore, Richard, Stoke Damerel.
Sleman, John, Tavistock, Devon.

As an Assistant in Compounding and Dispensing Medicines :

Gwatkin, James Ross, Brighton.

The following gentlemen also on the same day passed their First Professional Examination :—

Jones, Maurice, Charing-cross Hospital.
Newington, Frank Enefer, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BURKE, Dr. WILLIAM M.—Consulting-Physician to Dr. Steevens's Hospital, Dublin, *vice* Dr. Croker, deceased.

GRIMSHAW, Dr. THOMAS WRIGLEY.—Physician to Dr. Steevens's Hospital, Dublin, *vice* Dr. Burke.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—The following appointments have been made :—John Elliott, Staff Surgeon, to the *St. Vincent;* John Murphy, Surgeon, to the *Cambridge;* Joseph Halpin, Assistant-Surgeon, to the *Asia;* Henry Macdonnell, Assistant-Surgeon, to the *Hercules.*

10TH FOOT.—Staff Assistant-Surgeon Henry Northage Land James, M.D., to be Assistant-Surgeon, *vice* Robert Hyde, appointed to the Staff.

MEDICAL DEPARTMENT.—Assistant-Surgeon Robert Hyde, from the 10th Foot, to be Staff Assistant-Surgeon, *vice* Henry Northage Land James, M.D., appointed to the 10th Foot ; Assistant-Surgeon James Barry, M.D., from the 82nd Foot, to be Staff Assistant-Surgeon, *vice* William Charles Gasteen, M.B., appointed to the 66th Foot.

INDIAN MEDICAL SERVICE.—The following appointments and promotions in her Majesty's Indian Medical service have been made :—*Bengal.*—To be Principal Inspectors-General : John M'Clelland ; Henry A. Bruce, M.D. To be Inspectors-General : Henry Alexander Bruce, M.D. ; William Abbott Green, hon. Surgeon to her Majesty ; John Murray, M.D. To be Deputy Inspectors-General : John Murray, M.D. ; James Anderson, M.D. ; John Campbell Brown, C.B., hon. Surgeon to her Majesty ; Francis Anderson, M.D. ; George Schuyler Cardew ; James Alexander Dunbar, M.D. ; James Alexander Guise ; John Macintyre ; Duncan M'Rae ; Robert Bancroft Kinsey, F.R.C.S. ; Edward Hare ; James Henry Butler, F.R.C.S. ; George Harper ; John Wilkie, M.D. ; John Maismith, M.D. ; John Bowhill, M.D. ; Charles Bonner Chalmers ; William Keates ; John Satherland ; George Edward Morton, M.D. ; Edward Bronnecker Thring ; Charles Lindsay Cox, F.R.C.S. ; Daniel James O'Callaghan ; Charles Archer, M.D. ; George Saunders ; Thomas Hastings, F.R.C.S. ; Hugh Martin Macpherson ; John Fullarton Beatson ; John Macpherson, M.D. ; and Alfred Howorth Cheke. *Madras.*—To be Inspectors-General : Duncan Macpherson, M.D. ; Robert Cole, hon. Surgeon to her Majesty ; James Shaw, F.R.C.S. ; William Mackenzie, C.B., C.S.I. To be Deputy Inspectors-General : John Templeman Maule ; Charles Irvine Smith ; James Dorward ; John Emilius Mayer ; William Mackenzie, C.B., C.S.I. ; Edward Green Balfour ; John Henry Orr, C.B. ; John Andrew Reynolds ; Robert Henry Rennick ; William George Prichard, M.D. ; Joseph Myers Jackson ; Henry William Porteous ; John Kennedy, M.D. *Bombay.*—To be Inspectors-General : Matthew Stovell, M.D. ; Francis Shortt Arnott, M.D., C.B. ; Alexander Wright. To be Deputy Inspectors-General : David Ritchie, M.D. ; Andrew Henderson Leith, M.D. ; Parr Willisford Hockin ; Alexander Wright ; Daniel Costelloe, M.D. ; Henry Dunn Glasse ; Robert Halkerston Davidson, M.D. ; Thomas William Wards ; William Thom ; Saville Marriott Pelly, C.B. ; Edward Mahaffy, M.D., C.B.

BIRTHS.

COCKCROFT.—On February 26, at Keighley, Yorks, the wife of T. H. Cockcroft, M.D., of a son.

DUKE.—On March 3, at 4, Sandwell-place, Lewisham-road, the wife of J. C. Duke, Esq., Surgeon, of a son.

SANKEY.—On March 8, at the County Asylum, Oxford, the wife of Heurtley Sankey, Esq., Superintendent, of a daughter.

SIMPSON.—On March 4, at 12, Canonbury-square, the wife of Archibald Simpson, M.D., of a son.

MARRIAGES.

GLASFURD—CORNWALL.—On February 24, at Edinburgh, Charles L. R. Glasfurd, Major Bombay Staff Corps, to Jane Cuninghame, only daughter of James Cornwall, Esq., M.D.

HANNAH—FRASER.—On March 1, at Pau, Basses Pyrénées, John B. Hannah, M.D., 63rd Regiment, to Florence Harvey, youngest daughter of Lieut.-Col. Fraser, late H.M.'s Indian army.

PARTRIDGE—HARRISON.—On February 7, at the Fort Church, Calcutta, Theodore D'Orville Partridge, Civil Surgeon at Bustee, and only son of Dr. Partridge, M.D., York-place, Portman-square, London, to Francis Naylor, eldest daughter of E. M. Harrison, Esq., of the Middle Temple, barrister-at-law.

WAKELING—HUSSEY.—On March 3, at St. Paul's, Onslow-square, Brompton, Mr. Edward Wakeling, of Titchborne-street, Piccadilly, to Mary, only daughter of the late James Hussey, Surgeon, R.N., of Kilmallock, county Limerick, Ireland.

DEATHS.

ENGLAND, GRATIAN, infant son of Dr. England, Southgate-street, Winchester, on March 1, aged 10 months.

FARRAR, EDWARD, M.D., formerly of 48, Guilford-street, Russell-square, at San Francisco, California, on February 2, in the 62nd year of his age.

KILGOUR, Dr. PATRICK, 13th or Prince Albert's Light Infantry, at Gibraltar, on March 1, aged 37.

LAWRENCE, GEORGE WILLIAM, late Medical Superintendent of the Asylum, Fulbourne, Cambridgeshire, at Layer Breton Hall, on February 22, aged 37.

LOVEGROVE, PERCY EGBERT, the younger son of Dr. Lovegrove, of the Vicarage, Sevenoaks, on the 3rd inst., aged 2½ years.

LUARD, HENRY REYNOLDS, third son of the late Peter F. Luard, M.D., at Athlone, after a few hours' illness, on February 26, aged 41

MACLOUGHLIN, DAVID, M.D., M.R.C.P., at 22, Maddox-street, on Feb. 26, aged 86.

M'RAE, CAROLINE EMMA, widow of the late Dr. James M'Rae, late of the Bengal Medical service, at Eaton-villa, Castlebar-hill, Ealing, W., on March 5, aged 61.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRACKLEY UNION.—Medical Officer for the Fourth District. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Arthur Weston, Esq., Clerk, Brackley, on or before the 15th inst. Election on the 16th.

BRADFORD INFIRMARY AND DISPENSARY.—Resident Medical Officer. Must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before the 21st inst.

COTON-HILL INSTITUTION FOR THE INSANE.—Assistant Medical Officer. Applications and testimonials to Dr. Hewson, Coton-hill, Stafford.

DARTFORD UNION.—Medical Officer for District No. 2 B. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to the Clerk's Office in Dartford on or before March 18. Election on March 19.

DUNDEE ROYAL INFIRMARY.—House-Surgeon. Further particulars from the Secretary, D. Gordon Stewart, 18, Meadowside, on or before March 16.

HUDDERSFIELD INFIRMARY.—Assistant House-Surgeon. Applications and testimonials to Mr. E. J. H. Booth, from whom further particulars may be obtained.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be unmarried and duly qualified. Applications and testimonials to the Secretary on or before March 30.

NEWPORT INFIRMARY AND DISPENSARY.—Resident Medical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to E. W. Willey, Esq., Secretary, at the Infirmary, on or before March 15.

ROYAL SOUTH HANTS INFIRMARY, SOUTHAMPTON.—House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary on or before April 2. Election on the 11th.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES.—House-Surgeon. Applications and testimonials to the Hon. Sec., 54, Berners-street, on or before March 26.

TAUNTON UNION.—Medical Officer and Public Vaccinator for the Bishop's Lydeard District. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to H. C. Trenchard, Esq., Taunton, on or before the 12th inst. Election on the 17th.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Kidderminster Union.—Mr. Thomas Bradley has resigned the Wolverley District; area, 6378; population, 3071; salary £70 per annum.

Thornbury Union.—Mr. William E. Bletchley has resigned the Almondsbury District; area, 18,731; population, 5061; salary £52 10s. per annum.

APPOINTMENTS.

Belper Union.—Edward Hoskins, M.R.C.S.E., L.S.A., to the Markeaton District.

Hambledon Union.—Charles Ede, M.R.C.S.E., L.S.A., to the Bramley District.

Hambledon Union.—Albert A. Napper, M.R.C.S.E., L.S.A., to the Chiddingfold District.

Penistone Union.—George F. Trotter, L.R.C.P., M.R.C.S.E., to the Penistone District and the Workhouse.

Ross Union.—John George, L.R.C.P. Edin., L.R.C.S. Edin., to the Third District.

Warrington Union.—Abel F. Pennington, M.R.C.S.E., L.S.A., to the First and Third Districts.

The commission for the Faraday memorial to be erected in the hall of the British Museum has been placed in the hands of Mr. Foley.

The Hastings Board of Guardians have refused an application of Mr. J. C. Savery, one of the district Medical officers, for an increase of salary, and he has consequently resigned.

The foundation-stone of the new Infirmary at Southport was laid by the Mayor on Saturday last in the presence of the other members of the corporation and the various local authorities and inhabitants to the number of about 700. It was quite a gala day in the town, and the event was celebrated by a banquet in the evening at the Victoria Hotel, the Mayor presiding.

Trinity College, Cambridge.—Fellowship for Natural Science.—Notice is hereby given that at the annual election of Fellows to be held in October next, one Fellowship will be given at Trinity College for proficiency in the natural sciences. The examination will be held in the latter half of the month of September on days hereafter to be fixed, and the subjects for examination will be those appointed for the Natural Sciences Tripos. The competition for this Fellowship will be open to any member of this University who shall have attained the degree of B.A., B.L., or M.B., and whose standing after such degree shall not exceed three years.

Small-pox in the Paris Hospitals during 1869.—According to an official return there were admitted during the year 2079 patients with variola, of which number 270, or 12·99 per cent., died.—*Union Méd.*, February 22.

Health of Canterbury.—Mr. Rigden, in his annual report of the health of Canterbury for 1869, says the mortality has been considerably less than the year preceding, or the average of the three years immediately preceding. Also, that during the years 1867, 1868, and 1869, there were 200 fewer deaths than in the years 1864, 1865, and 1866. He attributes the low mortality to increased attention to sanitary laws.

Strange if True.—The *Staffordshire Sentinel* reports as follows:—"A man named Weston, employed by Messrs. Clementson, at their Broad-street works, was on Saturday carrying a load of saggers on his head through a doorway, when his load coming sharply in contact with the door-frame, the concussion caused the partial dislodgment of one of the bones of the neck. He was taken to the Infirmary, where the bone was immediately replaced in its socket, and Western was back at the works the same day."

Borwick's Baking Powder.—A perpetual injunction with costs has been obtained in the Vice-Chancellor's Court against a grocer of Norwich who had been selling a spurious adulterated article as the genuine Borwick's powder. The Vice-Chancellor said the evidence showed that the article manufactured by Mr. Borwick was very beneficial for the public and free from any deleterious ingredient; and, the plaintiff having carried on a systematic fraud calculated to injure his reputation as well as his profit, he was perfectly justified in coming to the Court at once for relief.

Relapsing Fever in New York.—The *New York Evening Post*, in a "Memorandum" of the Metropolitan Board of Health, says:—"The 'relapsing fever' having begun to prevail in a few places within the metropolitan district, the Board of Health has ordered that it shall be regarded as a contagious and infectious disease. It is a fever which can be controlled and prevented by sanitary measures, but in order to apply the necessary means for preventing its spread in overcrowded quarters, it is required that every person who is sick with it should be discovered and brought under sanitary care." Then follow some rules and regulations.

Medical Teachers' Association.—The next general meeting of the Medical Teachers' Association will be held on the 18th inst., at 32A, George-street, Hanover-square, W. Agenda.—1. To consider the following proposal of the Council in regard to class examinations:—"That it be recommended that class examinations, both written and oral, be held, as a means of tutorial instruction of the student." 2. To consider the following report of the Council on the formation of a combined examining board:—"1. That it is expedient that a single examining board for each division of the United Kingdom be established, and that a single licence to practise be granted to the candidates who pass these examining boards. 2. That means should be taken to secure uniformity of examinations and equality of fees." 3. To consider the following proposition of the Council in regard to schedules:—"That, after the establishment of an efficient system of examinations, it would be expedient that the certificates of attendance on lectures required by the examining boards should be abolished."

The Fulbourn Lunatic Asylum, Cambridgeshire.—At the last monthly meeting of the visitors, the clerk read the correspondence which had taken place between him and the secretary of the Commissioners in Lunacy on the subject of appointing an additional Medical officer. The Commissioners urged that it was quite necessary to do so, that this was the only asylum in England or Wales with only one Medical officer, and that it ought never to be left without a Medical man in attendance. The visitors, however, upon a further discussion, declined, as they had before, to accede to the request of the Commissioners.

Mr. Roberts, Surgeon of Cwm-y-glo, Carnarvon, and his apprentice, John Griffith, have been committed to take their trial for manslaughter under the following circumstances:—A woman named Jones, in a neighbouring village, was taken in labour with her ninth child, and sent for Mr. Roberts, who, being unwell, directed his apprentice to visit the woman and state he could not attend. Griffith, however, it appears by the evidence, gave the woman two doses of medicine, and then proceeded to apply instruments. For an hour he attempted to deliver the woman without success, and a midwife, who was present, interfered and sent for Mr. Roberts, who attended quickly, and the child was brought into the world in a few minutes. The child was dead, had a cut across its forehead caused by the instruments. Mr. Roberts stayed in the room about twenty minutes, but the woman succumbed a few minutes after. We have no Professional account of the injuries actually inflicted by the instruments, but the local papers state that a portion of the intestines was torn away, and the uterus torn. We shall refer to this case more in detail after the trial. It appears that Griffith is only nineteen years of age, and employed the instruments without the sanction or even knowledge of Mr. Roberts. He said on cross-examination that he had attended seven labours before this one. He would not say whether he had used instruments before. Bail was accepted.

Fever in Whitechapel.—Mr. Liddle, in his quarterly report, says:—"Had the public authorities devoted the same amount of attention to the alleviation of the sufferers from fever in the year 1862, when the deaths from fever in this district were 250, and the cases recorded in the books of the Medical officers of the union 822, we might have been spared, to some extent, the witnessing of the present outbreak, which, although not very fatal, yet is very extensive; the cases in this quarter being 132, and the deaths 11; and for the year, comprising 53 weeks, the cases are 385, and the deaths 95. In the year 1862, the common lodging-houses in Spitalfields furnished a large proportion of the cases of fever. In one quarter, the Medical officer of the Spitalfields district informed me that 40 cases of fever occurred in the common lodging-houses in Flower and Dean-street, and the adjacent neighbourhood."

Presentation to Dr. Brady, M.P.—The Council of the College of Surgeons in Ireland assembled at 4 o'clock on Saturday last in the board-room of the College for the purpose of presenting Dr. Brady, M.P. for Leitrim, the diploma of Honorary Fellow of the College, in recognition of his valuable services in promoting the interests of his Medical brethren employed under the Poor-law and Medical Charities Acts, by procuring for them the privilege of superannuation. Dr. Brady having been introduced by the Secretary of the Council, Dr. James Stannus Hughes, the President of the College, Mr. Rawdon Macnamara, addressed him in suitable terms, and wound up by presenting him with the diploma, which is beautifully engraved upon vellum, having the College seal attached

to it, enclosed in a handsome silver box. In reply, Dr. Brady acknowledged the very great compliment paid him, and expressed in high terms his sense of the lofty position occupied in the Surgical world by the *alumni* of the Royal College of Surgeons in Ireland. The proceedings, which were of a most interesting character, were witnessed by a number of the Fellows of the College, as well as by the members of the Council. In the evening the Council of the Irish Medical Association entertained Dr. Brady at dinner in the Albert Hall of the College of Surgeons. Dr. Martin, of Portlaw, President of the Association, presided, having at his right hand the guest of the evening, and at his left the President of the College, Mr. Rawdon Macnamara. A large number of the *élite* of the Profession were present.

REPORT OF THE MEDICAL TEACHERS' ASSOCIATION ON CLINICAL INSTRUCTION AND EXAMINATION.—I. At a general meeting of the Medical Teachers' Association, held March 19, 1869, the following resolution was adopted:—"That it be referred to the council of the Medical Teachers' Association to consider and report upon the amount and kind of practical clinical work in the wards of a Hospital, and the number of cases of midwifery which every Medical student should be required to have undertaken before presenting himself for the final examination for the qualification to practise all the branches of the Medical Profession which has been recommended in the report of the Association recently issued; and further, to consider and report on the times and methods of testing him practically in the subjects for the final examination. II. In reply to this reference the Council drew up a report, which was discussed by the Association on November 19, 1869. The following resolutions were adopted:—"1. That it is expedient that every student should be required to act alternately in the Medical and Surgical wards or out-patients' rooms as clinical clerk, dresser, or member of a class receiving special clinical instruction during the whole time between his second and final examinations—the time given to Medicine and Surgery being equal. 2. That every student should have attended twenty cases of midwifery before presenting himself for the final examinations. 3. That the clinical knowledge of every student should be tested from time to time upon both Medical and Surgical cases in the wards, and amongst out-patients at the Hospitals. 4. That it be urged upon the examining bodies to make the clinical examination of candidates for their diplomas a primary and essential part of their final examination; and that no candidate should be admitted to the final written and oral examinations until he has been certified by recognised examiners to have passed this clinical examination."

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN FEBRUARY, 1870.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	23·90	0·111	0·066	0·002	15·0	4·9
West Middlesex	22·21	0·051	0·091	0·000	14·9	4·6
Southwark & Vauxhall	21·03	0·145	0·076	0·002	14·6	4·5
Chelsea	23·17	0·164	0·091	0·001	15·0	4·8
Lambeth	21·47	0·062	0·110	0·002	14·4	4·4
Other Companies.						
Kent	30·97	0·035	0·168	0·001	20·5	6·0
New River	24·53	0·020	0·091	0·000	15·9	4·8
East London	24·00	0·062	0·110	0·002	16·0	5·1

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—viz., the Grand Junction and Chelsea.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 94,796,423 gallons; and the number of houses supplied was 476,191. This is at the rate of 29·9 gals. per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 27·7 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and Bois de Boulogne.

H. LETHEBY, M.B.

A NEW POINT OF VIEW FOR "HYGIENE."—M. Bouley, on presenting to the Académie des Sciences a new book by M. André Sanson on the "Hygiène des Animaux," described it as written from quite a new point of view. The author does not occupy himself so much with the means of preserving the health of animals as with the means capable of rendering them healthy or diseased, to the extent most conducive to the profit of their proprietor. It is therefore a treatise on hygiène devised from the point of view of the breeder, not of the animal.

CHORDEE.—M. Rollet prescribes the following pills in acute gonorrhœa with painful erections:—Camphor gr. xlv., ext. henbane gr. xxx., mucilage q.s., into thirty pills, from one to four of which to be taken at night. General and local baths also to be employed; and when the pills fail in giving relief, enemata with laudanum and camphor are to be tried.—*Union Méd.*, February 22.

THE city of Ottawa, Ill., has five Artesian wells, all in active operation, each sending up a stream of pure water about four inches in diameter, from an average depth of three hundred and eighty feet. Several more wells are to be put down next season.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. John A. Mullin, Hamilton, Canada.—Your letter (with enclosure) has come to hand.

Dr. O. Sturges.—We shall be glad to receive the MS.

Celsus.—An inquiry shall be made, and an answer shall appear next week.

Erinensis.—The translation will be acceptable, but cannot appear just yet, as our columns are so full.

Mr. Pitman, Manchester.—A very rare case of death from erysipelas after vaccination cannot be allowed to outweigh the hundreds of thousands of lives that have been saved by the operation.

"*In Confidence*" is thanked. There must be some mistake in the paragraph.

Mr. E. Jackson (Higham).—The facts respecting the state of the Profession in some parts of Australia forwarded by our correspondent will be used at the proper time.

Mr. J. F. Blake will not be required to pass the preliminary examination.

Ishmael.—We think A. would have best consulted his own dignity by refusing all responsibility, and retiring from a case in which his advice was not taken. We do not know under what motives J. acted, but we do not think that he could be fairly blamed provided that A. had been applied to first, and had refused to certify the cause of death.

Dr. J. L. Paterson, Guernsey.—Dr. Williams's forthcoming account of the case of the Earl of St. Maur will answer many of the questions proposed by our correspondent.

"*Timor omnis abesto.*"—The charges of which you have sent the list seem to us exceedingly moderate. Supposing all the facts of the case to be before us, we have no doubt that your colleague has behaved unhandsomely in the matter. It seems to us a subject involving several questions of Medical ethics, which might very properly be brought before a local Medical Society.

What is Pauperism?—We cannot too strongly recommend to our readers an admirable series of little tracts by the well-known and accomplished Physician the author of the "Evils of England."(a) One is entitled the "Plague of Beggars;" a second, the "Nuisance of Street Music;" a third is an abridged reprint of Defoe's "Giving Alms no Charity;" whilst the shortest, but possibly the most effective, of the lot is a single sheet, entitled "Who are the Poor?" If pauperism be fostered by an ignorant and weak yielding to impulse, the first step towards its suppression must be instruction as to its real nature and cause. What, then, is a pauper, and what pauperism? A mere poor man is no more a "pauper," in the true sense of the word, than a man who puts on a bit of sticking-plaster is a Surgeon. No man who tries by honest industry not to be poor can be called pauper. The pauper is he to whom poverty is a profession by choice—who trades, lives, and thrives on his poverty; who would not for the world try by honest means not to be poor; who cultivates poverty scientifically, artfully, and even artificially.

Mr. Henry Napier Draper has just published, in the form of a small pamphlet, a series of most interesting inquiries as to the practice of ether drinking as it now exists in the North of Ireland. The following contains the gist of his remarks:—

"The practice of ether drinking appears to be almost altogether confined to the counties of Londonderry, Antrim, and Tyrone; and the towns in which it most prevails are Draperstown, Maghera (Derry); Cookstown and Omagh (Tyrone). Belfast is the depot to which the ether manufacturers of Dublin, Edinburgh, and Glasgow send the supplies, which thence find their way into the smaller towns.

"So far as I can learn, the introduction of the practice dates from about five years since, and it is curious in its very origin. While it is only right to say that one of my correspondents attributes it to habit acquired by the medicinal use of the drug in cases where alcoholic stimulants were contra-

(a) Published by Renshaw, 356, Strand.

indicated, and another to the desire of 'getting drunk more cheaply,' I have not found either of these theories to bear examination, and my authorities are, with these two exceptions, unanimous in the opinion that ether drinking is a consequence of the laudable efforts made by the Roman Catholic clergy in inducing their flocks to abstain from whisky. The consumers of ether are said to be nearly all Catholics, and to belong chiefly to the class of small farmers, though the habit certainly prevails among mill hands and other operatives.

"The usual quantity of ether taken at one time is from two to four drachms, and this dose is repeated twice, thrice, or even four and six times daily. It is taken unmixed with water; indeed, its very slight solubility in that fluid(a) would make this a useless precaution; but the usual practice is to take first a mouthful of water, then the dose of ether, and again a mouthful of water.

"The intoxication produced by ether resembles that of alcohol, but is much more rapidly produced, and is more evanescent. The ether seems to be eliminated entirely by the lungs, as the urine has no odour of it; and, on the other hand, the breath of the ether drinker always affords ample evidence of his addiction to the habit. I am credibly informed that at the fair of Draperstown—which appears to be the paradise of ether drinkers—the prevalent smell is not, as at country fairs, of pigs, tobacco-smoke, or of unwashed human beings, but of *ether*."

COMMUNICATIONS have been received from—

Mr. R. W. Lapper; Mr. J. L. Paterson; Dr. H. W. Rumsey; Dr. T. W. Grimshaw; Dr. Braxton Hicks; Mr. Maunder; Dr. W. B. Woodman; Mr. J. Woodcock; Mr. H. Pitman; Dr. J. S. Walker; Celsus; Dr. O. Sturges; Mr. Short; Mr. D. C. L. Owen; Mr. Daucocks; Dr. Macnab; Ishmael; Dr. Buchanan; Dr. Vinen; Professor Erasmus Wilson; Mr. J. Fairmann; Dr. Hargrave; Dr. J. W. M. Millea; Messrs. Heckford and Tood; Dr. J. Whitmore; Mr. V. Jackson; Dr. Day, Torquay; Dr. Alexander Ogston, Aberdeen.

BOOKS RECEIVED—

Dublin Quarterly Journal of Medical Science, February—New Orleans Journal of Medicine, January—California Medical Gazette—Lapper on Registration of Correspondence—Transactions of the Odontological Society, vol. ii. No. 4—Smith's Pharmaceutical Guide—The Registers of Pharmaceutical Chemists, and Chemists and Druggists, printed and published under the direction of the Pharmaceutical Society of Great Britain.

NEWSPAPERS RECEIVED—

Nature—Liverpool Mercury—New York Medical and Surgical Reporter—Staffordshire Sentinel—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

March 12. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Prof. Max Müller, "Science of Religion."

14. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 7.

Medical Society of London, 8 p.m. An Address by Mr. John Gay (President). Dr. Richardson, "On the Production of Rapid General Anæsthesia."

15. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. Dr. Payne, "Syphilitic Tumours of Liver." Mr. Nunn, "Abscess between Vesiculæ Seminales; Molluscum Contagiosum." Dr. Moxon, "Ulcerative Endocarditis; Syphilitic Disease of Heart; Post-mortem Perforation of Œsophagus." Mr. Coles (for Dr. Cockle), "Dilatation of Innominate Artery." Dr. C. T. Williams, "Disease of the Aortic Valves." Mr. Holmes (for Mr. Williams, of Norwich), "Vesical Calculus;" also "Tumour of Upper Jaw, Effects of Potassa Fusa upon Diseased Bone, Diffuse Periostitis of Tibia," etc.

Royal Institution, 3 p.m. Dr. Rolleston, "Nervous System."

16. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

17. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Dr. Handfield Jones, "On Cirrhosis of the Lung."

Royal Institution, 3 p.m. Prof. Odling, "Chemistry."

18. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal Institution, 8 p.m. Mr. Bateman, "Subway to France."

(a) A pint of water dissolves about two ounces of ether.

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 5, 1870.

BIRTHS.

Births of Boys, 1157; Girls, 1102; Total, 2259.
Average of 10 corresponding weeks, 1860-69, 2126·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	811	862	1673
Average of the ten years 1860-69	728·1	700·2	1428·3
Average corrected to increased population	...	...	1571
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	3	16	...	10	1	5	2	3
North ...	618210	5	7	12	2	10	1	3	5	2
Central ...	383321	...	3	8	1	8	2	2	1	1
East	571158	1	3	17	1	13	2	3	1	2
South	773175	2	5	25	4	17	...	1	6	8
Total	2803989	8	21	78	8	58	6	14	15	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·551 in.
Mean temperature	45·8
Highest point of thermometer	61·1
Lowest point of thermometer	32·5
Mean dew-point temperature	41·5
General direction of wind	S.S.W. & N.E.
Whole amount of rain in the week	1·22

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 5, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Mar. 5.	Deaths Registered during the week ending Mar. 5.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2259	1673	61·1	32·5	45·8	7·67	1·22	3·10
Portsmouth ...	122081	32	77	75	60·7	31·5	44·6	7·01	0·88	2·23
Norwich	81087	27	50	42	58·0	32·0	43·6	6·45	0·23	0·59
Bristol	171382	90	119	85	56·2	32·1	45·1	7·28	1·20	3·05
Wolverhampton ...	72990	53	51	39	55·4	31·3	41·3	5·17	1·20	3·05
Birmingham ...	369604	117	229	140	53·4	32·0	42·0	5·56	1·12	2·84
Leicester	97427	75	86	37	57·0	29·7	42·3	5·73	0·91	2·32
Nottingham ...	88888	110	50	55	56·6	30·5	41·7	5·39	1·08	2·74
Liverpool	517567	250	358	272	53·7	30·9	40·7	4·83	0·98	2·49
Manchester ...	374993	207	281	219	56·2	30·0	42·3	5·73	1·09	2·77
Salford	121580	58	109	59	55·5	31·1	41·8	5·45	1·16	2·94
Bradford	143197	54	113	76	53·8	30·5	40·9	4·94	1·12	2·84
Leeds	259527	30	233	139	56·0	32·0	42·2	5·67	1·15	2·92
Sheffield	247378	27	191	148	55·0	30·0	40·8	4·89	1 62	4·11
Hull	130869	91	81	59	56·0	26·0	40·5	4·72	1·41	3·59
Sunderland ...	94257	52	81	43	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	130	65	52·0	32·0	39·4	4·11	0·48	1·22
Edinburgh	178970	100	129	108	50·7	25·0	38·0	3·33	0·80	2·03
Glasgow	468189	228	395	324	49·3	30·0	38·9	3·83	2·85	7·24
Dublin (City, etc.*)	321510	82	177	181	55·0	31·5	41·4	5·22	1·53	3·89
Total of 20 Towns in United Kingd'm	7209603	83	5193	3839	61·1	25·0	41·8	5·45	1·16	2·94
Week ending Mar. 5 Paris	1889842	242	...	1337	...	...	...	...	...	...
Week ending Feb. 26 Vienna	605200	162	...	310	...	...	34·0	1·12	...	...
Week ending Mar. 3 Berlin	702437	112	626	432	...	...	39·9	4·38	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·551 in. The barometrical reading increased from 29·34 in. on Sunday, Feb. 27, to 30·13 in. by the end of the week.

The general direction of the wind was S.S.W. and N.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

SIX LECTURES
ON
PRACTICAL HELMINTHOLOGY,
ILLUSTRATING
THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE
Medical College of the Middlesex Hospital
By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

LECTURE I.

GENTLEMEN,—Although, as you are probably aware, I have on several occasions delivered special lectures on the Entozoa (as part of the ordinary summer course of Comparative Anatomy at this school), a moment's thought will convince you that the subject of parasites has Professional bearings which cannot be satisfactorily discussed in a purely scientific series of lectures of that kind.

As the science and practice of our calling advances, it necessarily follows that new avenues of knowledge are continually opening up to our view, and those of us who are not afraid of "toil and trouble" may rest assured that a bold entry into any one of these hitherto unbeaten paths will not only bring to the Professional investigator a rich increase of pleasant (and sometimes of unpleasant) knowledge, but will enable him to point out the means of checking, if not of entirely eradicating, a variety of formidable diseases. The truth of this general statement cannot be better enforced than by an appeal to the record of our recent experiences in regard to the life-history and economy of the entozoa. Here, be pleased to observe, we have a group of creatures (hitherto mysterious to us in respect of their varied modes of origination and entry into the human body) showing peculiarities in their organisation and displaying migratory habits associated with metamorphotic changes altogether unique; and so strange are these phenomena, when viewed in reference to the ends accomplished, that I believe I am not going too far in stating that their fair consideration is certain to overthrow the ordinarily received opinions of teleologists respecting the why, how, and wherefore of their mere existence. This, however, is not the place to enter upon speculations which can tend to little practical good; nevertheless I will venture to remark in passing that I still think it possible to entertain conceptions of original causation in harmony with the doctrine of final causes, provided only you express that doctrine in terms sufficiently wide.

Be that as it may, gentlemen, it is perhaps sufficient for you to concern yourselves with the fact that the entozoa, the helminths, the intestinal worms, or call them what you will, are capable, both individually and collectively, of producing the gravest of maladies. Thus, a single parasite, no larger than a pea, and whose presence in the human body shall never have hitherto occasioned the slightest inconvenience to the "bearer" of it, may, without a moment's warning, give rise to instantaneous death; whilst, on the other hand, collections of parasites, each individually so small that thousands of them might be placed in a nutshell, are capable of producing equally fatal results, sometimes affecting a whole community. Surely, then, at a time when chairs are founded to promote the knowledge of dermatology, when societies are created to discuss questions of epidemiology, and when associations are formed solely with the benevolent purpose of advancing the interests of public health, I am not going out of the way in insisting more precisely than has hitherto been done on the claims of helminthology.

With these preliminary remarks, let us attack our subject by treating of those human parasites which, though not the most common, are perhaps the best known—I mean the tapeworms. In respect of their general structure and development, it is important to remind you that in a separate specimen, such as is ordinarily obtained from the Hospital, you have to deal with a multiple sort of creature, whose various "joints" or segments, whether sexually mature or otherwise, represent so many individual-like beings arranged in single file. A fully developed beef-tapeworm numbers about eleven hundred of these "joints." Towards the so-called tail-end of the tapeworm the segments become more and more perfectly formed, until the lowermost—so to speak—breaks off from the colony in order to assume a semi-independent existence. These separated joints are the "cucurbitini" of old writers, and I would urge you particularly to familiarise yourselves with the appearances presented by them, especially whilst they are still alive. I have known the most erroneous statements made and published respecting their true nature, and have repeatedly received them from Professional gentlemen, by post, for determination. Serious errors of practice have also occasionally arisen from this source. Sometimes you may be enabled, merely by a naked-eye examination of the segments, to determine the particular species or form of tapeworm from which your patient may be suffering; unfortunately, however, most of the eggs have usually escaped from the "joints" passed by stool, and in this way the distinctive form of the uterine cavity, constituting, under these circumstances, the best diagnostic mark of the species, is practically lost. A much more important point for you to remember in any case that may present itself lies in the circumstance that "joints" only pass where the worm is fully developed. In the instance of the beef-tapeworm you may reckon upon thirteen weeks as about the time necessary for the full growth and maturation of the parasite, and the recollection of this statement, which is based upon interesting facts occurring within my own experience, will often prove of service to you in practice. Let me illustrate it by a case in point.

Case 1.—C. B. was formerly a patient under the care of a Physician residing in the city. On two separate occasions, with the request or sanction of his Medical adviser, he called to ask my opinion respecting the nature of the parasite he had passed, chiefly with the view, I presume, of forming a correct prognosis. On the first occasion the specimen proved to be an incomplete example of *tænia mediocanellata*. As the head was not present I advised him to submit himself to the same excellent course of treatment (that had been previously adopted) should the parasite return, adding that he need not look for its return until the expiration of about three calendar months. On the occasion of his second visit (June 17, 1865) he brought me a perfect specimen of the beef-tapeworm with the head attached, and, what was equally satisfactory to me, he at the same time expressed his astonishment that the reappearance of the worm should have occurred on the very day when the interval of thirteen weeks had elapsed. The patient's mind being now completely relieved by my assurances to the effect that he had no other parasite left behind, and that it was impossible for the present worm to redevelop itself, the cure was pronounced to be in all respects complete.

In this connexion I have further to observe that a careful examination of the joints of several different tapeworms will convince you of their liability to vary in character, so that the same sets of segments, thus to speak, are not always alike. In the examples before you some are characterised by few and others again by many branchings of the uterine cavity. In well-marked types, therefore, you would experience no difficulty in referring some to the tapeworm derived from beef and others to the form derived from pork. Here, you perceive, is an extreme form which I believe to be characteristic of the tapeworm obtained from the ingestion of imperfectly cooked mutton. "Measly mutton" and "measly beef" are terms which will sound strange to those who know of no other "measled meat" than pork; but my investigations (as you see in part by the specimens of "measly beef" before you) have incontestably proved and verified the fact of the existence of larval tapeworms in the most esteemed kinds of animal food.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE
Royal College of Surgeons
By ERASMUS WILSON, F.R.S.,
Professor of Dermatology in the Royal College of Surgeons.

LECTURE II.

I.—DISEASES OF INFLAMMATION.

INFLAMMATION OF THE SKIN FROM COMMON CAUSES.

(*Continued from page* 281.)

PSORIASIS I define to be *a thickening and hardening of the skin accompanied with an excessive production of small irregular scales, with pruritus sometimes very severe, with a tendency to exudation of an ichorous lymph on being rubbed, and to fission on moderate pressure or flexion.* Psoriasis is, in fact, the psora leprodes or scaly psora, or simply a form of chronic ekzema squamosum.

Directly associated with ekzema, and especially with psoriasis, is another chronic form of ekzema, which presents appear-

ances identical with psoriasis, but in a minor degree. The condensation, if not the thickening, of the skin is still there; the skin is dry, hot, extremely itchy, and covered with minute scales, and, from the small size and fineness of the scales, which have been compared to bran, the disease has been named *pityriasis*, and by the Latins porrigo.

Pityriasis, therefore, is a chronic and sometimes an exhausted ekzema, usually limited to the scalp (pityriasis capitis), and it may be defined to be *a state of heat and dryness of the skin with condensation of its tissue, the production in excessive abundance of minute micaceous scales, and excessive pruritus.* The Latin term porrigo is very nearly the same in signification as pityriasis, being derived from *porrum*, an onion—"quia, ut porrum, in tunicæ involucra, ita cutis, velut in squamas resolvitur." According to Willan's classification, psoriasis and pityriasis are squamous affections, because one of their lesions, and the principal one in the case of pityriasis, is a formation of scales, and by a similar erroneous mode of reasoning the term psoriasis has, on the Continent, been transferred to the lepra of the Greeks. Nothing is more obvious in practice than the transition of an ekzema from its more active stages into the chronic condition of a psoriasis on the one hand, or of a pityriasis on the other; and only by violence can their separation be accomplished.

We often derive considerable information from anomalous forms of disease—indeed, sometimes more than from those of a regular type. Of this kind is a remarkable affection which generally pervades the whole surface of the skin; it is a dermatitis accompanied with excessive desquamation, dermatitis exfoliativa. But for the absence of serous exudation it would be recognised at once as an ekzema; viewed by its pathological features—an inflamed derma, which is at the same time dense and infiltrated, and sheds a great abundance of coarse scales—it is a psoriasis; whereas Devergie, who first described it, terms it *pityriasis rubra*, and Hebra has distinguished it by the same name. In the tables before us I have given it a place among the modified forms of ekzema.

Upon the correct appreciation of ekzema all our future progress in dermatopathology may be said to be founded. And, as you will perceive, ekzema is a classification in itself. It presents for our study six several lesions, and, to use the language of Willan, it is a papule, a squama, an exanthema, a pustula, and a vesicula; although Willan himself only adopts its sixth and rarest part as the object of classification, and groups it with vesiculæ. As I have described it to you to-day, there are several points in its history which I would impress upon you with more than ordinary urgency, and these are—1, its multiple lesion; 2, its tendency to papulation; 3, its tendency to pustulation; 4, its tendency to infiltration and thickening; and 5, its tendency to desquamation.

Ekzema is subject to a multitude of *causes*, some of which are internal and others external. The internal causes induce a tendency to the disease, and predispose as well as excite; the exciting causes excite only, but where the predisposing cause is already present, although passive, an accidental exciting cause may be the means of awakening the whole skin into a state of ekzematous inflammation. Such an exciting cause as I am now contemplating exists in the sarcoptes or acarus scabiei. An acarus reaches the hand, it burrows in the epidermis, selecting the secluded recesses between the fingers or the creases of the lines of motion; within this burrow it deposits its ova, and therein, also, the ova are hatched and the embryos pass through their transformations. The young issue forth, males and females—the females to be impregnated, to dig new burrows, and lay the foundation of new families; the males to hunt after females and take refuge under any chance roof which the broken cuticle may afford. The most frequent habitat of the acarus is the hands, and from and by the hands it is conveyed to the pudendum and feet, and is dispersed, more or less extensively, over the rest of the body, always burrowing in the epidermis, and always pursuing the same cycle of generation and colonisation.

Of the irritant action of the acarus we can have no doubt; but the manifestations of that irritation are extremely varied. In one person a little pruritus, with roughness of the cuticle, is all that is perceived; in another there may be a few scattered papulæ; in a third, minute conical vesicles with erythema; and, in a fourth, a combination of the whole of these symptoms—redness, with roughness, papulæ, vesiculæ, and pustulæ—in one word, there is ekzema. Can we refuse the evidence of the lesions? Can there be a doubt that the case is one of ekzema dependent upon a local cause? But sometimes, where an ekzematous diathesis or ekzematous predisposing causes are present, the ekzema so closely resembles an idiopathic attack of the disease as to render the diagnosis of scabies obscure.

It is for the reasons just given that I regard scabies as an ekzema, and place it among the ekzematous affections; and we have thereby thrust under our notice an illustration of the eccentricities of nomenclature which I previously noticed. Scabies is the Latin translation of psora; and while psora is retained as the synonym of ekzema, scabies is limited to that form of ekzema which is occasioned by the acarus. Not unfrequently the ekzema is prolonged for a considerable period after the acarus is destroyed; and not unfrequently an irritative habit is set up in the skin, which manifests itself in the form of papulæ for several or many months after the scabies ab acaro is completely cured.

Scabies I define as *a state of pruritus of the skin associated with the presence of the acarus scabici within the epidermis, and accompanied with roughness of the cuticle, erythema, papulæ, vesiculæ, and pustulæ.*

The pruritus is greatest at night, for then the acari are most active in their operations, and the diversity of manifestation presented by the skin has reference to the age and temperament of the patient. In the adult male there may be nothing to be discovered but burrows and pruritus, and here and there a papule; in a more sensitive skin, as that of the female, vesicles may be superadded; while, in very delicate persons, and children with a weakly and moist skin, the greatest number of lesions may be present, and with cuniculi or burrows there may also be found erythema, papulæ, vesiculæ, and pustulæ. The discovery of the female acarus within the epidermis is very easy. The cuniculi, more or less flexuous in their course, may be discerned with the naked eye or by means of a lens of low magnifying power. Swellings of the cuniculus from point to point indicate the spots occupied by a double pair of ova, and in the expansion at the extremity of the cuniculus the animalcule lies embedded, and may be exhibited by detaching the roof of its cell with a fine needle and introducing the point of the needle; the acarus clings to the needle, and is then very easily drawn forth.

I must now remind you that I called your attention a short time ago to the *pathology of a papule*, and that I described the papule as a prominence of the pore of the skin resulting from hyperæmia of the vascular plexus of the follicle, to which hyperæmia is superadded infiltration of the intervascular tissue. I may now proceed to state that the term "leichen" has been identified with a "papule," and that the proper designation of an eruption of inflammatory papulæ, such as I am now indicating, is leichen. Willan made no hesitation in classing the papulæ of ekzema under the term leichen; but the effect of such a mode of classification is necessarily to assign two names to the same disease, an argument *ad absurdum*. We trace this mode of thought in a synonym of ekzema papulosum—namely, ekzema leichenosum. The presence of papulæ as a conspicuous feature of ekzema identifies papulæ with that disease, and therefore, in employing the term leichen, I shall endeavour to draw within its embrace eruptions which, although ekzematous, are not strictly ekzema, and, in this sense, leichen must be regarded, like psoriasis, pityriasis, and scabies, as little more than a dependency or a sub-group of ekzema.

Leichen I shall therefore define as *an eruption of minute papulæ varying somewhat in size, more or less conical, hemispheroidal, or flat, more or less red, generally pruritic, and frequently terminating by desquamation.*

An eruption of papulæ presenting the character of a single lesion, and in the absence of the other lesions which constitute an ekzema, must therefore be termed a leichen. In this way, and according to the mode of *distribution* of the papules, we find described a leichen simplex, a leichen dispersus, a leichen circumscriptus, a leichen circinatus *seu* annulatus, and a leichen gyratus. According to *symptoms* or subjective signs, there is a leichen strophulosus, urticatus, and pruriginosus; and *objectively*, a leichen planus, pilaris, and lividus, to which Hebra has added a leichen scrofulosorum.

Forms of Leichen.

Distribution { aggregated / disseminated / circumscribed / serpiginous

Symptoms

Structure.

Leichen simplex	Leichen urticatus
„ disseminatus	„ pruriginosus
„ circumscriptus	„ planus
„ circinatus	„ pilaris
„ gyratus	„ lividus
„ strophulosus	„ scrofulosorum

The terms simplex, dispersus, circumscriptus, circinatus, annulatus, and gyratus, are very common in dermal pathology, and serve to express ordinary variations of appearance—for example, simple or uncomplicated, dispersed or scattered, circumscribed or bordered by a distinct boundary, circular, annulate, or a confusion of broken curves and segments of circles. *Leichen strophulosus*, or simply strophulus, is an eruption of round red papules, common to infancy, and associated with strophos or colic, or, as expressed by the Latins, *tormina*. *Leichen urticatus* is an eruption of dispersed papules, remarkable for their pruritus; hence the comparison with the *urtica* or nettle. *Leichen pruriginosus*—doubtless the prurigo mitis of Willan—is also a dispersed eruption, and illustrates in a still higher degree the pruritic quality of the papule. *Leichen planus* is an eruption of papulæ of large size, and remarkable for a smooth, flat, horn-like, and glossy summit, with the opening of the follicle, loaded with epithelial contents, visible in the centre. They present a peculiar dull crimson-redness, which has gained for them, on the authority of Hebra, the synonym of leichen ruber. *Leichen pilaris* is a papule occupying its normal position—namely, the aperture of a follicle—and visibly perforated by a hair; such papulæ are common on the shins. And, in this same situation, the papulæ are sometimes livid from torpid circulation, and sometimes even purpuric, as in *leichen lividus*.

Nothing, perhaps, is of more importance in Medical science than to have a fixed signification for technical terms, and I trust that I shall have helped you in this respect by the definitions which I have attached to the terms which we have just been considering — for example, ekzema, psoriasis, pityriasis, scabies, leichen, and strophulus.

(To be continued.)

ORIGINAL COMMUNICATIONS.

PRACTICAL REMARKS

ON THE FOOD OF INFANTS, WITH AN ACCOUNT OF THE USE OF BUTTERMILK IN REARING INFANTS.

By A. M. BALLOT, M.D., Rotterdam.

Every Medical man knows how difficult it is to provide food for babies when there is no mother's milk for them. The case becomes still more difficult when they are already ill before advice is asked.

Some years since, my attention was drawn to the use of buttermilk for infants' food. It was no theory of mine, but I heard of some cases where the method was followed by good results; so I tried it, and the success was such that the method acquired in a short time a great popularity amongst all classes.

In 1865, I published my experience in our Medical journal (reprinted in Schmidt's "Jahrbücher," 1866, No. 5), and I had the satisfaction of seeing the method adopted by many. To show that it was no novelty, I must mention one curious fact. An elderly village Doctor made the remark in our journal that it would be good if Medical men were to visit the country before they settled in the towns; they would then learn many things hitherto totally unknown to them. Now this remark was very agreeable to me. I was glad to learn that the use of buttermilk for babies was so old in that part of the world that the publishing of my method excited the sarcasms of the village Doctor.

Four years have elapsed since then. Not tens or hundreds, but thousands alone in Rotterdam are bred up with buttermilk; therefore I think it now time to make this food more generally known.

There are two different sorts of food:—(1) Animal; (2) vegetable.

1. The principal *animal* substitute for mother's milk is that of a wet nurse. I believe that generally there is too much made of the difference between the time that elapsed since the delivery of the nurse and the birth of the nursling. Nature knows not of so very narrow limits. The difference between the milk of various nurses is greater than that of different months of age, with exception of the first days. I should prefer that the nurse should be younger in years than the mother, not older, excepting only when the mother is very young indeed.

2. In the second place comes the goat's milk, more in accordance with the human, but seldom to be had.

3. Of ass's milk, so generally said to be most in accordance with mother's milk, I have seen enough to convince me of the contrary. This result is in accordance with the chemical composition.

4. Then comes the cow's milk, of which hereafter.

5. The egg is given either diluted with water or pure; either whole, or the yolk or the white separately. I have not enough experience of it, but in general I find that eggs are not very well digested by children under the year.

6. Meat, and of this above all beefsteak nearly raw, and shred very fine, is generally well digested by children above seven months old.

7. Broth (*bouillon*) contains very little nutritive elements, of which the fat is the principal. As is known, Professor Liebig lays a great weight on some salts in digestion; so it can be useful combined with other food, but I often found it causes diarrhœa. The same I found with the cold extract of meat prepared in addition with muriatic acid, otherwise this contains also the albuminous elements of meat.

Vegetable Food.—To this belong the various preparations of bread and biscuit, with sugar and water. Many children have been bred up with pap of biscuit; it will be difficult to abolish this popular custom. I have seen some children nursed with so-called bread-water. The bread, mostly of wheat-meal, was boiled with water, and then put through a sieve, so that nearly nothing rested on the sieve; it was then given warmed with sugar, in portions, out of a bottle.

Of the Liebig's food I have had too little experience; when it became known, I was content with the buttermilk; what I saw or heard of it was not very favourable, but, then, here in Rotterdam the same complaint which I have against the cow's milk rests with it because cow's milk enters into the composition of it.

I could continue with a great list of other sorts of food, to-day highly praised, to be forgotten to-morrow, but I will now enter on my chief object, and this is the nursing of babies with the milk of the cow, both as milk, and as buttermilk.

Cow's Milk.

Nothing could be more natural than, when the baby could not be wholly nursed by its mother, to use the milk of the cow. Moreover, chemical research seemed to show that the human and cow's milk were identical, save only in the proportion of their ingredients. Unluckily, experience shows that isomerism is no proof of identity. There would be need only to add distilled water to diminish the quantity of the casein and salts, and to add cream and saccharum lactis, and all would be right. Now, some were very precise in the mode of administering this artificial milk. The quantity of water and other materials to add was very accurately prescribed, and even for the different age of the baby; how often in vain our death annals can show. And how could it otherwise be, when in reality it would have been also so necessary that the nutritive elements should be totally equal.

Differences in Cow's Milk.—What a difference there can be in the secretions of the glands in the same animals, is shown not only by the difference of the first milk (colostrum) and afterwards, but by other varieties, which can easily occur. So, for instance, when during the summer the cows are exposed to great heat, or when it is very cold, the quantity of milk secreted varies much, and so does the quality. Then there is a difference between the morning and evening milk, between the milk that comes first and that which comes later; the first contains more water (Wolff); (a) the age of the cow and the time of the year make differences. But all these natural differences are still nothing compared with others not natural—I mean the falsifications of the milk, especially in towns of larger size.

Now, I suppose, in such a town, your Physician or other Medical man has ordered the use of diluted cow's milk. You apply to your milkman to give you the best milk he has, and you give this milk diluted to your child. What is it that your baby will get?

In the best case the milkman gives you milk of one cow. When your milkman cannot give you milk of one cow, whether from being less fortunate or more honest than his colleagues, you will have to do with a complication of situations in which the different cows can be placed. Happily the cows are free from mental or nervous emotions; otherwise in the mixed milk of many cows there would always be some disturbance.

Now let me speak of the falsifications of milk. In the first place, the milkman may have his own cows, which he milks and

(a) "Ueber die verschiedenen Methoden der künstlichen Ernährung von Säuglingen," von Dr. von Holst in Riga. *Journal für Kinderkrankheiten* von Behrend und Hildebrand, 1869, S. 169.

falsifies; in the second place, the greatest quantity of milk in large towns is imported. It may be that the milk is already imported falsified, or the milkman alters it himself, or both are done. I don't believe in the great variety of falsifications which you read of in books. Researches in Rotterdam showed three sorts—(1) the cream was more or less taken off; (2) water was added; (3) both were done. But perhaps worse than all these falsifications is the peculiarity of the food that most of the cows have in Rotterdam, Schiedam, and the neighbourhood. Most of them, even when they are in the meadows, receive, in addition to their natural food, the after-product of the gin distilleries, the refuse (*spoeling*). This food augments the milk secretion, but is rarely well digested by babies, and causes diarrhœa. In Rotterdam you will rarely find one milkman who has his own cows who does not give "spoeling," although they generally deny it.

When, in falsifying the milk, water is added, you may be certain that this is not distilled water; and, therefore, to this milk relates all I said previously in the *Medical Times and Gazette* of May 12 and June 15 of our drinking water.

In 1000 parts.	Parkes's average composition of unskimmed milk.		Analyses of milk of 100 milkmen in Rotterdam.			W. Robertson.						Simon, mother milk, average quantity of 14 researches.	Simon, asses' milk.
	1.	2.	Best milk.	Worse milk.	Norm.	1.	2.	3.	4.	5.	6.		
Date	...	...	...	...	...	Sept. 26	Sept. 21	Oct. 28	Nov. 4	Nov. 11	May 8	...	...
Temperature in degs. Fahr.	...	...	...	...	...	57	59	50	37	31	77	...	...
Specific gravity	1030	1026	...	...	...	...	...	...	...	...	...	...	...
Casein	40	30	...	...	...	...	...	56·33	66·51	56·13	55·18	34·3	16·74
Fat	37	25	38	16·93	30	28·9	28·5	23·08	27·41	32·40	21·92	25·3	12·10
Milk sugar	50	39	...	...	...	...	...	34·63	29·66	34·28	27·5	48·2	62·34
Salts	6	5	...	...	...	...	...	2·96	4·75	5·50	5	2·3	...
Total solids*	133	99	137·48	76·93	125	120	111	115	128·33	128·31	110	116·4	93
Water	867	901	862·12	923·07	875	880	889	885	871·67	871·69	890	883·6	907

* The total solids of the last two columns are just as they are found in Moleschott's treatise on dietetics. [The author gives six more columns of milk analyses from Simon, Boussingault, and Herzberger, which we are compelled to omit from want of space.—Ed.]

In Rotterdam the analyses were made by order of the Committee (commissioners) for Public Health to show the condition of the milk as it was sold by the different milkmen. The milk was bought of a hundred different milkmen by persons unknown to them. The quantity of butter, the total solids, and water were stated. Then follow the researches of my friend W. Robertson, on which I very much rely, because they are done with the greatest accuracy. The numbers 1, 2, 3, 6 were of ordinary milkmen, not knowing the use; No. 4 is milk of a renowned farm; No. 5 is milk of a farm near Rotterdam, but whose milk is not sold: lastly, I add a column of mother milk and of ass milk analyses.

The differences in milk are great. The difference in the casein amounts from 72 (Simon) to 30 per mille, and if we reckon *colostrum* as milk, from 151 to 30. The butter varies between 40 (Simon) and 25, the lactin between 53 and 26·3, the salts between 7 and 2·2, and in general the total solids between 216 and 99.

The analyses made at Rotterdam show a difference in the butter from 38 to 14·93, the solid parts from 137·48 to 76·93. The idea of the committee was that a good sort of milk must contain at least 125 total solids, and no more water than 875; this number for the solid parts was only found with four milkmen; thirty-two specimens were more or less bad and contained too little butter, while sixty-four were wholly discreditable. These researches have a great practical value because it is one thing to analyse the milk of a well-fed cow and to speculate concerning the benefit people derive from this milk, and how much they must take of it to be well fed, and another thing is the milk that really gets into the stomach of the said people. The milk was really so sold in Rotterdam in 1855.

The analyses of Robertson were done in 1864-65. The milk was also taken out of the shops, the milkmen not knowing the purpose for which they were purchased; they belong to the more renowned milkmen, nevertheless we see that the matter is not improved since 1855, for, with exception of No. 1, that can be called tolerably good, the three other numbers 2, 3, and 6 contained too little butter, and in general too little total solids. The number 4 was renowned grass milk of the farm of a rich private gentleman, where it can be daily bought, and No. 5 of a farm in Charlois, on the other side of the Maas; it was given to me for analysis, but the milk is not sold. These two numbers show that, while the total solids are nearly the same, there can nevertheless be a great difference in the various nutritive elements of the milk. When we compare now the different sorts of milk, with exception of the colostrum, with each other, we have following table:—

	Best milk.	Worst milk.	Mother's milk.
Casein	72·	30·	34·3
Butter	40·	21·92	25·3
Milk sugar	53·	26·30	48·2
Salts	7·2	2·20	2·3
Total solids	172·2	80·42	116·4
Water	827·8	919·58	883·9

Nursing with Diluted Cow's Milk.

Suppose now the Doctor orders to give a child, only some months old, cow's milk, one part of it diluted with two parts of distilled water, the mother then asks her milkman or his neighbour, who is, perhaps, more renowned, because he gives a little more than the other, to give her good milk, the best he has. The man does literally so, he gives the best milk he has—it is all relative—what is it that the child gets?

Let us compare a mixture of one part of the best and of the worst milk diluted each with two parts of water, and mothermilk.

	Best.	Worst.	Mothermilk.
Casein	24	10	34·3
Butter	13	7·3	25·3
Milk sugar	17·7	8·8	48·2
Salts	2·4	·7	2·3
Solid parts	57·1	26·8	116·4
Water	942·9	973·2	883·6

Now, generally sugar will be added. Moreover, the milkmen do not add aq. destillata, but all sorts of water—and often even ditch-water—to give a yellow colour to the milk. This alters the total solids.

When you closely observe children who are bred with cow's milk, you will often observe that there is something that hinders them from thriving; they are restless; from time to time they will vomit great tenacious morsels of curd. Then often diarrhœa will occur, green membranous stools. Very often, then, the milk will be still more diluted, in the supposition that it is too strong for the baby; but the case will get worse, the coagulation and diarrhœa will remain, and the child die of exhaustion. Often I heard of cases where the cow's milk had better success, but I learned soon not to be too credulous in this matter; then mostly when I inquired later after these children I heard quite the contrary; either they died, or a nurse was taken, or it throve better with another food.

Some years hence, when it happened that three Medical men (M.D.'s) had given cow's milk to their babies, which was very well digested. After some time they learned of each other that all three had abandoned the cow's milk, and that nearly at the same time, because the children could no more digest it. The milk was not of the same source, but it was the best then to be got here. In these cases all was strictly observed that was to be observed. To one of these children was then given asses' milk, which it digested very well; it was calm, did sleep well, had the bowels regularly opened once or twice a day, and of a good colour and quality. It drank a great quantity, and nevertheless the child would have died of exhaustion. Then a nurse was taken, and happily, after some time, the child would suck; a month later the baby was wholly altered for the best.

I write from my experience in Rotterdam, and, as I already mentioned, the feeding of the cows with "spoeling" (grains) must have influence on the milk. Nearly all I saw of the nursing with cows' milk turned out to be a mistake. I should never more advise it. My experience here led me to the conclusion that it is no adequate food, and, when once diarrhœa shows itself, you can seldom master it; the coagulations of casein irritate the stomach, and this goes from bad to worse. And, albeit that its use might still be pled for the better class, who can get good cows' milk, the use in general for the poor class, both as addition to mothermilk and as a total substitute for it as it is so often used, is wholly to be abandoned.

And here the use of the cow's milk did greatly diminish, to be replaced by the food I will now describe, and whose popularity only can be explained out of its intrinsic value. I mean the buttermilk.

(To be continued.)

ON THE USE OF THE CALOMEL VAPOUR BATH.(a)

By J. LAMPREY, M.B.,
Surgeon 67th Regiment.

Without entering into any physiological discussion as to the relative powers of absorption possessed by the internal surface of the body over the external, or the reason of the difference, we must admit that the external surface has sufficient absorbing powers, however modified, and that advantage may be taken of this circumstance to administer one of the most powerful remedial agents we possess—namely, mercury. It is found by experience that the action of mercury on the system, administered in the form of vapour such as we are about to describe, can be sustained without injury for a prolonged period, and this is a matter of great importance in the treatment of some forms of disease.

But it is not for administering mercury that this method is alone applicable; other substances used as medicines and capable of being rendered volatile by heat are equally suitable for this mode of administration, and if we had Surgeon-Major Wyatt's experience of this subject we no doubt should learn that the list of medicines capable of being used in this manner was not a very limited one. Surgeon-Major Wyatt appears to have given considerable attention to this subject, being first drawn to it by an observation of the late eminent Physician, Sir Henry Marsh, of Dublin, who was strongly of opinion that the method of treating disease by medicated vapour baths would be found to possess great therapeutic value. Surgeon-Major Wyatt has contrived a very ingenious instrument for administering the vapour bath to patients while in bed.

The following case will serve to show the action of the calomel vapour bath. In the month of February last a young woman, A. W., aged 23, was brought to me by her mother to consult me as to whether it were possible to do anything for her eyes or not. The history she gave was as follows:—She had been under Medical treatment for four months previously for inflammation of her eyes, and instead of improving she had become completely blind, so that she had almost made up her mind to try and get her into a Blind Asylum. Her eyes were very prominent, and there was an irregular bulging of each of them (sclero-choroiditis). There was great vascularity of the cornea of both eyes (keratitis), with such an amount of opacity that neither the pupil nor iris could be distinguished; she could not recognise any object, no matter how near to the eye or how strong the light might be. She had become very nervous, depressed in spirits, and broken in health. Her previous treatment consisted in the use of much iodide of potash.

I ordered the calomel vapour bath, using 10 grains of calomel at first twice a week, and 5 grains of bromide of potash to be taken three times a day, and an alterative pill of podophyllon, ipecacuan, and extract of gentian at bedtime every night. I also ordered small blisters to be repeatedly applied behind the ears, and that she should have good diet and much open-air exercise.

I desired her attendance after the lapse of a fortnight, when I found such an amount of improvement that the case appeared hopeful. There was less vascularity of the cornea, and she could distinguish light from darkness. The pupils also were dimly seen through the corneæ. Her health had greatly improved, and her spirits were returning. I increased the calomel to 20 grains, and continued the bath and other medicines as before, with the exception of the blisters, which had given her much annoyance.

At her next visit in a fortnight's time, I found great reduction in the vascularity of the cornea had taken place; she could reckon the number of fingers held up before her, and her health and spirits had greatly improved. She subsequently complained of much pain caused by the stumps of decayed teeth in her upper jaw. This pain she described as extending to her eyes. I extracted the stumps immediately, and gave her great relief, and it occurred to me that possibly they may have had some connexion with the condition of her eyes, as this could not be traced to any specific cause, and her improvement became more rapid after the stumps were extracted.

At the end of three months she was able to walk through the streets without the assistance of a guide, and could even see to read large-sized print. The cornea became clear enough to see that the irides were not implicated, and, what was more remarkable, the eyes had lost their prominent bulged-out appearance. Her treatment was now changed to sea-bathing, the vapour bath and other medicines being discontinued. At a later period of two months, I had the opportunity of again observing the completeness of the recovery in this case.

The prolonged action of the mercury kept up in this mild way by means of the vapour bath, no doubt excited a slow process of absorption of the products of morbid action without injury to the system, which very likely would have suffered had mercury been given internally. Hence its value in the treatment of secondary syphilis.

I have found that a very good substitute for the apparatus invented by Mr. Lee might easily be extemporised by any ordinary spirit lamp capable of giving a good flame, and a small tripod of iron wire to support a little tin dish, such as is used for making patties; by pouring about an ounce and a half of water into the dish, and putting into it a scruple of calomel, the spirit-lamp flame will first vaporise the water and then volatilise the calomel. This will answer almost as well as Mr. Lee's apparatus, the patient being, of course, enveloped well in blankets while seated on a chair over the spirit lamp, as when Mr. Lee's apparatus is used.

I lately succeeded in extemporising a calomel vapour bath in another way. During a visit to the west of Ireland, a country girl asked me if I could give her anything to cure her nose, which was attacked with lupus exedens. She stated that it commenced at the alæ of the nose about five years ago, that she suffered intense itching every evening, when she could not restrain herself from scratching her face so much as to make it bleed; her cheeks were covered with blood scabs from this scratching. The extremity of her nose and the upper lip were covered with a yellow scab, having much the appearance of being caused by purulent infiltration. The integuments near the margin of this scab were vascular—in short, she had the usual characteristics of this horid disfiguring disease. Her health might have been called robust with good muscular development, her occupation being that of a field labourer. Her complexion was florid. Her hair and irides were brown in colour. She was 20 years of age. She had little or no Medical treatment, being told that it was useless to give her anything. On examination of her throat, I found some vascularity of the soft palate passing down to the tonsils, but the remainder of the palate was free from diseased action. There was no eruption on the skin of any part of her body except the face. Suspecting a history of syphilis in her case, I directed her to take some lighted turf from the fire and to place it under a chair on which she was to sit, having first divested herself of all her clothing, and covered herself, chair and all, with blankets, and as soon as she began to perspire, her sister was to place a paper, containing ten grains of calomel which I had given her, on the fire under the chair, on which she was to remain seated for about half an hour. On the following morning (June 9) she called on me and reported what she had done; she said she arranged the fire of lighted turf under the chair, but did not take off her clothes, and remained seated on the chair till morning, perspiring profusely, so much so that she fainted two or three times, and at last had to be put to bed, she became so weak. She was so feeble the following day, she could hardly walk.

The mistakes she made were pointed out to her, and she was told to take another bath on the 10th, and report what she had done on the following morning. It was then seen that she understood how to follow the directions given her, and a third bath was ordered for the 12th. After the fourth bath, an eruption made its appearance over the body. It had a roseolar appearance, scattered over with vesicular-looking papillæ. It began to decline about the sixth bath, and was very itchy while it lasted. On the 18th she had twenty grains of calomel in the bath, and this quantity was used twice a week. The itching of the cheeks had ceased altogether, and the blood scabs had fallen off her cheeks. The vascular margin round the nose and upper lip had subsided, but the scab still remained. She began to feel in good spirits, as she considered she was getting rid of a most annoying complaint. She found some relief from the use of laurel cerate, an item of domestic medicine applied to her nose.

I lately had an account of this case sent to me by which I

(a) Read before the Portsmouth Army Medico-Chirurgical Society.

find she was greatly benefited, but not cured by the treatment. She was most anxious to resume the baths.

It was thought an advantage to cover the patient with a large waterproof cloak instead of the blankets; but the use of this will be found disappointing, as the material rapidly absorbs heat, and the vapours evolved by the heat condense on its inner surface. In the military Hospitals of Paris I have seen in all the bath-rooms a large box constructed for the purpose of administering the vapour bath. In the top of the box there was a hole wide enough to encircle the patient's neck, his head being outside the box, while the rest of his body was immersed in the vaporised medicines inside it; but it struck me that the use of a cane-bottomed chair and blankets was a far preferable method.

Other preparations of mercury have been used besides calomel, such as the bisulphuret of mercury, the red oxide, and the grey oxide. The green iodide of mercury has also been used. Mr. Langston Parker is the authority on this subject; but calomel will be found to be the most reliable and useful preparation. With the apparatus I have extemporised, sulphur vapour baths can be administered by pouring from half an ounce to one to two ounces of the solution of sulphur c. calce into the little dish and evaporating it by the spirit lamp, as in the calomel bath. The lime of the solution prevents the sulphur from causing the dish to melt when heated.

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

MR. MAUNDER'S CLINIC, FEBRUARY, 1870.—RECENT OPERATIONS.

Six cases of strangulated hernia were under care at the same time, five having been submitted to operation, and one had been reduced by taxis under chloroform. With regard to chloroform as an aid to taxis, Mr. Maunder has observed that just when the breathing becomes stertorous reduction is effected. Such was the case in the instance of W. B., aged 53, the subject of strangulated inguinal hernia. The anæsthetic had been previously administered, but its influence had not been fully exercised, and taxis had failed.

The danger of administering opium during strangulation was well illustrated in a female, E. M., 66 years of age, with strangulated femoral rupture. Symptoms had existed some twenty hours, and the stomach could not retain food. At this period half a grain of morphia was injected subcutaneously. All pain in the abdomen and tumour subsided, and the irritability of the stomach was so far allayed, that the patient was able to take and to retain half a basin of beef-tea, although strangulation persisted, and required operation. As a rule, opium should only be given in the very early stage of strangulation, and upon the understanding that if reduction be not effected within four hours of its administration, herniotomy is to be performed. When strangulation is relieved, opium is most valuable, in order to keep the bowel at rest, that it may have time to recover from the effects of constriction.

Cleft palate in a lad 12 years of age. The operation was performed under chloroform with a gag. The levatores palati were divided from behind, and the edges of the cleft came together without the least strain in the sutures. Union was perfect after the lapse of a week.

Amputation through the arm, in a lad 17 years of age, whose limb had been nearly carried away above the elbow by machinery.

Tumours, fibro-cellular, painful, and situated over the back of the ulna, removed from M. A. S., 24 years of age. Adenocele, the size of a large Tangerine orange, removed from the axillary border of the left breast of A. W., aged 15.

Internal hæmorrhoids, bleeding freely, removed from L. M., aged 39, by ligature.

Puncture per rectum performed on W. H., to relieve retention of urine consequent on stricture.

Two strictures were treated by rapid dilatation. In both a rigor followed the operation, but otherwise the cases did well.

Lithotrity.—J. L., 40 years of age, the subject of two good-sized stones, is doing very well.

Varicocele, severe, in a young man. Treated by subcutaneous section of veins.

HÔTEL-DIEU, LYONS.

WARD OF MR. OLLIER.

[Communicated by W. H. Corfield.]

In our visit to the ward of this celebrated Surgeon, the first thing that we remarked was the great crowding of the patients usual in all French Hospitals. Let the readers of this article imagine a single Surgical ward containing 115 beds separated by intervals of only a metre, and with the smallest possible amount of room for passages, &c., and then they will hardly wonder that, notwithstanding its considerable height, this ward is scarcely ever free from erysipelas, and that Mr. Ollier has over and over again petitioned to have it divided.

As we expected we found a most interesting and instructive set of cases, all kinds of bone diseases being amply represented. With regard to the subperiosteal excisions, for which this Surgeon is so justly renowned, we were shown one of the elbow-joint in a man of 47 years of age, a very bad subject for such an operation on account of his age and general unhealthy condition, and yet we were able to observe that the reproduction of the bones was very complete, and that active extension did exist to a slight extent, though the operation had only been performed about three months before. In another case of the same operation, practised on a young girl, the reproduction was astonishingly perfect, and had it not been for the cicatrix the most practised eye could hardly have detected, on seeing the elbows placed in extreme flexion, any difference between the contours of the two limbs. All the movements were also quite perfect, the only fault noticeable being that the arm could not be extended absolutely straight, as the new olecranon seemed to meet with some opposition; this, however, would doubtless be remedied by time and the continued use of the limb. We were fortunate enough to witness the dissection of a reproduced elbow-joint, the first that Mr. Ollier has had the opportunity of examining, because, as he significantly said to us, "all my other cases are alive." It was that of a young man who had died of phthisis fifteen months after the operation of excision. We can only say that we could have wished that all who are sceptical as to the real reproduction of bones in their original forms and positions after these subperiosteal operations might have been there to have seen for themselves.

Another class of very interesting cases was furnished by the "ostéite juxta-epiphysaire" which Mr. Ollier has been especially studying lately—cases of osteitis arising in the extremities of the shafts of the long bones without any affection either of the epiphysis or of the joint itself, to which, however, the inflammation may at a later period extend. The two ends of the femur, especially the upper one, the superior extremity of the humerus, and that of the tibia are the parts most frequently attacked. The treatment employed is absolute immobility with compression, after evacuation by means of a fine trocar of any subperiosteal effusion that may have taken place.

Chronic rheumatic arthritis, which, like all rheumatic affections, is very common at Lyons, was well represented by two cases of anchylosis of both hip-joints—in the one case in the position of extreme flexion, and in the other in that of extreme extension, so that neither of the patients could walk even with crutches. Among many others we noticed two cases of old scrofulous tumours ("white swellings") for which the patients insisted upon having their legs amputated, as they had been long enough inmates of Hospitals to learn that the statistics of excision of the knee-joint are not favourable to that operation.

A case of acute osteitis of the bones of the carpus, for which the excision of all the bones had been practised; unfortunately, however, the inflammation had spread to the metacarpal bones and to those of the forearm, so that an amputation was imminent—another example of the bad results of operations on the small bones.

A case of compound comminuted fracture of the first phalanx of the middle finger of the right hand from the explosion of a pistol. All the soft parts around, with the exception of the flexor tendons, had been torn to shreds without either of the joints being injured. Mr. Ollier removed the broken bone to the extent of three-quarters of an inch, and strapped the finger (which seemed only to be connected with the hand by the unhurt flexor tendons) to a splint; the result was most favourable, granulations sprang up from all the bruised surfaces, the finger was soon able to support itself, and even to perform slight movements of flexion, and is doubtless by this time quite healed.

We observed several aneurisms which were being treated in various ways, and an aneurismal varix which had been

produced by the puncture of the carotid artery through the internal jugular vein on the left side, and for which digital compression had failed.

And, lastly, we may mention two cases of fracture of the middle third of the humerus, in one of which impaction of the radial nerve between the fragments was diagnosed on account of the intense pain along the course of that nerve, which was increased by pushing the ends of the broken bone against each other. The nerve was cut down upon, found to be impacted, was liberated, and the symptoms disappeared; whereas, in the other case, with equal pain along the course of the nerve, impaction was proved not to exist by the fact that the pain was not increased by the above-mentioned manœuvre, while it was so by traction of the limb. The diagnosis was confirmed in this case also by the fact that, after the limb had been placed in an immovable position for a few days, all pain had ceased.

Mr. Ollier has lately treated in his private practice a case of tetanus by section of all the nerves of the forearm. The result promises to be a successful one. A contrivance to support the limbs during the application of the silicate bandages, which this Surgeon prefers to all others, consisting of a board pierced with a number of holes for the reception of props of various sizes and lengths, struck us as very useful. But we cannot say the same of a sort of hybrid instrument in vogue in the wards here, which consists of a spoon and fork made all in one piece, so that the patients are exposed to the risk of poking their own eyes out with the fork while they drink their soup with the spoon; we hope that no Hospital economist will copy that invention, the only advantage of which seems to be that about an inch and a half of Britannia metal is saved by it.

After the visit, M. Léon Tripier kindly showed us the large collection of preparations which Mr. Ollier has made to illustrate the direction of growth of the long bones, the possibility of transplanting bones and of producing bone in any part of the body by ingrafting a piece of periosteum there, and especially the regeneration of bones or parts of bones removed subperiosteally; and not only so, but Mr. Ollier caused two kittens to be brought in, on one of which he had excised the upper half of the humerus, and on the other its lower half; the reproduction of the parts removed, and which we saw, was all that could be desired, though kittens are not very good patients from their restlessness, and, indeed, the results of these operations are much more favourable on human beings — they are most reasonable patients.

We had the advantage of seeing Mr. Ollier perform his variation of Pirogoff's operation on the dead subject. Instead of leaving any part of the os calcis itself, he merely leaves the whole of its periosteum, which subsequently throws out a quantity of new bone and so forms a hard, firm stump, and M. Léon Tripier performed an excision of the elbow-joint for us by which we were able to see how much this operation is simplified by being performed sub-periosteally.

We had nearly forgotten to mention that ether is always used here as the anæsthetic agent, the Surgeons of Lyons thinking chloroform more dangerous. We are certainly of opinion that, should they take to use chloroform, the administration of it should not be left to the inexperienced hands of any *externe* or *stagiaire* who may happen to be present, as appears now to be the case with the ether.

London Labourers' Dwellings Society (Limited). — It appears by the seventeenth half-yearly report that this Society is in a very flourishing condition. The capital of the Society now amounts to £42,200, and several blocks of buildings have been added to its estates.

Health of Newcastle and Gateshead.—Dr. Philipson, in his first report for 1870, includes the four weeks from January 2 to January 29. The annual rate of mortality in Newcastle has varied from thirty-three to twenty-three per annum to 1000 persons living. The average of the four weeks is twenty-eight against twenty-seven the average of the four weeks in London, and twenty-four in Sunderland. In the corresponding weeks of the four years 1866 to 1869, the averages in Newcastle were 34, 42, 27, and 30. The total of the deaths registered from all causes in Newcastle has fluctuated between 84 and 59. The average of the four weeks is 71 against 64 the average of the preceding four weeks, and 75, the average of the corresponding period of 1869, and 69, that of 1868. Of the 286 individuals who died during the four weeks, 71 were under one year of age, and 77 were sixty years of age and upwards, together 148; leaving 138 for the years of age intermediate.

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Medical Times and Gazette.

SATURDAY, MARCH 19, 1870.

THE FORTHCOMING MEETING OF THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

The meeting of Fellows and Members of the Royal College of Surgeons, which is to take place in consequence of a requisition signed by 250 Fellows and Members, is fixed for Thursday next, the 24th inst. This meeting is looked forward to with no little expectation both by the party of moderate reformers and by those of more extreme views. We have no doubt that resolutions will be proposed to the meeting which will embody the sentiments of the moderate and, as we think, more rational party, while it is not improbable that ultra-propositions, inimical alike to the well-being and usefulness of the College and to the independence of the Medical Profession, will also be submitted. We would ask the gentlemen who clamour now so loudly for a clean sweep of the existing corporations and a single board of examiners, to be appointed by Government, what they hope to gain by the change? Do they think that admission to the Profession will be guarded more jealously by Government officials than by the union of the corporate bodies, who are composed of Medical men, and to whose interest as well as honour it is to admit into their own rank only persons rendered suitable by education and training? If the corporate bodies were deprived of the *prestige* and revenues derived from examinations to-morrow, would the Medical Profession be in any way gainers by their fall? On the contrary, we believe the Profession would lose most wofully both in status and in scientific standing. At present almost every Medical man in the kingdom is a Fellow or Member of one or other Royal College. Under the ultra scheme of our radical party he would be a mere Licentiate of the Government, who would be bound, by the principles of free trade, to admit men with the lowest possible amount of knowledge, and to pay them in their public capacities as little as possible. Instead of the fees being appropriated to the support of a noble temple of science, such as the Hunterian Museum—of which a Profession in any age or country would be justly proud—of libraries of scientific and Medical knowledge which are open to all, and for the benefit of all Medical men, and of institutions which have been long identified with the Profession of Medicine by the public, and which at least are respectable from their antiquity, the fees will be diverted into the coffers of the Chancellor of the Exchequer; the Hunterian Museum and libraries would be lost to the Profession, and become mere appendages of the British Museum; and the Practitioners of Medicine, isolated

and scattered, with less organisation than the chemists and druggists now possess, would be left without a corporate existence or head, under the dictation of the President of the Privy Council or the Prime Minister of the day, utterly powerless for combined action, and lacking all the advantages which independence and union always confer on a public body. We ask again, is this the condition to which it is desirable to reduce the Profession in the three kingdoms? Reforms are undoubtedly needed. It is necessary that the unseemly competition between the examining bodies should be put an end to; that the standard of Medical education should be uniform, and in some quarters higher than at present; and that the representation of the corporations and universities in the General Council should be placed on a broader and more liberal basis. But all these necessary improvements may be had without the demolition of existing institutions, without any revolution, by the simple process of combining examining boards, and giving the members and licentiates of corporate bodies a voice in the choice of the person who is to represent them in the General Medical Council. To demolish is the work of the revolutionary; to recombine existing elements, preserving all that is of use and excellence, but rectifying error and eliminating abuse is the work of the true reformer.

A RECENT TRIAL IN THE COURT OF PROBATE.

In these latter days the Medical man may have to "play many parts." First, and chiefly, he has to be Physician to the body. Secondly, he has also to be Physician to the mind, for, whatever may have been the case in Shakespeare's time, the Medical man now not only ministers to "all the ills that flesh is heir to," but he does also "minister to a mind diseased." And further, as in times far back the priest was also the Physician, so now the Physician not rarely ministers to the perturbed and anxious spirit of his patient, and, in Protestant communities at least, confessions of sorrow, temptation, and of sin are breathed into his ears as often or more often than into those of the priest. Thus he may be called on to be not only the healer, but also the Adviser, the Soother, the Consoler. The consciousness of having fulfilled any or all of these functions is no doubt a great joy to a Medical man, but, alas! it is too often his only reward; for the censorious and hard-hearted world is but too ready to treat him with the most cruel ingratitude, and to impute to him the meanest and basest motives for his purest and most disinterested actions in any of these capacities.

In this way a member of our Profession, an M.D. of the University of London, has lately been dragged into her Majesty's Court of Probate, and made to lay bare, before a scoffing multitude, his most tender and sacred feelings, to have dissected, for their edification, his most generous and unselfish actions. Among the patients who enjoyed the advantage of the Professional care and skill of this gentleman was a certain Mr. A., a provision merchant, who, by his industry and business capacities, had amassed a fortune amounting to at least £120,000, but who had not had any great educational or social advantages, and appears not to have been of the most temperate habits. In 1863, he had, while in a state of intoxication it was said, been thrown from his gig on his head, and was never the same man mentally afterwards. Nevertheless, in November, 1865, being then 60 years of age, he married a Miss X. Y. Z., a young lady of 30, whom he had known and admired for some twelve years, and who seems to have been his housekeeper. In December of the same year, being advised by his solicitor that his marriage had revoked all former wills, he executed a new will, by which his widow would inherit about £40,000. After marriage, his health became worse and worse, he grew more and more forgetful, childish, and unequal to any business, and, notwithstanding all the care and attention of his Doctor and his wife, in August, 1866, he died. It is not clear to us whether the M.D. knew much of Miss X. Y. Z. before she rose to be Mrs. A., but he acknowledged that he had advised Mr. A. to marry her, "thinking that this would improve his health." And what more natural? The Doctor was a widower, and kept warm in his heart a tender recollection of all that a woman can be as a purifier and comforter; he knew what it was to have a wife able "to warn, to counsel, or command;" and, conning anxiously over the means of benefiting his patient, it may well be that one of his prescriptions ran—"℞ Miss X. Y. Z. to wife." However, Doctors are not infallible, and even this prescription failed; but as the M.D. became more and more intimately acquainted with the lady as Mrs. A., he learnt to fully recognise and appreciate all her virtues. Those few months of her marriage life were, we may well understand, months of sore trial; it was a period of constant, anxious, tender watching, of disappointment and deferred hope, such as makes the heart sick; but the M.D. was there to share the wife's anxieties, help her in her troubles, and to rouse her courage if it ever grew faint. And as he watched her in the performance of her holy duties, we can imagine, and from the sequel may even suspect, that, in his widowed and desolate heart, admiration of her virtues and pity for her trials gradually melted and blended into a soft feeling, the feeling to which the poet tells us pity is akin. Not that he betrayed any such feeling. No; brave and true as the Spartan boy, he suffered in silence; as he affirmed in answer to the rude questioning of heartless barristers, he never made love to the lady during her husband's life; "he let concealment, like a worm in the bud," etc. But Mr. A. died, and then the M.D., having to the last faithfully done all he could for the husband, was free to appear in the character of Consoler to the widow. Recognising this to be indeed a duty, he did not falter or hesitate, but at once set to work to soothe her sorrows, heal her wounds, and wipe away her tears. His "desire, like all strongest hopes, by its own energy fulfilled itself:" the lady *was* comforted; within a week of her husband's death she was engaged to the M.D., and in three months they were married. Thus for once virtue was well rewarded; the attentive and affectionate wife-nurse gained a new, appreciative, and self-denying husband, and the M.D. a well-tried and well-dowered wife.

But, "alack! for the rarity of Christian charity under the sun," envious relatives of the deceased did not scruple to believe, or to affect to believe, that his will had been made under undue influence, and when he was incapable of clearly understanding what he was about. One of them, a brother, was bought off for the sum of £5000; but afterwards a nephew appeared from Australia, and insisted on carrying the matter into the Court of Probate. And during the trial it must be confessed that some things came out which, in worldly phrase, bore an ugly aspect. The M.D. acknowledged that, though "there was no intimation that he loved" the lady before her husband's death, yet he "had kissed her before this." The kiss was, of course, a purely Platonic kiss—a kiss of friendship, of sympathy, of anything but love. Respect for the woman, common honour and honesty between man and man, to say nothing of the relations of patient and Doctor, forbid our believing for a moment that it was a kiss of love that the Doctor gave his patient's wife. Still, we must allow that it was not pretty, and that it was unprofessional; and we must be permitted to regret the kiss.

Very strong evidence was given to show that the deceased had not testamentary capacity, and one witness affirmed that on the very day of his marriage "he forgot all about it, and wished to have a separate bedroom." Evidence to the contrary was by no means lacking on the other side; but the jury found against the will. The effect of the verdict may not perhaps be very grievous; for, as it adjudges Mr. A. to have died "detested and against his will," his widow will inherit a share of his personal property, and thus Mrs. M.D. (*née* X. Y. Z.) may still be possessed of a by no means despicable, though lessened, store of golden charms. And

though she, womanlike, may regret that she has less of this world's goods than she thought to bestow on the present choice of her heart, the high-minded Doctor will, no doubt, derive joy and satisfaction from a verdict that sweeps away some of the tinsel which, to worldly eyes, may have alloyed or obscured the motives for his marriage.

And it seems not impossible that the purity and disinterestedness of his love may be put to a far sterner test; for during the late trial it was hinted that the validity of the marriage of Mr. A. might possibly be contested on the ground of his mental state at the time. If such an attempt should be made and be successful, the M.D. will have married a dowerless damsel instead of a wealthy widow, and a grand opportunity will be given him to prove himself, by his future behaviour and by the strength and constancy of his love, a single-minded and honourable gentleman and a worthy disciple of Hippocrates. We are almost tempted to hope, for the honour of the Profession and for his own vindication, that such an opportunity may not be denied him.

DR. LETHEBY AND THE REGISTRAR-GENERAL.

A PRETTY little dispute has arisen between the Medical Officer of Health for the City of London and the Registrar-General out of an attack by the former upon the latter in a recent report. Dr. Letheby complains that the death-rates published weekly by the Registrar-General afford no reliable indication of the relative salubrity of the places to which they relate, because allowance has to be made for birth-rate and immigration, that by publishing them without these necessary corrections he is misleading the public by creating on the one hand unnecessary alarm when the mortality is apparently high, and on the other false confidence when it is low, and further, he says that "it would be more satisfactory if the statistics submitted to the public were more reliable and less obscured with remarks of a sensational character." Major Graham, thereupon, has accused Dr. Letheby in a letter addressed to the Commissioners of Sewers at Guildhall of ignorance of the subject, and refers to the supplement to his twenty-fifth annual report in which he was at the pains of pointing out very fully the reservations to be taken into account on the use of such death-rates as he publishes. Dr. Letheby, of course, could not sit down quietly under the imputation of ignorance; so he has published a reply in which he undertakes to substantiate his statements.

The explosion is to be regretted because it appears to us to have been quite needless, inasmuch as any good that can come out of it might have been attained in a more quiet manner. On the one hand, Dr. Letheby is mistaken in saying that the Registrar-General's statistics are not reliable simply on account of their misinterpretation by ignorant people; and, on the other, the Registrar-General can hardly intend seriously to impute ignorance to his adversary. Both these gentlemen know perfectly well what they are talking about. One is quite as well aware as the other of the corrections which must be applied in using death-rates as an index of salubrity. The Registrar-General seems to think that he has done enough to warn the public against a misemployment of his perfectly reliable statistics by once for all pointing out in an elaborate and very careful manner the corrections by the aid of which misconceptions of his meaning may be avoided. Dr. Letheby thinks that the bases of correction should be supplied week by week. After all, this is only a matter of detail relating to a question of convenience in which an accommodation might have been easily effected without any dispute between two public scientific authorities.

The last paragraph of Dr. Letheby's letter perhaps throws some light on the origin of the outbreak, for it contains an allusion to the old passage of arms between himself and the distinguished chemist employed to make the analyses of the London waters. It may, perhaps, be thought that, as the battle between these gentlemen was fairly fought out last year before the Association of Health Officers, Dr. Letheby might have spared his opponent this indirect thrust. Everybody knows the position of the two combatants. Dr. Letheby objects to the sensational style of some of the writing in the weekly returns of mortality, and his remedy would be the publication of the bare figures without any explanatory comments. But he forgets that the readers of the papers issued from the General Register Office are many of them persons to whom such comments are a great convenience; and, although we agree with him that fine writing is objectionable in official productions, we cannot think that on that account all writing whatever should be abstained from. It might be retorted, why does not the Medical Officer of Health for the City content himself with the publication of mere tables?

CHEMICAL CONSTITUTION AND PHYSIOLOGICAL ACTION.

OUR readers are aware that for some time back Drs. Crum Brown and Fraser, of Edinburgh, have been engaged in investigations as to the modifying effects of new chemical combinations in some of our more common and more potent alkaloids. For their first series of investigations they selected strychnia and brucia, morphia, thebaia and codeia, and nicotia. The modifying agents selected were the iodides of methyl and ethyl, compounds which before now have done good service to the chemical inquirer. Briefly, their results were, not only a total change of effect, but also a notable weakening of the powers of these alkaloids. Let us select, as an example, nicotia. A rabbit, weighing 3 lbs., had introduced beneath its skin 15 grs. of iodide of methyl-nicotium, containing as much as 5·4 grs. of nicotine. Trembling and partial paralysis followed, and lasted about an hour, after which complete recovery took place. Some time afterwards the same rabbit, having perfectly recovered, had subcutaneously injected rather less than half a grain of nicotia as sulphate. Death followed in fifteen minutes. No doubt the result is generally influenced by the greater insolubility of the iodides, but the more soluble sulphates exhibit the same peculiarity, and the nicotine compound is remarkably soluble. Again as to effect. The action of strychnia now-a-days is well known to be spinal, but in the new compounds it is found to act on the peripheries of the motor nerves. In the case of morphia, its convulsant action disappears, and in its stead there is a paralysing action on the peripheries of the motor nerves, whilst its hypnotic effect is materially lessened. In other words, the convulsant effects of such substances as strychnia and brucia disappear, and in their place a curare-like action is produced by means of the iodide of methyl.

In a second series of experiments recently made public, the same gentlemen investigated atropine and conia. Atropia is not a substance easy to study, for its action is extremely complicated, affecting not only the cerebro-spinal system and the sympathetic generally, but having also a specific effect on the vagus, arresting its inhibitory powers over the heart's action. It is not, however, very poisonous. Thus, the minimum fatal dose of sulphate of atropia for a dog weighing eight or nine pounds is about fifteen grains; whilst rabbits, curiously insusceptible of its effects, require even a larger quantity.

Now, the first and most notable peculiarity of the methyl compounds of atropia is their greatly increased lethal power, a dog dying speedily with ten grains, and a rabbit with three. But it is not only in degree, but also in kind, that the action of atropia is modified in methyl-atropium. Atropia itself paralyses apparently through the sensory nerves and the spinal cord, also stimulating the cord and giving rise to convulsions, whilst it has a decided diuretic and cathartic effect. The ammonium compounds of atropine possess none of these properties. True, they paralyse, but, as in the case of the compounds previously investigated, by a curare-like action—that is, through

the peripheries of the motor nerves. It is somewhat doubtful if atropine or belladonna acts at all on the motor nerves. If they do, the effects of the new compounds are in this respect very much greater, it being to this property that their increased lethal activity is due. But what as to the inhibitory action of the vagus? This atropine arrests, and this power is not only retained, but greatly increased in the new compounds. In this respect the methyl-atropium compounds would constitute valuable antagonistic agents to such substances as digitaline, which markedly increases the inhibitory action of the vagus.

In investigating conia, the first curious result obtained was that all specimens of conia do not act alike. Thus, a famous specimen of conia which has long been in the possession of, and was originally prepared by, Professor Christison, of Edinburgh, gave very different results from one prepared by Morson, of London. Thus, of the hydrochlorate of Dr. Christison's conia, two-tenths of a grain speedily killed a full-grown rabbit; the same dose of Morson's preparation produced no distinct effect. This probably arises from the fact that, as was shown by Von Planta and Kekulé, ordinary conia is a variable compound of two bases, conia and methyl-conia, the latter being much less active than the former, and of it Morson's preparation would seem to have contained an excess. The researches detailed by Drs. Crum Brown and Fraser are full of interest, especially those on frogs, who were affected by these and another artificial base, dimethyl-conium, in an extraordinary manner. Every sign of life had in some instances gone, and yet the animals came back to life; whilst in others it was only the supervention of *rigor mortis* which clearly indicated that life had finally departed. Dimethyl-conium paralyses as does the two primary bases, but in a different way. Conia destroys the action of the spinal cord; dimethyl-conium does not, but it paralyses the ends of the motor nerves most effectually, yet so that the actions of the spinal cord and sensory nerves are fully retained, if not exaggerated.

In conclusion, we would remark on the extremely interesting character of these investigations. Of immediate and direct practical good there may not be much derivable from them; but this is often the case with scientific investigations—it is not until many days after that the true value of such becomes apparent and available.

THE WEEK.

TOPICS OF THE DAY.

The Executive Committee of the General Medical Council have been summoned during the present week for the purpose of an interview with the Lord President of the Privy Council on the subject of the amendment of the Medical Acts, and to consider matters of business referred to them by the Medical Council. The interview with the Lord President took place, we believe, on Wednesday afternoon, and was by his Lordship's request.

We have received a circular marked "urgent" which has been issued by the Medical Reform Union, praying for subscriptions for the payment of expenses already incurred in getting up the memorial with its 9724 signatures to the Home Secretary, and for funds to be spent in watching and controlling the forthcoming Medical Acts Amendment Bill through Parliament. Already between £400 and £500 have been spent in getting up the memorial and procuring signatures; but of this sum only between £100 and £200 have been subscribed. It would, we think, have been more dignified to have procured a fund for carrying out the objects of the Union before so large a debt had to be announced and so "urgent" an appeal had to be made. However, the moral we wish to be drawn from the fact is this. The party represented by Messrs. Gamgee and Bell Fletcher are anxious for the direct representation of the Profession in the Medical Council. In order to support their view they have obtained, by an amount of canvassing, advertising, letter-writing, and petitioning, represented by the sum of nearly £500, 9074 signatures to their memorial. Now, can any one suppose that a representative to the General Council would be returned by the whole Profession at a smaller expense in money and canvassing than this which the Medical Reform Union have to meet? We would ask, Is the Profession to be subjected every few months to contests so expensive? If so, we cannot suppose the honour of representing them will be coveted by any except the millionaires—if there are any—in the Profession, and we are sure that the men who would do the most work and the best work in the Medical Council would be practically excluded.

About two years ago we reported in this place some original observations made by Dr. B. W. Richardson on the action of methylic ether as a general anæsthetic, and described an experiment we had seen him perform, in which a guinea-pig recommenced to breathe spontaneously four minutes after the respiration had been brought to rest by the inhalation of this ether. Lately, Dr. Richardson has been using the methylic ether for producing rapid anæsthesia in the human subject with remarkable results. In tooth-extraction he has narcotised with the agent to sufficient degree of sensibility within the minute, with recovery within the minute following. Curiously, too, the insensibility to pain precedes loss of consciousness, so that the patient, while insensible of pain, will often do what he is requested, as if he were conscious, but without recollection of the circumstance. The fact supports certainly an opinion expressed by Dr. Richardson on Monday last at the Medical Society, that a general anæsthetic will yet be found which will not interfere with consciousness at all, while it will utterly remove peripheral sensibility.

Dr. Arthur Farre, F.R.S., and Dr. West were elected Honorary Fellows of the Obstetrical Society at the last meeting of that Society.

Dr. Brady's efforts in behalf of the Poor-law Medical Officers of England, Wales, and Ireland, deserve, and will receive, the thanks of the whole Profession. We were very glad to announce last week that the Royal College of Surgeons of Ireland has acknowledged, by conferring its Honorary Fellowship, its sense of the great services Dr. Brady has rendered to the Profession in Ireland by procuring from Parliament superannuation allowances for the Irish Poor-law Medical Officers. Dr. Brady has now obtained leave to bring in a Bill to procure the same boon for the Poor-law Medical Officers of England and Wales. It would be premature to speculate on what measure of success may attend his effort. We trust that the whole Medical Profession will use all the Parliamentary interest it possesses to insure the passing of the Bill. But whether Dr. Brady be successful in this session or not, it is a point gained to have the matter fairly brought before Parliament and the public. Medical legislation is worth nothing if it does not improve the education and status of those who attend the poor as well as of those who minister to the rich. But Parliament must be taught that a higher class of Practitioners cannot be procured at the miserable salaries which have hitherto disgraced our Poor-law system. The Medical man must be fairly paid, and like other servants of the public he must be able to claim a provision for old age and sickness. If Dr. Brady's efforts are crowned with success, he will have accomplished that which will make his name a household word at thousands of Medical firesides, and will hand it down for the honour and gratitude of posterity.

It is reported that all communication with Dr. Livingstone has been arrested by the prevalence of cholera along the east coast of Africa. The supplies and porters sent by order of the Earl of Clarendon to Dr. Livingstone have been stopped by the epidemic which is said by Dr. Kirk to have killed 10,000 persons at Zanzibar, and 30,000 in the whole island.

Our readers would be sorry to notice that a paragraph announcing the probable retirement, on account of ill-health, of Mr. W. J. Clement from the representation of Shrewsbury appeared recently in the papers. Mr. Clement, however, has since stated that no declaration of his intended retirement has been made with his knowledge or consent. His health, we are glad to hear, is improving, and he has no intention of resigning his seat.

The bench of magistrates who have been investigating the case of the Welsh fasting-girl have committed the father and mother of the girl for manslaughter. Mr. Coleridge pressed hard to obtain a committal of one or more of the Medical men who watched the case, but we are happy to see he did not succeed.

It appears that our omnivorous Chancellor of the Exchequer has fixed a longing eye upon two acres and a half of land reclaimed from the Thames by the Embankment. The land in question lies between the end of Whitehall-place and Whitehall-gardens. Mr. Lowe proposes to build over it and apply the proceeds to the relief of taxation. We cannot wonder that the ratepayers of London, who may be said to have created the land in question, having paid for its reclamation, demur to this arrangement. It appears that this piece of land is claimed as part of the Royal domain, the revenues of which are received by the Chancellor of the Exchequer by an arrangement which was made on the accession of the Queen. The Embankment Act, however, states that the space reclaimed from the Thames other than the private domain of the Crown, shall be devoted for ever to public recreation and amusement. Now, it seems a pity that this piece of land, although nominally belonging to the Crown, should be covered with buildings instead of being laid out in gardens or ornamental grounds, of which Londoners for health have not too many. But if this must be done, it would be fair, we think, that the ratepayers of London should be relieved of some burdens by the profitable employment of the land before the taxpayers of the whole kingdom. Their money has created it, and they ought to have the benefit, although any argument for covering such a piece of public ground with buildings contrary to the spirit, if not the letter, of the Embankment Act, would apply with equal force to a proposal by the Government for profitably using as building land any one of the Royal Parks.

THE AMALGAMATION SCHEME.

At a final meeting of the Royal Medical and Chirurgical Society held on Monday evening last, the scheme for an amalgamation of the various existing societies was discussed, and received its last modifications at the hands of the Fellows. All important changes which the scheme sustained in the committee of delegates have been adopted by the Society with one exception. They insist on a Medico-Chirurgical Section. This is no doubt fatal to the scheme, for the Obstetrical Society will not consent to union on such terms; the action of the Pathological Society is also somewhat doubtful. The tone of the Medical and Chirurgical Society was perhaps best shown by the adoption of a final motion by Mr. Holmes to the effect that while the Society did not object to modifications of details, they would not consent to any fundamental change in their plan. However much we may regret the falling through of the scheme as originally proposed, it must not be forgotten that it was really a plan for amalgamating existing bodies, not for forming a totally new one. The sections were made as much as possible to conform with existing societies, and were not such as would constitute the divisions of a typical Academy of Medicine. Now the Medical and Chirurgical Society have the matter very much in their own hands. It is well known that a large and influential section of the Fellows are averse to any change of name or even to amalgamation; but it is evident that something must be done towards revivifying the Society. If they do away with the entrance fee, it is certain that a large number of the younger members of the Profession will join their ranks. Let them form sections for themselves; they are certain, with good management, ultimately to swallow up at least the majority of existing societies.

ARMY MEDICAL DEPARTMENT.

Inspector-General of Hospitals J. Mouat, C.B., V.C., on temporary half-pay, having been declared fit for service by a Medical board, is, we believe, soon to proceed to Bombay to relieve Inspector-General Dr. A. Gordon, C.B., as principal Medical officer of British troops in that command. It is also probable that Dr. Currie, C.B., will shortly be restored to the full-pay list for the purpose of relieving Inspector-General S. M. Hadaway, at present principal Medical officer of British troops at Madras.

ARMY MEDICAL SCHOOL AND ROYAL VICTORIA HOSPITAL, NETLEY.

We understand that Staff-Surgeon E. Becher, M.D., has been nominated Assistant Professor of Pathology in the Army Medical School, Netley, *vice* Staff Assistant-Surgeon Vivian Wearne, who has resigned that appointment previous to going on temporary half-pay. The rumour that General Eyre is likely to succeed Major-General Wilbraham, C.B., as military commandant at Netley will prove, we believe, to be quite without foundation.

ORGANIC MATTER IN THE BREATH.

The now well-known ammonia process of Wanklyn, Chapman, and Smith is doing good service in various ways. In the hands of Dr. Ransome, of Manchester, it has furnished a means of measuring the nitrogenous organic matter existing in the breath in health and disease. From the account of his experiments in this direction, read by Dr. Ransome to the Literary and Philosophical Society of Manchester a short time ago, we gather the following. The total quantity of organic nitrogenous matter passing out of the lungs in the space of twenty-four hours, the subject being in a state of health, is about 3 grains. In disease the organic matter varies considerably; in health it is tolerably constant in quantity. On the other hand, the free ammonia in the breath is very variable even in healthy subjects. One of the most interesting results given by Dr. Ransome is the fact that a large quantity of organic nitrogenous matter is thrown off by the lungs in kidney diseases, especially in Bright's disease. A deficiency of organic matter was observed in cases of catarrh, measles, and diphtheria.

ORGANIC CHEMISTRY IN THE ROYAL SOCIETY.

A curious controversy is being carried on in the Royal Society between Dr. Frankland and Mr. Duppa, on the one side, and Mr. Wanklyn on the other. In the year 1856 the two first-named chemists published a most interesting research on the production of some very strange compounds by means of sodium and acetic ether. They described acetic ethers wherein the metal sodium had replaced a portion of the hydrogen contained in the radicle of acetic acid. These strange substances were sodacetic ether, di-sodacetic ether, and tri-sodacetic ether, and were described as being produced by the driving out of hydrogen by sodium, which thereupon took the place of the hydrogen that had been expelled. By the action of iodide of ethyl on the two former of these sodium-compounds, Frankland and Duppa professed to have got butyric and caproic ether. In 1868 Mr. Wanklyn made the startling announcement that there is no production of hydrogen when sodium acts on acetic ether. This result, if it should prove to be in accordance with the fact, is obviously destructive of the whole fabric raised by the first-named chemists. Accordingly, they made a most ingenious, but rather desperate, defence of their

work at a recent meeting of the Royal Society. They attribute the discrepancy to the effect of pressure. Mr. Wanklyn (so they say) operated under high pressure, and therefore obtained no hydrogen, whilst they operated in open vessels and in the absence of pressure, and so got hydrogen gas. Mr. Wanklyn replies that he did not work under high pressure, and that he sometimes operated under no pressure at all. Dr. Frankland's hydrogen (according to Mr. Wanklyn) is a product of alcohol, not of acetic ether.

THE METROPOLITAN BUILDING ACT.

A DEPUTATION from the Metropolitan Association of Medical Officers of Health had an interview with the Home Secretary last Tuesday in order to bring under his notice some serious deficiencies in the Building Act which have an important bearing upon the sanitary arrangements of the dwellings which are springing up in all directions around London. The points chiefly dwelt on by Mr. Liddle, who headed the deputation, Dr. Tripe, Dr. Vinen, and Dr. Aldis, who addressed Mr. Bruce, were the practice of erecting buildings upon deeply excavated ground which had been previously filled in with rubbish containing a good deal of unwholesome decomposable materials without the protection that would be afforded by a layer of flagstones or concrete at the foundation, and also that of building upon wet and undrained land. Instances were mentioned in which the surveyors of the Metropolitan District boards, contenting themselves with the deposit of plans for house drainage, took so little further interest in the matter that builders either put in no drains at all or made a pretence of putting them in without any communication with the sewer, or departed from the plans deposited from motives of economy. They also drew Mr. Bruce's attention to the evasions which were practised in respect of the 29th section which provides for the ventilation and lighting from the outside of all the inhabited rooms of a newly built house. Mr. Bruce in reply expressed his general concurrence with the views of the deputation, and in the necessity there was for an amendment in the statute. He considered, however, that this matter formed a part of a more comprehensive scheme of sanitary legislation, and that it should be dealt with by the Government when the Sanitary Commission now sitting shall have made its report. He was reminded by Dr. Vinen that the inquiries of that Commission excluded London, but replied that although such was the case Government would not be thereby deterred from including the metropolis when the question of amendment in the sanitary laws came under consideration.

FROM ABROAD.—DEATHS IN BERLIN IN 1868—CUBEBS IN DIPHTHERIA—REUNION OF DIVIDED TENDONS.

GEH. MED.-RATH. E. MÜLLER has just published a summary of the results derived from the registration of deaths in Berlin during 1868. The entire number amounted to 24,687, which is a large one, being 4793 greater than in 1867, and only 2315 less than in 1866, which was the year of the cholera. According to the census there were at the end of 1867 702,437 inhabitants in Berlin, which gives a mortality in 1868 of 3·52 per cent., or 1 in 28·33 inhabitants. The births amounted to 28,880—viz., 14,813 boys (2245 illegitimate), and 13,987 girls (2120 illegitimate), the proportion of deaths to births being 100 to 116. Of the 24,687 deaths 13,040, or 52 per cent., took place in males, and 11,647, or 48 per cent., in females. With respect to age, it is found that 1318 were born dead, and that 9357, or 39 per cent. (5026 boys and 4331 girls), died during the first year. From 1 to 5 years 4290, or 18·2 per cent., died; from 5 to 10 there were 1024 deaths, or 4·3 per cent.; from 10 to 20 only 701 deaths occurred, but during the next ten years (20 to 30) they rose to 1631, after which they diminished at each decennial period. As many as 307 took place between 80 and 90, and 30 between 90 and 100. The suicides were unusually numerous during 1868—viz., 266—206 male and 60 female. The modes of their performance were: Hanging in 117, shooting in 46, poisoning in 27, charcoal fumes in 11, drowning in 52, stabbing in 2, incised wounds in 7, fractured skull in 3, and running over on a railway by 1. The number of deaths from accidents was smaller than usual. Among these were, however, 23 who lost their lives from inhaling carbonic acid gas, and there would have been very many more but for the success which attended Medical assistance. Only 8 persons died from being run over. There were 128 deaths from variola, 600 from scarlatina, and 236 from measles. Pertussis only caused 82 deaths, but 804 persons died of gastric and nervous fevers. Among the diseases that carried off an unusual number of children during the year were the diarrhœa and cholera of children, the deaths from these under the second year amounting to 2134, besides many others returned as dying of wasting. During the first year 27 per cent. of the deaths of legitimate and 51 per cent. of those of illegitimate children were so caused. Diphtheria proved very fatal, no less than 1030 deaths from this cause being recorded. Croup, also, caused 441 deaths. Phthisis pulmonalis gave rise to 2706 deaths, being 11 per cent. of the entire deaths. Several tables are given exhibiting the deaths as they occurred during the different months and in the various quarters of the town.

In a recent number of the *Gazette des Hôpitaux* M. Vaslin gives some account of the treatment of diphtheria by means of cubebs, introduced some time since by M. Trideau, and especially employed by M. Bergeron, of the St. Eugénie Hospital. This gentleman has already communicated several cases to the Société des Hôpitaux, telling in favour of this agent; and in the present paper M. Vaslin, his interne, gives the results as observed at the St. Eugénie during 1869. During this year 42 cases of diphtheria (cases of croup and diphtheria seem to be confounded together by the French Practitioners), 8 being examples of angina and 34 of croup. Of the 8 anginas, 7 recovered, the other dying of consecutive diphtheritic paralysis. The pharyngeal diphtheritis was primary in almost all these cases, the false membranes existing chiefly on the tonsils. The general symptoms were limited to mild febrile reaction, except in two cases, when temporary subdelirium was present. The sole medicine employed was a saccharate of cubebs, twenty grammes being administered during the day in divided doses, no local treatment being resorted to. The false membranes were gradually dissolved, the duration of the disease not exceeding ten days.

Of the 34 cases of croup, 13 were cured, 3 without and 10 with operation, and 21 died, all but one having been operated upon, so that of the 34 cases, tracheotomy was performed in 30. None of the children less than 3 years of age recovered. Most of these children were brought to the Hospital at a late period after various means had been tried, 6 only having been admitted during the first or second stage, and all these recovered, 3 with and 3 without operation. In 27 cases tracheotomy was immediately required, and of these 7 only recovered. Of the 20 deaths 4 were due to croupal asphyxia and diphtheritic intoxication, 1 to accidental asphyxia, and 15 to secondary broncho-pneumonia of a diphtheritic character.

Thus all the cases of diphtheritic angina to which cubebs were administered recovered, except one in which generalised diphtheritic paralysis had set in, and M. Vaslin believes that it was by the agency of this drug that their solution in the place of their deposit and the prevention of their propagation to the larynx were effected. He protests against the practice recommended by Bretonneau and Trousseau of cauterising the surfaces invaded by diphtheria, as the end in view can be far better obtained by the use of cubebs, while the operation is most painful for the patient and difficult for the Surgeon. The saccharate of cubebs (the proportion is not given) is taken readily by the children dissolved in water. In

croup the remedy cannot have a fair trial, for the children are only brought to the Hospital at a late period of the disease, after emetics and various inefficacious or mischievous means have been tried, and when tracheotomy is the only resource. Of the six who were brought at an early stage three recovered. Even in the advanced cases, however, the recoveries have been numerous, as of thirty children ten recovered after tracheotomy aided by cubebs, and in cases calling for it the administration of rum. The cubebs have to be continued, associated as indications offer with the alcohol for some days after the operation. In four instances in which life was prolonged to from the eighth to the twentieth day after the operation, the resistance was evidently due to the employment of the alcohol, and had they been in a more favourable locality than the walls of a Hospital they would probably have recovered.

The following are the conclusions of an elaborate memoir read at the Académie des Sciences by M. Demarquay on the "Reproduction and Reunion of Divided Tendons." He says that it results from his researches that neither the blood, plastic lymph, or blastema, which have been successively invoked as the elements of reparation, play the part that has been assigned to them. According to his own investigations, it results:—1. That tendon is regenerated by proliferation of the elements which are found at the internal surface of the sheath of the divided tendon, its two ends being retracted. 2. That the external portion of the sheath takes no part in the process, except that the vessels which it supports become more voluminous and more numerous. 3. The proliferation which takes place at the inner surface of the sheath does so at the expense of the cellular elements of the latter, which, at the end of eight or ten days, becomes confounded with the cellular elements which spring from the extremity of the divided tendon. 4. The regeneration of the tendon is rapid in proportion to the vascularity of the divided tendon. Thus, while the tendo Achillis is repaired in twenty or twenty-five days, the tendo patellæ requires a longer time. 5. The phenomena which lead to the reproduction of tendons are in every respect similar to those which occur in the reproduction of bone by the periosteum. 6. Histological examinations have confirmed the deductions from physiological experiments. 7. In this memoir further illustrations are derived from facts in pathological anatomy, and the subject of the suture of tendons is clinically and experimentally examined. The general result, derived from observations made on man and animals, is that sutures of divided tendons do not give rise to satisfactory results except when they are executed by means of very fine needles and very thin threads, when union takes place by means of the proliferation of the cellular elements, and when a considerable length of time has elapsed.

PARLIAMENTARY.—THE CONTAGIOUS DISEASES ACT—POOR-LAW MEDICAL OFFICERS IN ENGLAND AND WALES.

In the House of Commons on Thursday, March 10,

Mr. Jacob Bright asked the Secretary of State for the Home Department whether an Englishwoman named Elizabeth Holt is now or has recently been a prisoner in Maidstone Gaol because she declined to subject her person to the fortnightly inspection of a Surgeon; and whether her refusal, or the refusal of any other woman, to submit to this outrage would be followed by repeated periods of imprisonment so as to amount practically to perpetual incarceration.

Mr. Bruce replied that the 58th section of the Act of 1866 ordered that a woman voluntarily submitting herself for inspection must continue to do so periodically, or be liable to three months' imprisonment. Elizabeth Holt, a resident in Woolwich, voluntarily submitted under the 17th clause, underwent fourteen examinations, and was sent to the Hospital five times. In a fortnight she objected to examination, the necessary summons was applied for, and at the hearing she was sent to Maidstone Gaol for fourteen days. (Opposition cheers.)

On the motion of Dr. Brady, leave was given to bring in a Bill to provide for superannuation allowances to Medical officers of Poor-law unions in England and Wales.

THE DEPUTATION FROM THE MEDICAL REFORM UNION TO THE HOME SECRETARY.

On Thursday, March 10, the Home Secretary received a deputation, representing members of the Medical Profession, who had memorialised the Government in favour of an amendment of the laws relating to the practice of Medicine and Surgery. Mr. Dixon, M.P., introduced the deputation, and among those present were Sir Herbert Croft, M.P., Sir John Gray, M.P., Dr. Brady, M.P., Mr. Chandos Hoskyns, M.P., Mr. Figgins, M.P., Sir Duncan Gibb, Dr. Bell Fletcher, Professor Sampson Gamgee, Dr. A. Smart, C.B., Mr. R. B. Carter, Dr. Medwin, Dr. F. Davis Colley, Mr. C. Heath, Dr. Mayo, Dr. Glover, Dr. B. W. Richardson, Dr. Lloyd Owen, Dr. Dowse, Dr. Stallard, Dr. F. A. Parsons, Dr. H. Cooke. Mr. Simon was also present.

Professor Gamgee stated that the memorial to be presented that day had been signed by upwards of 9700 Medical men, and these formed a clear majority of the Profession in practice, and about half the Profession in the Kingdom. The Act of 1858 affirmed that "it is expedient that persons requiring Medical aid should be enabled to distinguish qualified from unqualified Practitioners;" but the experience of the last ten years had proved that the Act was practically inoperative, for men were practising Medicine and Surgery in different parts of the country, not only without any legal qualification, but without having undergone any regular course of Medical education. Such men had been proceeded against, and convictions had been obtained; but superior courts had quashed the convictions on various grounds. In some places persons assumed the title of "Doctor," and practised under fictitious names. They obtained considerable sums of money from the weak by intimidation and extortion, and the Act was practically inoperative in restraining such offences. It was also capable of proof that some legally qualified men had lent their names to persons not so qualified to enable such unqualified persons to practise Medicine and Surgery without the very small responsibility otherwise incurred, and it was considered that the Medical men who lent themselves to this practice should be removed from the Register. Then it was a fact that many people were buried in this country without any certificate of death from a qualified man—a course which greatly favoured secret poisoning and infanticide—and it was suggested that a certificate, in the absence of the coroner's order, should be indispensable. The General Medical Council was constituted for the purpose of regulating Medical education and registration throughout the United Kingdom; but, composed as the Council was mainly of the members of the Medical Corporations who granted licences to practise, the control of the system of Medical education had proved to be very impertect. It must be so, as those corporations subsisted on fees obtained from the students, and the licensing bodies were in rivalry to obtain the students. The independent men appointed by the Crown had done much, but they could not prevent all the evils which arose from the present system, and the remedy looked for was, in the first place, a revision of the Medical education system; in the second, the institution of one high and uniform standard of examination, and one legal qualification, in place of the present system and the many forms of licence now granted; and, in the third place, stringent regulations for enforcing the practical part of Professional study. It was likewise considered only just that the Profession, as such, should have a voice in the government of the General Medical Council. It would be for the good of the public if the general body of the Practitioners of Medicine and Surgery were represented on the Council. The memorialists had, moreover, to urge that a public prosecutor should be appointed to enforce the law, as without that other amendments would go for little. The public interest was identical with the interests of the Profession in this matter, and an Act embodying the suggestions submitted would be alike beneficial to the honour and welfare of the Profession and to the community at large.

Mr. Bruce asked what corporations were referred to.

Professor Gamgee replied that the nineteen licensing corporations were pointed at.

Dr. Bell Fletcher then read the memorial, the heads of which were given in the opening address.

Sir John Gray said he had been at some pains to ascertain the opinions of the Medical men in Ireland, and from all he

had heard he gathered that the Profession generally concurred in the objects of the memorial. The fact that the Medical Profession was not represented on the Council, and that the several licensing bodies were in rivalry, could not tend to advance the standard of education for a Medical qualification.

Dr. Brady said that he could not agree with Sir John Gray that the object of the corporations was rivalry and a lowering of the standard of Medical education. He knew, from his own observation, that within the last twenty-five years the corporate bodies had made great improvement in education, and had much raised the status of the Profession. He hoped the Government would bring forward a comprehensive measure.

Mr. Bruce, in reply, said the representations of so important a body as that of the Medical Profession would receive the careful and serious consideration of the Government. In fact, the matter was under the consideration of the Government at the present time, and they were assisted by the able and learned gentleman who occupied the responsible position of Medical Adviser to the Privy Council—Mr. John Simon. (Cheers.) It might be said that the Government had prominently before it, among other subjects, the evils resulting from a multiplicity of examining bodies, and the admission into the Profession of persons not properly qualified to deal with matters on which no little of the happiness of the world depended. He assured the deputation that it would give him much pleasure to convey the memorial and the statement of Sir John Gray to her Majesty's Government, who, he might state, were ambitious of dealing with such a subject in a comprehensive manner. (Cheers.)

The deputation thanked Mr. Bruce and withdrew.

ANALYSES OF PATENT MEDICINES.—IV.

MRS. WINSLOW'S SOOTHING SYRUP.

This is an American preparation, as will be seen from the following statement, quoted from the bill of directions enclosed with the medicine:—

"Mrs. Winslow, an experienced nurse and female physician, presents to the attention of mothers her Soothing Syrup for Children Teething, which greatly facilitates the process of teething, by softening the gums, reducing all inflammation; will allay all pain and spasmodic action, and is sure to regulate the bowels. Depend upon it, mothers, it will give rest to yourselves, and relief and health to your infants. We have put up and sold this article for over ten years, and can say, in confidence and truth, of it, what we have never been able to say of any other medicine—Never has it failed in a single instance to effect a cure, when timely used. Never did we know an instance of dissatisfaction by any one who used it. On the contrary, all are delighted with its operations, and speak in terms of highest commendation of its magical effects and medical virtues. We speak, in this matter, 'what we do know,' after ten years' experience, and pledge our reputation for the fulfilment of what we here declare. In almost every instance where the infant is suffering from pain and exhaustion relief will be found in fifteen or twenty minutes after the syrup is given. This valuable preparation is the prescription of one of the most experienced and skilful nurses in New England, and has been used, with never-failing success, in thousands of cases. It not only relieves the child from pain, but invigorates the stomach and bowels, corrects acidity, and gives tone and energy to the whole system. It will almost instantly relieve griping in the bowels and wind colic, and overcome convulsions, which, if not speedily remedied, end in death. We believe it the best and surest remedy in the world in all cases of dysentery and diarrhœa in children, whether it arises from teething or from any other cause. We would say to every mother who has a child suffering from any of the foregoing complaints, Do not let your own prejudices, nor the prejudices of others, stand between your suffering child and the relief that will be sure—yes, absolutely sure—to follow the use of this medicine, if timely used. Full directions for using will accompany each bottle. None genuine unless the fac-simile of Curtis and Perkins, New York, is on the outside wrapper, thus—

Sold by druggists throughout the world.
Principal Office, No. 48, Dey-street, New York. Curtis & Perkins.

"*Directions for Using.*—For a child under one month old, six to ten drops; three months old, half-a-teaspoonful; six months old and upwards, a teaspoonful three or four times a day, until they are free from pain. For dysentery, repeat the above dose every two hours, until the character of the discharge is changed for the better."

The bottles of syrup are wrapped in yellow wrappers, and labelled in English, French, German, and Spanish. Each bottle contains fifty cubic centimetres of fluid (about f. ʒjss.). The corks are covered with sealing-wax, and the two that were examined were both found to be in a leaky condition.

The syrup is of a very pale yellow colour, and slightly turbid. It is sticky to the touch, very sweet to the taste, and smells and tastes strongly of aniseed. The specific gravity is 1·18. No morphia could be detected in it. There was no mineral matter, there being no *fixed residue*. It contains a large quantity of cane-sugar, a considerable quantity of alcohol, and some oil of aniseed.

The following numbers have been found. A bottle of the syrup (fifty cubic centimetres) contains:—

Cane-sugar	26·8	grammes
Absolute alcohol . . .	2·2	,,
Oil of aniseed . . .	traces	,,
Water	30·0	,,
	59·0	

The active ingredients are the oil of aniseed and the alcohol. From the above it may be calculated that a teaspoonful of the syrup contains three grains of *absolute* alcohol (equal to a quarter of a teaspoonful of sherry), a quantity quite adequate to produce an effect on an infant.

REVIEWS.

Authentic Narrative of the Case of the late Earl St. Maur. By C. J. B. Williams, M.D., F.R.S. With Short-hand Notes of the Retractation and Apology. London: Longman, Green, and Co. 1870.

Although not a single member of our Profession can have felt the slightest doubt that Dr. C. J. B. Williams could give the most satisfactory and perfect answer to every one of the charges and imputations against his Professional skill, his kindness, and courtesy, contained in the libel circulated by the Duchess of Somerset; yet all have awaited with great interest his statement of the case of the late Earl St. Maur. For, though the apology for, and retractation of, the libel made in court was most complete and ample, every imputation against the Professional honour and character of Dr. Williams being withdrawn frankly, freely, and in the fullest manner possible, yet, while the fulness of the apology rendered any course other than its immediate acceptance impossible, that acceptance deprived Dr. Williams of the opportunity of answering in detail the numerous grave misstatements and imputations contained in the libel, and, by its publication in court, spread throughout the land. It was most desirable, therefore, in the interests of the honour and reputation of the Profession at large, as well as of Dr. Williams, that an authoritative and detailed history of the case should be made public, and that thus all the misstatements and errors contained in the libel should be openly and fully disproved and corrected, and all its grave charges and imputations shown to have been entirely without foundation. Such a statement is now given to the public in the pamphlet before us, and, though it has come into our hands too late to allow of our making any full analysis of it, we can, without any hesitation, affirm that it is the most complete vindication conceivable of Dr. Williams's treatment and conduct throughout the short time that the late Earl St. Maur was in any degree under his Professional care.

We will quote at full length the preface to Dr. Williams's narrative, because it gives a clear and convenient summary of the contents of the pamphlet itself, and it gives also a written opinion on the case of the late Earl signed by several of the most eminent Physicians and Surgeons in London. That opinion will, we venture to assert, command the assent and acceptance of every competent judge, and the greater any Medical man's personal experience of such cases may have been the more clear and decided will be his concurrence with the opinion.

"PREFACE.

"The trial in the case of Williams *v.* the Duke and Duchess of Somerset having been brought to a sudden termination by the defendants, through their counsel, making, and my leading counsel accepting, their complete and unreserved retractation of, and apology for, all the charges and imputations in the libel circulated by her Grace the Duchess of Somerset, no

opportunity was afforded to me personally to explain the real history of the case, and to disprove in detail the serious mis-statements of facts which the libel contained. If I and my witnesses had been examined in Court, this explanation and correction would have been complete; but my leading counsel undertook by himself to represent my case in his opening speech, and when this speech was made, it appeared to myself and to all my friends who were in court, an imperfect statement of the case, and quite insufficient to supply the place of such evidence as myself and witnesses were prepared to give.

"The want of this evidence is the more to be regretted, as the libel, with all its errors and mis-statements, written as it was, when the mind of the writer was, as her learned counsel states, 'a chaos incapable of fixed thought,' was published in full in several of the daily journals, and in one without even the interspersed comments of the Solicitor-General. This renewed and extensive publication of the libel, notwithstanding its complete retractation in court, and in the presence of the Duke of Somerset, has produced, on the minds of some persons, an erroneous impression that my conduct may have been such as to afford grounds of complaint.

It is to correct such erroneous impressions, and to supply to the Medical Profession and to the public those explanations which the Solicitor-General informed the court I was about to give, that I have drawn up the following careful statement of the case. It will be found to contradict, on ample evidence, the statements in the libel on which the chief charges are founded, especially the following:—

"The libel states that on the morning of September 30 I was sent for a little after 8, and that I did not come till 12.

"I prove that the message reached my house at a quarter before 9, and that I was with the patient, in Dover-street, at 9.

"The libel asserts that I behaved rudely to Dr. Hardinge, who was called to attend the patient before I came, and that, in all that followed, I was actuated by a feeling of jealousy towards him.

"My statement shews that these charges were wholly without foundation. At first sight, I did not recognise in Dr. Hardinge a Medical man and an old acquaintance, but when he told me his name, I recollected him, and treated him with all courtesy, which he acknowledges in his own letter. There was not a shadow of ground for the notion of 'jealousy' or 'rivalry' in my mind.

"The libel states that my rough examination, and 'pinching the throat,' immediately brought on the attack of spasm in the afternoon of September 30, which proved fatal.

"My statement positively denies that my examination was rough, or that I ever 'pinched' the patient's throat; and I prove that he was quiet after this examination, and that the spasm did not come on till several minutes later, when I was in another room.

"The libel states that I gave the duchess no notice of the performance of the operation of tracheotomy.

"The statement shews that, to spare her Grace's feelings, I withheld the announcement of the operation till the arrival of the Surgeon made its immediate performance possible; then I distinctly told her Grace that making an opening in the windpipe was the only chance of saving life, and that the Surgeon was come to do this.

"The libel makes sundry charges of neglect, apathy, want of consideration, not giving warning of danger, etc., etc.

"The statement details the full particulars of my attendance on Earl St. Maur, which consisted of four visits; the three first, each of about an hour's duration; the last, of more than two hours, besides an interview of about an hour with the duchess alone. It describes the careful examination, the anxious consideration, and the minute instructions and warnings which were given to the patient on each and every occasion. The nature of the disease, obscure at first, became gradually more apparent, through the scrutiny of scientific investigation; and was approached, if not quite determined, by a diagnosis, which would account for all the symptoms, and especially for the last unexpectedly rapid strides of the disease to its fatal end.

"My conscience is clear that throughout this short but anxious and painful charge, I acted in good faith and to the best of my ability and judgment; and I have no doubt that the verdict of my own Profession will be in my favour. It is with feelings of deep satisfaction that I refer to the statement at the end of this preface, which expresses the deliberate opinion of some of the most eminent and enlightened Physicians and Surgeons in this country.

"The retractation and apology of the Duke and Duchess of Somerset in court has 'frankly, and freely, and most unreservedly withdrawn' all these imputations in the libel which reflect on my Professional honour and character. This is so far satisfactory to me, as an act of justice, albeit somewhat tardy. It is still more satisfactory to me to prove that all the charges and imputations were, from the first, absolutely without foundation; but it is far more gratifying to me—I feel it to be a positive honour—that throughout this painful and embarrassing trial, and amid opposing influences of high rank and noble birth, I have received the support and approval of those whom I most esteem and venerate in my own honourable Profession, and of my numerous other personal friends.

"Charles J. B. Williams.

49, Upper Brook-street, March 12, 1870.

"We, the undersigned, after a careful and anxious consideration of the case of the late Earl St. Maur, as described in detail by Dr. Williams, desire to record our unanimous opinion that Dr. Williams's view of the most probable nature of his Lordship's disease was correct, and his treatment of it skilful, appropriate, and in strict conformity with the established teachings of Medical science.

(Signed)

"Thomas Watson, M.D.	Francis Sibson, M.D.
George Burrows, M.D.	William Fergusson.
William Jenner, M.D.	James Paget.
William W. Gull, M.D.	John Eric Erichsen."
Richard Quain, M.D.	

We will only add that the evidence given in the body of the narrative most fully corroborates every statement made in the preface. It is clear that at his first interview with the late Earl Dr. Williams suspected the essential character of the disease. He suspected that there was "some consolidation in or tumour pressing upon the inner part of the summit of the left lung," and this he stated to the Duchess of Somerset during his interview with her on September 27, adding a warning that the disease "might prove to be serious." The course of the malady was exceptionally and most distressingly rapid, and it must be owned that this rapidity was in part owing to the imprudence of the patient and his disregard of the cautions and directions given him.

The statement in the libel that on the morning of September 30 Dr. Williams "was sent for at a little after 8 o'clock, and that he did not come till 12," is shown to be utterly without justification or foundation. It is proved by Dr. Hardinge, by Dr. Williams's household, and by his own evidence, that he received the Duchess's message at a quarter before 9, that he was with his patient by 9, and was at home again by 10 o'clock. We all know that to a person waiting in agony and dread for Medical help minutes will seem like hours, but that the Duchess could have afterwards written and circulated the statement she did can only be explained by accepting her counsel's assertion that "her mind was a chaos, incapable of fixed thought." As complete is the demolition of the charge of rudeness, incivility, etc., towards Dr. Hardinge, who, in a letter to Dr. Williams, says—"I assure you I was not at all aware of any incivility on your part when I met you on September 30 at the Duchess of Somerset's—indeed, my feeling on the subject was quite the contrary, and I have said so."

We need not add more, for we are sure that Dr. Williams's "Narrative" will be eagerly and carefully studied, and the Profession, while sympathising with him in the painful trial he has had to endure, will feel deeply obliged to him for so fully and openly meeting and demolishing charges which through him affected the honour and character of the whole Profession.

American Medical Literature.—It is stated that during the year 1869 ninety-three works on Medicine and Surgery, including new editions, were published in the United States.

Testimonial to Mr. Boutflower.—A valuable testimonial was presented last week to Mr. John Boutflower, who for upwards of forty-four years has occupied the position of senior honorary Surgeon to the Salford and Pendleton Royal Hospital and Dispensary. The testimonial was presented in the board-room of that institution. £400 had been subscribed, 200 guineas of which was expended in the purchase of a handsome service of plate, the remainder having been appropriated to the painting of Mr. Boutflower's portrait for presentation to the institution, etc. The Mayor presided, and the large room was crowded with ladies and gentlemen. Several speeches were made, and an illuminated address, signed by the president and 100 of the other subscribers, was presented with the plate to Mr. Boutflower, who acknowledged them in a very able and eloquent speech.

GENERAL CORRESPONDENCE.

ON THE FORMATION OF A ROYAL ACADEMY OF MEDICINE.

By Dr. J. Braxton Hicks.

Letter II.

[To the Editor of the Medical Times and Gazette.]

Sir,—But apart from the external influence produced by a union of the Societies, let us consider how far the combination may assist the advance of Medical knowledge. This is a question which has been often under consideration. It involves the greater one of centralisation against localisation. Let us take the Medico-Chirurgical Society itself as an example of centralisation. It included, doubtless, all the sections at first, and up till almost the present moment it was in the same position. But after a time a number of offshoots sprang up, not under its auspices, but totally independent of it. What reasons can be assigned for these separations? Why, for instance, did the Pathological arise? Was it because it was felt that this branch was not sufficiently attended to by the old Society; or was it because the fee was too great for those interested in that branch, when the expenses of the branch could be met by a third of the subscription? Again, why did the Obstetrical Society spring up at a later date? Was it because obstetrics could not engage sufficient interest in the old Society to further the growing requirements of the department? or was it because the fees were too great for those who took interest in the department? or was it because Practitioners in this important division were kept in the background as far as the posts of honour were concerned? Cause there must have been, for within three or four years the numbers of the Obstetrical Society equalled those of the old Society, and do so still. Yet the old Society had existed, and should, if centralisation had been sufficient, have been enough for needs of the Profession. Again, why, only lately, did the Clinical Society jump up into existence? Was the subject not sufficiently attended to by the old Society? and yet theoretically it should have been attended to by the Society, more particularly than even the other subjects. It would seem clear, from these considerations, either that centralisation itself was not sufficient for the exuberant vigour of the Profession, or that the mode of its administration was imperfect. With regard to the advantages of centralisation, many opinions exist both within and without the Medical world. All must admit that if it destroy vitality, check interest, or prevent expansion, then it is a disadvantage. Each section must of necessity know how to conduct its own business best, and perceive more clearly its needs; any section with perfect control over its finances and actions must act with more promptitude and energy than where these are under the control of a general body, each division of which would more or less check the free action of the other. The societies of Dublin have lately decided against amalgamation; they consider that more work would be done by them separately. Perhaps the mode of election of their officers by seniority until lately in the Medico-Chirurgical Society has acted against its expansibility. The tendency also to select as its President a Physician or Surgeon, ignoring those who practised obstetrics and other sections, although equally talented, must have acted against the comprehensiveness of the Society.

But also the large subscription and entrance fee demanded by the old society has kept many out, and doubtless caused many to secede. Three guineas for entrance, and the same annually, is a large sum for the beginners to pay, and it is from these beginners that so much and such vigorous work is obtained; or at least it is from hearing discussions that many of the most active members receive their first stimulus to work. The use of societies, it must always be borne in mind, is not alone for reading and discussing papers, but to diffuse a general interest in the subjects embraced by them. If the high fee limits the number of members, then by so much does the society fail in one of its objects. The fee, then, should be reduced to the lowest point compatible with efficient working. What can be done by a guinea subscription without entrance fee is shown by the balance-sheet of the Obstetrical Society. £1000 in the funds, a yearly volume of *Transactions*, a museum of instruments, a library and room, an expensive exhibition of instruments, with an illustrated catalogue, committees of inquiry, etc., have all been compassed within ten years. These are merely brought forward here to show what the guinea subscription can do. If it be advanced that the Medico-Chirurgical Society gives the use of a valuable lending library in addition, then the fact must be admitted. It is doubtless a most valuable one—invaluable, indeed, to certain members of the Profession—and is doubtless the chief attraction for many in joining the Society. But it is open to very great doubts whether a society should be so hampered in its actions by a library, however valuable, that it cannot perform its most essential functions. It is the library that has, in the scheme of amalgamation, formed a check to action, a sort of dead drag to more expansive measures. Could not an expedient be devised whereby the library may be at the command, without payment, of all those who have hitherto had access, and to others upon the payment of a certain sum, so that the sections could be formed totally unshackled by a library, but yet within the command of all? As long as the library is made an essential condition of junction, the fees must be increased both to those who do not require a library and those who do. But one great disadvantage resulting from the compulsory (if I may so speak) taking of the library is this—that, in the scheme put forward, the status of the members was regulated by the amount of fees paid. The defect of this proposition is radical. If it be desired to have two grades, make those grades by votes; and if, after election, the upper grade is made to pay a larger subscription with larger privileges, well and good, but do not make the elevation due to the pecuniary power of the individual.

The entry to the whole Society should be on an equal footing—say by a moderate entrance fee, or by the fact of belonging to one of the sections, in which latter case, supposing it were financially requisite to have an entrance fee, it would not be a very hard thing if section joined were to pay the entrance fee to the Council upon each admission, whereby the entry would be made as easy as possible to the largest number. Every person joining a section would then be a Fellow of the Royal Academy of Medicine. If he desired to belong to either of the other sections, he could do so by a payment of a further sum, either of a guinea or of half a guinea, to the section upon production of his receipt from the section to which he already belongs. However, this is thrown out merely as a suggestion, the principle being to make the Society as accessible as possible to the whole Profession. If it be answered, as it has already been remarked by one of your contemporaries, "that numbers may be a source of weakness," then it is rejoined—How can a wider interest, a greater income, a larger field for recruits, a greater working power, be a source of weakness, combined with an active executive freely and liberally recruited out of its body? High fees, a tendency to exclude the general body of the Profession, a habit of electing by seniority to the executive, will in these times, and doubtless more so in the future, tend, in a few years, to bring a Royal Academy of Medicine into a state of stagnation.

I am, &c. J. Braxton Hicks, M.D., F.R.S.

PHTHISIS IN ICELAND.

Letter from Dr. Arthur Leared.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have to thank a correspondent, signing himself "S. W.," for having published in your journal of January 22 an extract from Drs. Carpenter and Power's "Principles of Physiology," entirely favourable to my views respecting the immunity of the Icelanders from phthisis. But it is remarkable how often it happens to one possessing personal knowledge of any subject to find inaccuracies in authoritative printed accounts of such subjects. In the *British Medical Journal* for January 16, 1869, I have given a description of Icelandic houses and their interior economy from my own observation. Now, the statement in the "Principles of Physiology," that the sheep are kept in the dwelling-houses "during the severer parts of the winter," may be exceptionally, but is certainly not generally, true. This is not, however, a matter of much moment, but it leads me to point out an error of real importance as regards the etiology of phthisis, which elsewhere occurs in this excellent work. Speaking of the effects of oily substances in tuberculous diseases, this passage occurs:—"A most remarkable example of this is presented by the population of Iceland, which, notwithstanding the concurrence of every one of the circumstances usually considered favourable to the scrofulous diathesis, enjoys a most remarkable immunity from it, without any other assignable cause than the peculiarly oleaginous character of the diet usually employed." This is entirely erroneous, and I wish it to be known in order that it

may be eliminated from consideration in all attempts to explain the undoubted freedom, if not complete exemption, from phthisis which Iceland enjoys. The mistake has arisen, like many other mistakes, from a hasty generalisation. Because the country lies far to the north, it is classed, as regards climate and consequent habits of the people, with Greenland and Lapland. But the fact is, that, owing to the effect of the Gulf stream, the winter of Iceland, although much longer, is not much colder than that of England, while the diet of the inhabitants, which mainly consists of rye bread, dried mutton, and fish, is certainly not more oleaginous than that of Englishmen. Oil forms no part of the food of the Icelander, although butter does to some extent.

Your correspondent's letter has elicited a reply from my opponent on the subject of phthisis in Iceland—Dr. MacCormac. Of what use is it for Dr. MacCormac to reiterate that tubercular matter is caused by the retention of carbon in the system, as a consequence of rebreathed air, without advancing any proofs? One must give him credit for sincerity and belief in himself; but unsupported assertions, however strongly made, will bring no conviction to others. As to Dr. MacCormac's reiteration, that 10·2 per cent of the inhabitants of Iceland die from phthisis (quoting from Schleisner), I shall not occupy your space with its refutation. Any one interested in the subject may see that I have already fully refuted it in a letter in the *British Medical Journal*, February 13, 1869. I am, &c.

March 9. ARTHUR LEARED.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 8, 1870.

Dr. MERYON in the chair.

A PAPER was read by Dr. F. B. NUNNELEY, of York, on the Action of Citrate and Acetate of Potash, of Spiritus Etheris Nitrosi, and of Oil of Juniper on the Urine in Health. The author had made the necessary experiments upon himself, and the method pursued was to estimate the water, urea, and solids of the urine each day for about twenty-eight days, during the middle twelve days of which the medicine was taken, the days before and after being medicine-free. Citrate of potash was taken to the extent of from ten to eighteen drachms in twenty-four hours; was found to increase the water by 2½ ounces, and to diminish the urea by 84 grains, and the solids by 60 grains. The acetate of potash, in daily doses of from 2½ to 3½ drachms, exerted a similar influence in a somewhat less degree. The spiritus etheris nitrosi (ten to eighteen fluid drachms in twenty-four hours) slightly increased the water, and diminished the urea by fifty-four grains, and the solids by 122 grains. The oil of juniper (thirty to forty minims in twenty-four hours) slightly increased both the urea and the solids. The paper produced no discussion.

Mr. L. S. LITTLE then read the report of a case in which a plate with artificial teeth had been swallowed, detected in the stomach, and extracted. A woman was admitted into the London Hospital, who, two days previously, during an epileptic fit, had swallowed a gold plate, to which some artificial teeth were attached. This produced so much irritation that no food had since been retained; and, as the foreign body could be readily felt in the stomach by means of an ivory-tipped probang, Mr. Little passed an ordinary œsophageal coin-catcher, and, after several attempts, succeeded in hooking the plate, and drawing it up as far as the pharynx, where it lodged. Considerable difficulty was experienced in removing it from this situation, although this was ultimately effected, and the patient recovered without a bad symptom. The plate, which had sharp projecting extremities, measured one inch and three quarters in length by one and a quarter in width, and fixed to it were three incisor teeth, one canine, and one bicuspid. The author advocated attempts at extraction in similar cases, urging that if a foreign body has passed down the œsophagus, and through the cardiac orifice of the stomach, no great difficulty will be met with in its withdrawal through the same passage, provided no force be used; and he referred to some experiments by Mr. Pollock, to show that the removal from the stomach of even a small plate by the natural efforts is very improbable.

Mr. POLLOCK mentioned a case in which a similar foreign body had been ninety-three days in the stomach, and was ultimately rejected by vomiting. He described some experiments tending to show that a plate with sharp extremities would not be likely to pass either the pylorus or the ileo-cæcal valve; although a larger smooth plate would pass both with facility.

Mr. CURLING referred to the vomiting as an effect of a foreign body that rendered the case urgent, and that justified the attempt at extraction.

Dr. WM. HOWSHIP DICKINSON read a paper

ON CERTAIN MORBID CHANGES IN THE NERVOUS SYSTEM, ASSOCIATED WITH DIABETES.

Diabetes has hitherto been regarded as a functional disorder, and has been attributed to erroneous action rather than structural change. This view, however, must be looked upon as only provisional. Function is simply the expression of structure; structure and function are as inseparable as cause and effect. Where, as in diabetes, function is permanently altered, it almost follows of necessity that there should be equally abiding changes in the mechanism of the organs concerned. In this belief the various organs of diabetic subjects were subjected to a searching examination, and it was found that the nervous system was the seat of important alterations, an observation which gained significance from the discovery of Bernard that puncture of a certain part of the medulla oblongata rendered the urine saccharine. The details of the examination of the organs in five diabetic subjects were laid before the Society, and the pathological changes in the brain and cord illustrated by a series of drawings, representing their naked-eye and microscopic appearances. The results obtained in the five cases are briefly these: — Peculiar morbid changes were constantly found in the cerebro-spinal system. In all the alterations were of the same nature, and, for the most part, in the same situations. The earliest alteration recognised was a dilatation of the arteries. This was followed by a degeneration of the nervous matter at certain points external to them. An extension of the degenerative process occasioned destruction and excavation of the tissue around the vessel. Cavities were thus produced, often large enough to be striking objects even without the microscope, and contained bloodvessels, extravasated blood, grains of pigment, and the products of nervous decay. Finally, the contents appeared to become absorbed, so that simple vacuities were left. As to their situations, the changes occurred in constant association with arteries. They were found in every part of the spinal cord and encephalon, attaining their greatest development in the medulla oblongata and pons Varolii. The excavations were frequently in connexion with folds of pia mater, and were often disposed with lateral symmetry. Several spots were found to be affected uniformly in all the cases examined —viz., the olivary bodies, the vicinity of the median plane of the medulla, the grey matter of the floor of the fourth ventricle, and in particular a spot just internal to the origin of the facial nerve. This point presented a remarkable sameness in all the cases, a large excavation lying generally on both sides in connexion with a process of pia mater. Another spot, which in four of the five cases presented a considerable cavity, was found near the front of the pons in the median line, also in connexion with the pia mater. The optic thalami and corpora striata were involved to a slight extent. The septum of the ventricles, and the white matter of the convolutions, displayed the alterations in a remarkable manner, as also did the corpus dentatum of the cerebellum. The changes especially affected the white matter, though the grey matter at the floor of the fourth ventricle and of the spinal cord are exceptions to this statement. The cells of the grey matter were generally perfect. The deterioration was not general, but was limited to the vicinity of the arteries. Such parts of the sympathetic system as were examined—namely, the upper cervical and semilunar ganglia—were apparently natural. The only constant change found in the viscera was epithelial accumulation in the liver and kidneys. It would seem from the foregoing observations that diabetes is associated with an organic change, which may be briefly described as a destruction of the nervous matter along the arteries of the brain and cord. From the uniformity with which this was found in the five cases examined, it may be presumed that there was a more than accidental connexion between the symptoms of diabetes and the peculiar state of the nervous centres. The question presents itself, whether the lesion is a result of the disease or its cause. The association of the morbid action with the bloodvessels sug-

gests that it may be connected with the state of the blood. We know that the blood in diabetes is altered by the presence of sugar; is it to this that the deterioration of tissue is due? Several considerations militate against this, at first sight, probable explanation. The veins and capillaries appeared to take no share in the morbid process, though equally permeated by diabetic blood, which, in the capillaries at least, is brought into more intimate relation to the tissues than in the arteries. If the changes in the tissues were directly due to the altered composition of the blood, the capillaries could hardly fail to distribute its morbid influence. Besides this, the blood traverses the whole body without producing in any other organ an analogous failure of nutrition. We may probably abandon the view that the changes described are consequent upon the diabetic state of the blood, and have recourse to the supposition that the nervous alterations are antecedent to and productive of the glucosuria. The following considerations may be mentioned in favour of the latter supposition. No organic change has been found elsewhere to which the saccharine state of the urine can be attributed. The alterations in the brain are, in their nature and situation, exactly such as physiology has shown to be capable of producing that symptom. Further, we are the more disposed to regard the nervous changes as primary by the fact that alterations similar in kind, though differing in distribution, occur as belonging exclusively to the nervous system, quite independently of diabetes. This is the case particularly in the general paralysis of the insane. Dr. Lockhart Clarke has, since most of the preceding observations were made, described the lesions in that disorder, and shown that though differing somewhat in situation, they are of the same nature as those here described. The conclusion that diabetes is primarily and essentially a nervous disease accords with all that is known of its natural history; indeed, the opinion has, of late years, been gaining ground, that the disorder is due to altered nervous action, though no structural change was known to account for it. The urine often becomes saccharine in consequence of injuries of the head, apoplectic seizures, intra-cranial tumours, and other sources of cerebral irritation. These traumatic and accidental forms of the disease are, as we may believe, not necessarily accompanied by the grave and general lesions which have been under consideration. Several kinds of irritation, if acting in the right situation, give rise to a similar change in the urine, though often temporary, and for the most part unaccompanied by the serious symptoms which characterise what may be termed "idiopathic" diabetes. Diabetes in its ordinary "idiopathic" form, though sometimes hereditary, and often taking its origin in causes which are not wi[illegible]lisation, many opinions exist both within and circumstances whic[illegible]world. All must admit that if it destroy action upon the nerve or prevent expansion, then it is a distioned mental disturbance must of necessity know how to the various forms of dis[illegible]best, and perceive more clearly its takes a prominent place. [illegible]ect control over its finances and give rise to modifications of [illegible]promptitude and energy than and it has been shown that, as [illegible]trol of a general body. [illegible] microscope, a widening or distenss check the f[illegible] centres, initial change in the pathologic[illegible] have [illegible] learned from the servations concur in leadi[illegible]at [illegible] of the arteries was the tially belongs to [illegible] series. The foregoing ob- have a prac[illegible]ty to the belief that diabetes essen- Society has [illegible] system, a consideration which may to select a[illegible]difying the treatment of the disease.

Dr. Lo[illegible] [illegible]ore testimony to the faithfulness with whi[illegible]es had been described. They were precisely [illegible] which he had met with in a case of general [illegible] which he had given an account in the last [illegible] *Journal of Mental Science*. As far as he knew, no[illegible]em had been described before. In his case, whi[illegible]pical one of general paralysis, the brain resembled Gruyère cheese, or crumb of bread. The blood-vessels in the brain were surrounded by the so-called perivascular sheaths, and these were contained in large channels in the brain-tissue. The structure of the perivascular sheaths underwent some thickening, and had then been supposed, by Rokitanski and others, to be an exudation; but they were natural structures. The cavities were not new formations in the brain, but were left by the destruction of the vessels and their sheaths. Dr. Dickinson had not referred to the mental state of his patients. In his (Dr. Lockhart Clarke's) case the cells of the convolutions were much altered, had undergone degeneration, and were loaded with pigment-granules. He had also found in a case of diabetes degeneration of the floor of the fourth ventricle, and erosion of the calamus scriptorius, with destruction of the nuclei of the vagus. It is very remarkable that there were cavities at the roots of the facial nerves and in his case he had found the same.

After some remarks from Mr. Thomas Smith, Mr. Brooke, Dr. W. Ogle, and Dr. Hare,

Dr. Dickinson replied to the various speakers. He said that in his patients the mental faculties had been weakened, but not otherwise impaired; and that the cells of the convolutions were everywhere natural. The cavities he described were ir regular in form, eroded, and contained entangled vessels. In paralysis he believed that changes of the cells were usually found, and that the lesions were chiefly in the pons Varolii and the anterior part of the convolutions. In his cases the lesions were universally distributed, but were most abundant in the medulla oblongata.

CLINICAL SOCIETY.

Friday, February 11.

Mr. Paget, President, in the Chair.

Dr. Gee communicated a paper by Mr. Arthur Andrews upon a case of Scarlet Fever intercurrent during Nephritis. The patient was a healthy young man, who had incurred acute nephritis from exposure. For eleven days his urine was scanty—reduced to twelve or fourteen ounces in the twenty-four hours—and highly albuminous. It then became suddenly more copious and less albuminous, and the quantity of albumen then daily lessened, till, on the forty-third day, there was only a trace. Next day scarlet fever set in, the urine immediately became almost black from the presence of blood, and highly albuminous—characters which gradually gave place to those which it presented before the accession of the fever. On the fourteenth day the albumen, which had disappeared for five days, returned, and gradually increased day by day till the quantity was considerable. On the eighty-fifth day from the onset of the nephritis, and the forty-second day from the beginning of the scarlatina, the urine was still moderately albuminous. The points of interest were the sudden and abundant hæmorrhage on the occurrence of scarlatina; the rapid diminution of the hæmaturia until, on the ninth day of the fever, the urine was not albuminous; the recurrence of the albuminuria at the period when the urine of uncomplicated scarlatina becomes albuminous for the first time, and its continuance from this period. The hematuria resembled remarkably what is called paroxysmal hæmaturia, so far as its intensity, onset, and cessation were concerned.

Dr. Greenhow asked if the microscope had been used, as in nine cases of intermittent hæmaturia no blood corpuscles, or only shrivelled bodies resembling them, with oxalates, were found.

Dr. Gee only knew the[illegible] [illegible] in these cases puscles. The [illegible], contained [illegible]otes. In this case there were cor- Academy of Me[illegible] The most remarkable thing was the sudden onset.

Dr. Anstie remarked that, in Dr. Beale's opinion, the colouring matter in intermittent hæmaturia came from the liver rather than from the kidneys.

A case of Angina Pectoris, by Dr. Lauder Brunton, was communicated by Dr. Burdon Sanderson in the absence of the author. The patient, a man of 26, was under observation in the Clinical Wards of the Infirmary, Edinburgh, for a period of four months, during which he was under the care of Professor Bennett. He had had seven attacks of acute rheumatism, and had suffered from symptoms of disease of the heart for several months. When admitted he presented the physical signs of aortic obstruction and regurgitation with hypertrophy of the left ventricle, and suffered during the whole of the time that he was in Hospital from severe paroxysms of præcordial agony, the pain extending from the chest to the right side of the neck and right arm. These attacks occurred mostly during the night, each lasting one or two hours; they were not relieved by aconite, digitalis, or by stimulants, but the patient was considerably benefited by small bleedings. During an attack of acute rheumatism the pain entirely disappeared. Six weeks after admission the treatment by inhalation of nitrite of amyl was commenced, only a few drops being employed at a time. The pain was relieved, or rather ceased, immediately that the characteristic symptoms of the physiological action of the drug manifested themselves—*i.e.*, the flushing of the countenance and the amplification of the pulse. On many occasions the effect of the remedy was observed with the aid of the sphygmograph. The tracings show (1) that the arterial expansion is much diminished and the arterial tension correspondingly increased during the paroxysm of angina, the smallness of the pulse being due to its hardness; and (2) that under the influence of nitrite of amyl the arterial tension is diminished and the

expansive movement increased by the direct influence of the compound in relaxing the muscular walls of the arteries. From these results Dr. Brunton concludes that it is of great value as a means of affording immediate relief in all those cases in which pain is due to arterial spasm. Before communicating the case, Dr. Sanderson gave a short account of certain physiological researches as to nitrite of amyl lately made by the author in Professor Ludwig's laboratory, which have just been published in the *Leipzig Transactions*. The purpose of these researches is to determine the action of nitrite of amyl on the circulation by exact experiments on animals. Rabbits were employed for the purpose. The results of the inhalation were recorded in each instance on the cylinder of the kymographion. They show (1) that the effect of the drug is to diminish the arterial pressure; (2) that this diminution occurs as distinctly in animals in which the vaso-motor nerves have been paralysed by section of the spinal cord in the cervical region as in the natural condition; (3) that nitrite of amyl does not diminish the work done by the heart in a given time, although it increases the frequency of its contractions; and consequently (4) that the nitrite does not exercise its influence on the nervous system, but on the contractile walls of the blood-vessels, diminishing the arterial pressure by diminishing the resistance to the circulation. A question of great importance still remains to be determined experimentally—that of the action of the drug on other involuntary muscular fibres, as, *e.g.*, those of the intestine. If it acts in the same way on these as on those of the vessels, it is likely to turn out as valuable for the relief of multitudinous pains which depend on intestinal spasm as for those of angina.

Dr. Sanderson also exhibited sphygmographic tracings showing the effect of nitrite of amyl on the normal pulse.

Dr. Anstie communicated a Case of Angina Pectoris relieved by Nitrite of Amyl. The patient was a gentleman aged about 50, of a highly nervous temperament, a sufferer for the last twenty years from spasmodic asthma, and very liable to facial neuralgia. Between four and five years since he began to suffer from severe and frequently recurring attacks of angina pectoris, and his life was for a long time in much danger. By the use of sulphuric ether in large doses, and of considerable quantities of alcoholic stimulants, the attacks were diminished in frequency and violence; but they have never ceased to recur at intervals whenever the patient was much fatigued or excited in the course of his professional work. In December last it was determined to try the nitrite of amyl, and on the recurrence of the next anginal spasm, the sufferer took one long and powerful inspiration through one nostril from a half-ounce bottle of the drug. After a panse of a few seconds, the characteristic flushing of the face and sense of fulness in the head were induced, and the patient instantly passed from agony into a state of perfect calm repose. The experiment has been several times repeated on the recurrence of the heart-pang, and always with complete success, and the result has been most fortunate, as the patient has been able to entirely dispense with the disagreeable necessity of taking large and frequent doses of ether, and also greatly to reduce his allowance of stimulants. There has also been much less trouble than formerly from asthma, and he has obtained far more natural sleep at nights. The angina, although very severe, appears to be purely neurotic; no cardiac change, or at most a small amount of dilatation, can be discovered by the most minute physical examination. From some further observations Dr. Anstie believes that amyl is a relaxer of spasm in all involuntary muscular fibre, and that it would be particularly useful in colicky affections. He would not, however, advise its use by aged persons or others who might be likely to have commencing degeneration of the minute vessels of the brain, for fear of apoplectic accidents.

Dr. Farquhar said that in India he had seen a gentleman suffering from a kind of colic, paroxysmal in its character, and coming on at night, very terrible to the sufferer. Bromide for a time gave relief. He then tried the nitrite of amyl, when, as the patient expressed it, he was transferred from agony to heaven in a moment. The disease partially returned when the drug was discontinued. In another instance similar to the above the nitrite also did good. In reply to Dr. Buzzard, he stated that the attacks seemed to wear out.

Dr. Powell asked as to the theory of the action of amyl—if it acted on the muscles immediately. The vaso-motor system caused these to contract.

Dr. Silver asked Dr. Sanderson if the theory of the nitrite acting through the depressor nerve of the heart by means of the connexion of the cervical ganglia with the spinal cord was not more tenable than that of its direct action on muscle. Stimulation of this nerve undoubtedly affected the heart through the medium of the vaso-motor system, which was primarily affected. He also remarked on the want of any reference to belladonna or atropia, which was physiologically indicated in such cases, rather than the remedies employed.

Dr. Anstie had great objections to substances which required to be given in gradually increasing doses to secure their effects. He remarked on the instantaneous action of the amyl.

Dr. Sanderson said every cardiac pain was not angina. As to the theory of the depressor nerve action, he imagined it required a perfect spinal cord, which amyl did not.

Dr. Baeumler thought this confirmed Nothnagel's theory of spasm of the coronaries. The cause was neurotic, and it yielded to neurotic remedies.

Mr. Paget described the case of a lady who had suffered from Ichthyosis of the Tongue for a year when she consulted him. The patches occupied the papillæ, and showed no indications of cancer. Four months afterwards, however, they became thickened and indurated, and soon presented appearances of well-marked ulcerated epithelial cancer. There was hereditary cancerous tendency in the family.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, February 2.

Dr. Graily Hewitt, President, in the Chair.

The following gentlemen were elected Fellows of the Society:—Mark Long, M.D., Barking-road; W. J. Pilcher, F.R.C.S., Boston; L. D. H. Russell, M.R.C.S., East London Hospital for Children; Baron Paul von Seydewitz, Shadwell-road; J. Davies Thomas, M.B., University College Hospital; Alexander Towne, jun., M.R.C.S., Kingsland-road; and Frederick Wallace, L.R.C.P., Hackney-road.

Dr. Wiltshire exhibited an ovarian tumour removed by him, and made some remarks on Sir. James Simpson's proposal to treat the pedicle by a long acupressure needle.

Dr. Willoughby read a case of Cicatrices from a Burn requiring division during labour. The patient was a primipara 20 years of age. When a child she had been severely burnt by standing over a fire she had lit in the yard, and which she was anxious to hide from her mother. On examination a firm fibrous band was discovered, preventing the separation of the thighs. Dr. Willoughby felt certain this would prove an obstacle to the passage of a full-sized head, and accordingly induced the labour at the eighth month. When the head descended on the perinæum, it was found that it stretched this band, and seemed as if it would cause it to rupture. Eventually it was found necessary to divide it by four marginal incisions, after which the head passed without difficulty, the patient making a good recovery.

Dr. Murray related a similar case which had come under his observation, in which the burns were caused by hot water. In this also perineal incisions were found necessary, after which the labour terminated favourably.

Dr. Woodman made some observations on the administration of the preparations of Iron during Pregnancy. For several years he had given one form or another of chalybeate without observing any bad results. In this he had followed the practice of the late Dr. Ramsbotham and Dr. Barnes. Of course, steel must be given in such a way as not to cause vomiting or to upset the stomach; and he therefore preferred in many cases the administration of the ammonio-citrate in an effervescing form. But he had often given the perchloride, the carbonate, sulphate, and other forms, and without ill result. He was, therefore, greatly surprised the other day to hear a Medical Practitioner in Mile-end attribute an abortifacient effect to a simple effervescing mixture containing ten grains of the ammonio-citrate of iron. Indeed, he told the jury so, who had been summoned to an inquest on an illegitimate child which was born at the eighth month without assistance. The medicine had been taken for three months with good effect. No mention of abortifacient properties in preparations of iron occurred in Dr. Pereira's, Drs. Royle or Headland's, or Dr. Sidney Ringer's or other works on Materia Medica and therapeutics to which he had access. Dr. Taylor, indeed, mentions that some of them had been taken for the purpose, but so had almost every conceivable substance.

The President said that probably all Practitioners were in the habit of prescribing iron in the anæmia of pregnancy, and that he had never witnessed bad results of any kind.

Dr. Routh read a paper on a case of Absence of Vagina. He first saw the case with Miss Garrett. There was a dilated urethra; only the vestibule of the vagina existed, and the uterus could be felt per rectum, distended with fluid, about two inches above the anus. The bag felt per anum very thin, as if it would soon burst. Dr. Routh wished to open first per rectum, and, at a later period, proceed to the formation of a new vagina. After a consultation with Drs. Greenhalgh and Rogers and Mr. Spencer Wells, it was decided to make a new vagina at once, and to open the uterus through it. This was easily effected, and the case at first did pretty well. The fluid was helped in its exit by the injection of a weak solution of iodine, and the new vagina kept clean by a weak solution of carbolic acid. On the seventh day a sudden shock seemed to occur, and she died in a few hours with all the symptoms of internal hæmorrhage. A post-mortem examination showed the cause of death to have been a rupture of the right Fallopian tube. The tube did not communicate with the uterus, nor did the left, which was also a little dilated. It was interesting to consider how far it would have been wise to have punctured first through the rectum, and so to have relieved the tubal dilatation. This might have saved life. There was no inflammation in the neighbourhood of the operation, which, as far as could be judged by the post-mortem, was, as an operation, entirely successful. Dr. Routh passed in review several analogous published cases in which death had likewise occurred after operation from rupture of the Fallopian tube, which was the principal evil to be feared.

Dr. Playfair described a case of Imperforate Vagina which had come under his notice. The patient was a healthy-looking and well-developed young woman, aged 23, who had never menstruated. She had, however, a regular monthly nisus. On careful examination per rectum, no distended uterus could be made out, and the vagina was entirely absent. He therefore came to the conclusion that it was a case of congenital absence of the uterus, but that, judging from the menstrual nisus, the ovaries were present. On this account he did not advise any operation. A successful attempt to form a vagina was afterwards made, and no uterus was found. This was more than a year ago, and it had been necessary to keep the vagina distended with a porcelain plug all the time. If this was removed even for a single night, it showed a remarkable tendency to contract and close; and on two occasions it had to be reopened with sponge tents. This curious case raised the question as to whether a vagina, artificially made in the cellular tissue between the bladder and the rectum, would of itself always remain patent.

Mr. Spencer Wells thought Dr. Routh's practice the best that could have been adopted. Supposing the distended state of the Fallopian tube discovered after death had been accurately recognised during life, and the sac had been punctured through the rectum, the distended uterine cavity would not have been emptied, and the cavity of the Fallopian tube would have been left open into that of the peritoneum as soon as the canula was withdrawn. Puncture of a distended Fallopian tube or a distended uterus through the rectum could only afford temporary relief, and it exposed the patient to the danger of fæcal gas entering the peritoneum as the fluid escaped. But opening the vagina gave the same temporary relief with less risk, and became a permanent relief to the patient. Further observation is required to tell us whether, in cases of retained menstrual fluid, it is better simply to remove the obstruction and leave the fluid to escape gradually, or to press it all away and wash out the cavity by iodine injections. In either case dangerous symptoms are apt to follow—elevation of temperature, rapid pulse and respiration, scanty or albuminous urine, sickness and pain. But he (Mr. Wells) had seen several cases where no ill effects whatever had followed the opening, and he had not yet learned why in some cases the operation simply afforded relief, and in others led to imminent peril or death.

Dr. Wynn Williams remarked that it appeared to him from the history that two operations were required, one to empty the dilated Fallopian tube, the other the uterus. If it were the fact, as stated by Dr. Routh, that the different parts in the pelvis and their relation to each other can be distinctly made out by inserting the hand into the rectum, he could see no objection to first puncturing the dilated Fallopian tube, and then proceeding with the second operation. Had this plan been pursued, he did not think that the accident which proved fatal could have occurred.

Dr. Phillips called attention to the contracted state of the uterus in Dr. Routh's case, and to the apparent development which its tissue had undergone. It had been stated that in such cases the uterus became simply dilated and did not contract on the withdrawal of the fluid. He inclined to think, however, that the cause of the dangerous symptoms so frequently following operative interference was the escape of some of the retained menses along the Fallopian tubes into the peritoneal cavity, caused by the uterine contractions excited by the operation. This appeared to be the explanation in the only fatal case he had seen. The Fallopian tubes were generally distended in long-standing cases of menstrual retention.

Dr. Braxton Hicks read a paper on Puerperal Diseases. The paper, comprising the reports of eighty-six cases of puerperal disease, was brought forward as a contribution to the disturbing causes of recovery in the puerperal state. They occurred to him in consultation in private practice, and they presented an aspect different from Hospital reports, which the author considered of value. They occurred after simple labour, all those in which operations had been performed having been excluded. The treatment had also been excluded in order not to draw off attention from the points desired to be noticed. Instead of classifying the cases according to type, he took cause as the basis of arrangement. This, he admitted, might be open to objection from those who considered that the causes themselves might be open to doubt; but he thought that in many cases the diseases might be advantageously viewed in this way. He divided the cases into two groups—first, those in which the cause appeared certain; secondly, those where the cause appeared uncertain. In the first group, which took in sixty-six cases, he placed cases of scarlet fever as being the most numerous—viz., thirty-six cases. These were divided into those in which the rash was present—nineteen—and those in which there was no rash, but where the patient had been exposed to the risk of contagion—fifteen—and two others in which persons in the same house had sore throat, but whether of distinct scarlatina origin or not was not clear. Dr. Hicks discussed the nature of the rash in the less marked cases, and how far it was similar to the rash of surgical pyæmia, and whether the latter were really distinct—a point difficult to say unless we could be certain that the patient had or had not been under the influence of scarlet fever before admission. Regarding the cases without rash, but which had been exposed to the chance of contagion, he reminded the Society of the varieties of scarlet fever in the non-puerperal state, as also of those cases in which there was sore throat and no rash, and showed how, even in those cases in which the puerperal patient was unquestionably attacked, the usual symptoms were modified; that is to say, the throat and the glands were but slightly affected, and the rash nearly always appeared simultaneously over the body. The other symptoms were like those of so-called puerperal fever, so that if the rash were added to the typical disease, no difference could be observed. These facts, he argued, should prepare us to believe that a disease entering the puerperal woman may become so modified as to produce symptoms more or less differing from the ordinary ones. He dwelt upon the advantages which would be derived from more generally studying the modifications of disease under varying conditions, particularly the exanthemata, admitting at the same time the necessity of distinctly defining disease. At any rate, he considered the occurrence of puerperal fever, with exposure to the poisons, a wonderful circumstance, if a mere coincidence. Thus, viewed in another way, out of thirty-two cases of typical puerperal fever without a rash, half had been exposed distinctly to the contagion of scarlet fever. Of the other half, it could only be affirmed that no such cause could be detected. Six cases of erysipelas connected with parturition were given, showing the slight influence of this disease in private practice. In two instances the attendants became affected with erysipelas of the face after the mother had become attacked by puerperal fever. Six cases of diphtheria, and two apparently from typhoid or typhus, were also given. Next came nine cases where serious symptoms arose from decomposition of the uterine contents. After alluding to his paper read before the Leeds meeting last year, the author pointed out the analogy of a poison derived from this source and one derived from without. Only one case of puerperal fever had occurred which could be clearly traced to the Medical man having attended a similar case. This was pointed out as very satisfactory, because formerly the conveyance of this disease was largely owing to the attendants. After considering the influence of maniacal symptoms on the puerperal state, the cases were gone into which seemed to have no external origin, of which twenty were reported. There were some in which symptoms appeared early in labour, of which the symptoms appeared of a different kind to those which came on about the third to the fifth day. Some of the others were simply local, and probably tranmatic, while others belonged to the typical puerperal fever. The various

causes which might have produced dyscrasia in these were alluded to, and, in conclusion, the author thought that the cases showed that the parts bruised and abraded by the forces of labour tended to recovery; that if any animal poison, such as of zymotic disease, were imbibed by the patient, the system might be so rapidly affected that death might ensue before the ordinary symptoms showed themselves, so that they might show themselves in a more or less modified form, or in a manner so distinct that its origin escaped detection; that under these influences the parts which should have recovered tend to serous effusion, which may go on to suppuration; or inflammation may arise at once or separately in the uterus or its neighbourhood—viz., metritis, cellulitis, peritonitis, etc.—and from these the system may again be affected by pyæmia and all its secondary affections, embolism, phlegmasia dolens, etc., so that the patient is not only subjected to the influence of the primary poison, and to the local troubles thence resulting, but also to secondary blood disturbance the effect of the local mischief. So, also, offensive lochia would poison the system, cause local irritations, but these again may affect the blood by pyæmia, etc. In like manner any depressing influence, mental, aërial, functional, etc., would tend to retard recovery of the bruised parts, so that they may go on to serous effusions, suppuration, etc., and end, perhaps, in pyæmia and its results. Looking to the fact that, out of eighty-six severe puerperal diseases, more than three-fourths had been connected with exposure to animal poisons of one kind or another, the author endeavoured to impress upon all the great importance of removing these causes from the parturient woman, and particularly alluded to separation where scarlet fever existed in her house.

The discussion on Dr. Hicks's paper was postponed until the next meeting.

NEW INVENTIONS.

NEW DISINFECTING APPARATUS.

Mr. George Fraser, of the firm of Messrs. John Fraser and Sons, exhibited and explained at the recent meeting of the Medical Officers of Health Association a new apparatus for which he has recently obtained a patent. The object is to supply a ready means of disinfecting all clothing, bedding, etc., that may have been used by persons suffering from fever or other infectious disease. If such apparatus were erected in all populous districts, it was thought the spread of many diseases might be considerably checked. The apparatus and its working may be thus briefly described:—A brick oven or chamber occupying a space of 8 feet square is erected, in the lower portion of which is a covered furnace and flue capable of raising the internal atmosphere to the required temperature; the front being enclosed with a sliding door. A closed truck or carriage is provided with shelves, racks, and doors, and it is intended to collect the clothing in these carriages from the infected houses and convey it to the chamber. The front door is then opened and the truck placed inside, the fire lighted, and the process of disinfection takes place, sulphur or other fumes being used. When the process is completed the truck is taken again to the house and the articles removed.

The chief points in this patent are:—1. The whole of the vapours given off during the disinfection are, by a peculiar arrangement of flues, made to pass through the furnace, and are thus consumed. 2. The clothing is not removed from the truck until returned to the owner. 3. The carriage, which conveys the clothing and returns the same to the house from which it was taken, is itself disinfected on each occasion with the clothing, etc. 4. The apparatus is not expensive.

NEW BOOKS, WITH SHORT CRITIQUES.

A Plea for the Compulsory Teaching of the Elements of Physical Education in our National Elementary Schools. By M. Roth, M.D.

*** This pamphlet, which is dedicated to Mr. Forster, M.P., calls public attention to the important subject of national physical education, including the elements of sanitary knowledge, and to induce the Council of Education to rule that a school should not be considered *efficient* unless physical education forms part of the *regular* and *daily* instruction, and that no Government aid should be given to any school except the inspector reports sufficient progress in this educational branch. Dr. Roth treats the subject in an able and convincing manner.

Maw's Quarterly Price Current and Book of Illustrations.

*** The Book of Illustrations is a marvel in its way, but is a most useful book of reference to the Practitioner. The illustrations are many hundreds in number, and comprehend, first, Surgeons' instruments, appliances, etc., arranged under their respective heads; these are on such constructions as are supplied to the principal public institutions, and include those recently introduced which have received the approval of competent authorities. Second: Apparatus, implements, utensils, etc., employed in pharmacy and in the dispensing of medicines, Medical glass, earthenware, etc., arranged alphabetically. Third: Fittings, furniture, and other requisites suitable to surgeries and dispensaries. The Book of Illustrations should be in the hands of every Practitioner of Medicine and Surgery, whatever "grade" he may occupy.

Some Population Statistics for Sanitary Organisation. By H. W. Rumsey, M.D.

*** This pamphlet is reprinted from the *Transactions* of the Manchester Statistical Society, and the object of the author is to show in what way the existing areas of sanitary administration can be enlarged and properly worked, and this he does in a very able argument and a copious statistical appendix. At the present time the reprint is most important.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, March 10, 1870:—

Crowther, William Edwin, Lorrimore-road, Walworth.
Esnouf, Charles Amand Evariste, Mauritius.

As Assistants in Compounding and Dispensing Medicines:—

Normand, Claude, Shepherd's-bush.
Romano, Frederick Wm., Calthorpe-street.

The following gentlemen also on the same day passed their First Professional Examination:—

Martin, Richard Johnson, Manchester School of Medicine.
Smith, William John, Sheffield School of Medicine.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Darwen, Mr.—District Medical Officer for Birmingham.
Jackson, Mr.—District Medical Officer for Birmingham.
Jones, Mr.—District Medical Officer for Birmingham.
Suckling, Dr.—District Medical Officer for Birmingham.
Suffield, Mr.—District Medical Officer for Birmingham.

MILITARY APPOINTMENTS.

1st Foot.—Staff Assistant-Surgeon William O'Byrne White to be Assistant-Surgeon, *vice* John Middleton, M.D., appointed to the Staff.

59th Foot.—Staff Assistant-Surgeon Charles Healey to be Assistant-Surgeon, *vice* Thomas Seward, M.D., who exchanges.

Medical Department.—Staff Assistant-Surgeon Henry Richard Lobb Veale, M.D., to be Staff-Surgeon, *vice* Robert Watson, placed on half-pay. To be Staff Surgeons-Major: Francis Reynolds and Alexander M'Arthur, M.D., from the Military Train. To be Staff Assistant-Surgeons: Joseph Richard Kehoe, William White, and Edward Litton Low, M.D., from the Military Train; Thomas Seward M.D., from the 59th Foot, *vice* Charles Healey, who exchanges; Edward Denham Tomlinson, from the Military Train; John Middleton, M.D., from 1st Foot, *vice* William O'Byrne White, appointed to 1st Foot.

To be Surgeons-Major: Surgeons Charles Lowdell and Stewart Clark.

Madras Army.—To be Surgeon-Major: Surgeon George Whittaker Walter.

BIRTHS.

Lewis.—On March 13, at Loughton, the wife of W. Lewis, M.R.C.S.E., of a son.

Liveing.—On March 7, at 53, Welbeck-street, the wife of Robert Liveing, M.D., of a daughter.

Munro.—On March 4, at Moffat, N.B., the wife of James Munro, M.D., of a daughter.

Roche.—On March 11, at Museum-terrace, Chelmsford, the wife of Francis Everard Roche, B.A., M.D., etc., of a son.

Swift.—On March 2, at 2, De Burgh-villas, Maison Dieu-road, Dover, the wife of Dr. B. Swift, Deputy Inspector-General of Hospitals, prematurely, of a son.

Topham.—On March 11, at Rome, the wife of John Topham, M.D., of a daughter.

MARRIAGES.

Burrows—Aynsley.—On March 12, at Abney Chapel, Stoke Newington, John Mackeson Burrows, youngest son of the late Dr. Samuel James Burrows, Ipplepen, South Devon, to Maria Elizabeth Aynsley, daughter of the late Joseph Bell Aynsley, of Highbury.

GALTON—BREWERTON.—On March 10, at Friern Barnet Church, John H. Galton, M.D. Lond., of Three Oak-villa, Upper Norwood, late of Foochow, China, to Jeannie, younger daughter of Charles Brewerton, Esq., of Walfield, Whetstone, Middlesex.

DEATHS.

BARNES, ELIZABETH, relict of the late John Barnes, of the Bengal Medical Service, at her residence, Byfleet, Surrey, on March 13, aged 84.

BARNES, PHILIP EDWARD, second son of H. Barnes, M.D., of Redcliffe-gardens, West Brompton, late of Notting-hill, on January 1, suddenly, the result of an accident, on his passage home from Melbourne.

ENGELMANN, MARIA ANNA THERESIA, only and dearly beloved child of Professor Donders, F.R.S., and wife of Dr. Th. Wilh. Engelmann, aged 23, at Utrecht, on March 3, five days after the birth of twins, a son and a daughter.

FRANKS, MARY, the wife of George Franks, F.R.C.S., at Sevenoaks, on March 12, aged 77.

GRAHAM, SUSANNAH, the beloved wife of T. J. Graham, M.D., at Epsom, on March 13, aged 77.

MUNRO, GEORGINA ELIZABETH, infant daughter of James Munro, M.D., at Moffat, N.B., on March 12.

SWIFT, ANNIE, the wife of Dr. B. Swift, Deputy Inspector-General of Hospitals, at 2, De Burgh-villas, Maison Dieu-road, Dover, on March 2, aged 34.

TATHAM, THOMAS ROBERT, M.D., formerly of Huddersfield, at his residence, Welbeck-terrace, Nottingham, on March 5, aged 66.

WOLLASTON, CATHERINE ANNE, widow of Robert Wollaston, M.D., at 34, Sackville-street, Piccadilly, on March 9.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before April 16.

BRADFORD INFIRMARY AND DISPENSARY.—Resident Medical Officer. Must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before the 21st inst.

BRIGHTON AND HOVE DISPENSARY.—Resident House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to "the Chairman of the Committee of Management," on or before April 4. Election on May 3.

GREAT NORTHERN HOSPITAL.—Junior Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, 43, Great Coram-street, W.C., on or before April 6.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be unmarried and duly qualified. Applications and testimonials to the Secretary on or before March 30.

ROYAL ISLE OF WIGHT INFIRMARY.—House-Surgeon. Applications and testimonials to the Hon. Secretary, Ryde, on or before March 29.

ROYAL SOUTH HANTS INFIRMARY, SOUTHAMPTON.—House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary on or before April 2. Election on the 11th.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, MANCHESTER.—Medical Officer to attend patients at their own homes. Candidates must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Barber, Esq., 41, John Dalton-street, on or before April 2.

ST. PETER'S HOSPITAL FOR STONE AND URINARY DISEASES.—House-Surgeon. Applications and testimonials to the Hon. Sec., 54, Berners-street, on or before March 26.

WEST LONDON HOSPITAL, HAMMERSMITH.—Junior Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, on or before the 21st inst.

WESTMINSTER HOSPITAL.—Resident House-Physician; must have a qualification and be registered, and have served as clinical clerk for six months at some recognised Hospital. Applications and testimonials to the Secretary of the Hospital on or before the 25th inst.

POOR-LAW MEDICAL SERVICE.

. The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Dartford Union.—Mr. F. A. Tipple has resigned the Second B District; area 4490; population 6999; salary £55 per annum.

Malton Union.—Mr. Thomas Allanson has resigned the Rillington District; area 22,970; population 2666; salary £28 per annum.

Reading Union.—Mr. Henry H. Phillips has resigned the St. Giles District; area 2640; population 10,200; salary £118 per annum.

APPOINTMENTS.

Liverpool Parish.—James Ridley, L.K. and Q. Coll. Ire., M.R.C.S. Ire., Assistant Workhouse Medical Officer.

St. Alban's Union.—Frederic R. Spackman, M.D. Lond., M.R.C.S.E., L.S.A., to the Third District.

Worcester Union.—Tom Bates, L.R.C.P. Edin., M.R.C.S. Edin., M.R.C.S.E., to the First District.

COLLEGIATE MEETING.—In pursuance of a requisition recently presented to the President of the Royal College of Surgeons, that gentleman has just convened a meeting of the Fellows and Members of the College for Thursday next, the 24th inst., at 3 o'clock, to which reporters will also be admitted.

ROYAL COLLEGE OF SURGEONS.—The following is an abstract of the unconfirmed minutes of the Council on the 10th inst.:—"The further report of the committee on Section XVIII. of the bylaws in reference to the expediency of summoning a meeting of the Fellows annually on the day of the election of members of the Council, was postponed to a future meeting of the Council. Applications were made by Messrs. Alexander Mosely, of Albemarle-street, and Frederick John Roberts, of Stalybridge, Members of the College, that their names might be altered in the calendar to Morley and Dudley respectively, the necessary legal measures having been taken for that purpose; their requests were granted. A requisition, of which a copy has already appeared in the *Medical Times and Gazette*, signed by 244 Fellows and Members, and by two Surgeons neither Fellows nor Members, was then read, when it was moved by Mr. Quain, seconded by Mr. Simon, and resolved, that, in the opinion of the Council, the object of the meeting proposed in the requisition is a proper one, and on the motion of Mr. Hawkins, seconded by Mr. Erichsen, the President was requested to fix a day and hour to discuss the question proposed in the requisition.(a) It was then moved by Mr. Simon and seconded by Mr. Spencer Smith, that every person desiring admission to the meeting be required to write his name and address, and that none but Fellows and Members of the College and reporters of the public press be admitted. On the motion of Mr. Simon, seconded by Mr. Smith, it was resolved that at the next meeting of the Council, after each meeting of the Fellows and Members, or of Fellows or Members, an account be rendered of the number of Fellows and Members respectively present at the meeting, distinguishing the number of those resident in London from the number of those resident out of London, and that a record of the minutes of the meeting be kept at the College. At the request of Messrs. Dudfield and Welch for the Council to give its support to the Bill for the Superannuation of the Poor-law Medical Officers of England and Wales, it was moved by Mr. Birkett, seconded by Mr. Hewett, and resolved, that the president and vice-presidents be requested to draw up a petition to the House of Commons in support of the Bill, and that, when signed by the members of the Council, the same be presented to the House. Messrs. A. G. Brookes, of Shrewsbury, Samuel Parker, of Sheffield, and Thomas Parr, of the army, were elected Fellows of the College.

THE LEVÉE.—At the Levée held on Friday, March 11, at Buckingham Palace, the following presentations were made to her Majesty:—Deputy Inspector-General Dr. Robert Bernard, R.N., on appointment as Hon. Surgeon to the Queen, by the Director-General of the Navy Medical Department. Dr. Wilberforce Bird, by Sir James Carmichael. Dr. G. S. Cardew, Inspector-General of Hospitals, by the Secretary of State. Mr. W. Collins, Army Medical Staff, by Colonel the Hon. Dudley F. C. de Ros. Deputy Inspector-General Dr. Henry J. Domville, C.B., R.N., on appointment as C.B., by the Director-General of the Navy Medical Department. Assistant-Surgeon Olliver T. Duke, Bengal Army, by the Secretary of State. Dr. J. A. Dunbar, Inspector-General of Hospitals, late Bengal Army, on return from service, by the Secretary of State. Assistant-Surgeon J. J. Durant, Bengal Medical service, by the Secretary of State. Assistant-Surgeon Albert C. Fernandes, Grenadier Guards, on appointment, by his Royal Highness the Field Marshal Commanding-in-Chief. Surgeon Thomas W. Fox, M.B., R.E., on return from foreign service, by the Deputy Adjutant-General, R.E. Staff Assistant-Surgeon Joseph Gray, by the Adjutant-General. Dr. J. A. Guise, Inspector-General of Hospitals, her Majesty's Indian Army, on return from India, by Lieutenant-General Sir George Bell. Assistant-Surgeon Isaac Hoysted, by Colonel Knox. Staff Assistant-Surgeon W. Napier Keefer, by the Secretary of State. Deputy Inspector-General Dr. George Mackay, R.N., on appointment as Hon. Surgeon to the Queen, by the Director-General of the Navy Medical Department. Deputy Inspector-General of Hospitals Dr. H. H. Massy, on appointment as C.B., by the Adjutant-General. Staff Surgeon John Meane, M.D., by the Adjutant-General. Staff Assistant-Surgeon Dr. William Nash, by the Adjutant-General. Assistant-Surgeon K. J. Parr, M.D., R.A., on return from India, by the Deputy Adjutant-General Royal Artillery. Assistant-Surgeon A. Seaman, Bengal Army, by the Secretary of State. Mr. Leonard Sedgwick, by Hon. Edward W. Douglas. Surgeon St. John Stanley, on appointment to the 1st Battalion 25th Foot, by the Adjutant-General. Surgeon Thompson, by

(a) Thursday, the 24th instant, at 3 o'clock, is the day and hour appointed.

Colonel Knox, C.B. Assistant-Surgeon J. C. Whiskaw, Bengal Medical service, by the Secretary of State. The following gentlemen attended the Levée:—Sir William Fergusson, Sir Henry Holland, Sir Thomas Watson, Inspector-General Dr. Dumbreck, C.B., the Director-General of the Medical Department of the Navy, Deputy Inspector-General Jee, C.B., V.C.; Drs. Acland, Atkyns, M. Baines, Vernon Bell, Brewer, M.P., Cape, Langdon Down, Day-Goss, Hector Helsham, Nicoll, George Owen Rees, H. Cooper Rose; Staff Surgeon Leonard Kidd, M.B.; Messrs. William Adams, Cæsar Hawkins, James Paget, Solly.

At a meeting of the Social Science Association to be held on Monday next at 8 o'clock, a paper will be read by Mr. James Lewis on "National Returns of Sickness." Dr. Farr, F.R.S., will take the chair.

On the 15th inst. a deputation of the Association of Medical Officers of Health, consisting of Mr. Liddle, Dr. Aldis, Dr. Ballard, Dr. Tripe, Dr. Woodforde, Dr. Rygate, with Dr. J. N. Vinen and Dr. Stevenson, hon. secs., had an interview with Mr. Bruce at the Home Office on the subject of some legislation for the better construction of dwelling-houses. The objects of the deputation were to point out that houses are frequently built on foundations composed of most offensive refuse, that no concrete or any similar material is used for covering the ground surface, that offensive materials are often used in the construction of the walls and in the composition of the plaster, and that the drains are badly and inefficiently constructed. The necessity for some specified open space being left in the rear or on the side of dwelling-houses, and for improvement in the height, ventilation, and light of rooms, were also insisted on. The members of the deputation stated that from the manner in which a large number of houses had been lately constructed serious injury to the health of the occupiers had resulted, and they urged the necessity of some legislation to prevent a continuance of the evils alluded to. Mr. Bruce acknowledged the importance of the subject, but, as he objected to piecemeal legislation, he would communicate the views of the deputation to the Royal Sanitary Commission, with the object of some action being taken which would not be confined to London, but include the whole country.

Employment of Children in Agriculture.—Prolonged Fasting.—Last Saturday, in a case heard before the magistrates of Canterbury, it transpired that a lad, 14 years of age, often worked in the fields from half-past five in the morning until half-past three in the afternoon without any food in the interval.

The Quekett Microscopical Club.—The annual *conversazione* of this club took place on Friday evening last at University College. It was numerously attended by members and visitors. Various interesting objects were exhibited under the microscope. Photographic specimens, lent by the India Office, were much admired. Other specimens were also exhibited, and the meeting altogether was highly successful.

Government Inspectors.—The Medical Department of the Privy Council have seven inspectors, with salaries amounting to £4775, besides their expenses. The two inspectors of schools of anatomy received £448 for salary and allowances in 1869. The Poor-law Board have seventeen inspectors and sub-inspectors, with salaries ranging from £350 to £900, and allowances.

Medical Charities.—The late Mr. George Thomas, of Bristol, has bequeathed £2000 each to the Bristol Royal Infirmary and the Bristol General Hospital. The Hon. Lady Augusta Vernon-Wentworth, of Connaught-place, has bequeathed to the Beckett Dispensary, Barnsley; St. Mary's Hospital, Paddington; Cancer Hospital, Brompton; and the Royal Hospital for Incurables, Putney, £100 each; and Mr. Thomas Parr, of Grappenhall, Heyes, has left £1000 towards establishing an infirmary at Warrington. These several benefactors have made further bequests to other charities, not strictly Medical, and directed that the legacies be paid free of duty.

Microscopic Soirée at St. Thomas's Hospital.—The success which attended the *soirée* given for the first time by the President of the St. Thomas's Hospital Medical Society to the members towards the close of last winter session encouraged Mr. Croft to issue invitations for another *soirée*, which was held as before in the museum and library of the Hospital on Thursday, March 10. Everything was done to make the evening entertainment as agreeable and instructive as possible. Bottles of "pickles," such a terror to men going up for the "first college," were judiciously kept out of sight or screened by floral and other decorations. All the students who had microscopes kindly lent them for the occasion, so that with those supplied by Messrs. Ross, Beck, and Baker, there were in all about forty instruments disposed as follows. Mr. Rainey exhibited some very unique specimens illustrating his observations on "molecular coalescence." Dr. Bristowe showed some injected preparations of the retina, as also some acini explaining the different forms of skin disease with which they are associated. Mr. Croft showed some beautifully tinted sections of the spinal cord, as also some preparations of the eye. At Dr. Ord's table there were some living specimens of entozoa from the intestine of the frog, etc. Mr. Stewart showed some very pretty effects of polarised light upon crystals, blocks of plate-glass of different shapes, and also transparent photographs of natural history specimens also polarised. Mr. Wagstaffe undertook a series of preparations of urinary deposits and some injected preparations of the skin and kidney. Mr. Churchill showed some beautiful specimens illustrative of Dr. Carpenter's deep-sea researches in the "Porcupine Expedition" of 1869. We recognised some very rare forms of foraminifera, on which subject Dr. Carpenter is the undoubted authority. Mr. Inglis showed some miscellaneous specimens principally of natural history and botany, the effects of polarised light on the scales of fish, etc. A very pleasant evening's entertainment was thus provided for the students, and we hope that it may be repeated annually, and we trust that winter *soirées* will be inaugurated at other Hospitals.

Dr. Cobbold, F.R.S., the Swiney Lecturer on Geology, commences his course at the London Institution on Thursday, March 10. In his course he proposes to discuss the following list of subjects, which will be seen to comprehend some of the most interesting scientific questions of the day:—Scope and tendency of the Physical and Biological sciences. Method of Geology and Palæontology. Principles involved in the classification of Sedimentary rocks. Significance of the facts of Succession and Superposition. Value of Grouping and Equivalency as applied to organic forms and rock masses. The best mode of acquiring an adequate conception of Geologic Time. Determination of the earliest representatives of animal and vegetable classes. General account of the past record and range of the more important major animal groups. Special descriptions of remarkably interesting extinct animal types. Known range in time of the Organic Series as a whole. Parallelism subsisting between the Group-record of the animal and vegetable kingdom, respectively. Evidences of the incompleteness of the Geological record. How far this imperfection lessens the value and interest of our deductions. Statement of the general conclusions which are not only admissible but must be held absolutely. How far the data advanced tend to support or otherwise prevailing theories of Evolution. The claims of Geology as an aid to the acquirement of high Mental Culture. The lectures to commence at half-past seven o'clock in the evening precisely. The public are admitted free.

Health of Scotland.—The deaths of 2629 persons were registered in the eight principal towns of Scotland during February, of whom 1286 were males, and 1343 females. The number, after allowing for increase of population, is 110 above the February average of the last ten years. Of the 2629 deaths, 1097, or 42 per cent., were of children under 5 years of age. In Paisley, 29 of the persons who died were under 5 years of age; in Perth, 30; in Edinburgh, 34; in Aberdeen, 39; in Dundee and Leith, 42; in Glasgow, 45; and in Greenock, 50 per cent.

The Medical Society of London.—The Society held its ninety-seventh annual meeting on Tuesday the 8th instant, at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn. The President, Mr. Peter Marshall, was in the chair. The result of the ballot was declared to be as follows:—*President:* John Gay, Esq. *Vice-Presidents:* William Adams, Esq.; Dr. John Cockle; T. C. Weeden Cooke; Dr. Symes Thompson. *Treasurer:* C. H. Rogers Harrison, Esq. *Librarian:* Dr. S. Day Goss. *Secretaries in Ordinary:* J. W. Baines, Esq., and Dr. J. C. Thorowgood. *Secretary for Foreign Correspondence:* Dr. Sansom. *Orator:* Dr. Cholmeley. *Council:* Dr. Althaus; H. Royes Bell, Esq.; R. Davy, Esq.; W. H. Day, M.D.; R. W. Dunn, Esq.; F. J. Gant, Esq.; James Hinton, Esq.; Thomas Hunt, Esq.; H. L. Kempthorne, M.D.; George Lawson, Esq.; Dr. Macpherson, M.A.; P. Marshall, Esq.; F. Mason, Esq.; V. de Méric, Esq.; Dr. Richardson, F.R.S.; H. P. Robarts, Esq.; Leonard Sedgwick, M.D.; F. Simms, M.D.; George Slight, M.D.; E. W. Tait, Esq. According to a recent change in the laws, the Annual Oration will be delivered on May 2, when a general conversazione will be held.

Fothergillian Gold Medallist: Thomas S. Clouston, M.D., Medical Superintendent, Cumberland and Westmoreland County Asylum, Carlisle, "for the best essay on any subject in therapeutics." The subject chosen by Dr. Clouston was "On the Use of Opium, Bromide of Potassium, and Cannabis Indica, especially in regard to the use of the two latter given together in Insanity." *Fothergillian Silver Medallist:* Dr. A. E. Sansom for special services rendered to the Society. The following is the subject for the Fothergillian Gold Medal next year:—"On Obstetrics" (including the Diseases peculiar to Women), essays competing to be sent in before November next. The Fellows of the Society, to the number of sixty, afterwards dined together. Among the visitors were Dr. Paget (of Cambridge), Dr. Quain, Jonathan Hutchinson, Esq., Dr. Graily Hewitt, Professor Tyndall, etc., etc. The usual loyal toasts having been drunk, "The Medical Society of London" was given, in proposing which the President took occasion to congratulate the assembly on the very prosperous and flourishing condition of the Society. His remarks were received with much cheering.

"Honorary" Medical Officers.—The Norwich Dispensary has for some time been deficient of "honorary" Medical officers, and the emergency has been temporarily met by one of the Honorary Medical Officers and the Resident Medical Officer giving extra time. The matter has been under consideration by the Finance Committee, and their last report commences as follows:—"The Finance Committee regret to report that they have not as yet received any offer of assistance from any of the Medical gentlemen of the city, but your committee is not prepared to advise on the best course to be pursued in the present emergency." A similar difficulty has been experienced at the Royal Kent Dispensary, where the honorary Medical staff is deficient to the number of six—viz., three Medical Officers for Deptford, two for Greenwich, and a House-Surgeon. Now, at the Royal General Dispensary, Bartholomew-close, under similar circumstances, the committee overcame all obstacles by reducing the number of the Medical staff and *paying them*. We commend a similar plan to the consideration and adoption of the committees of the Norwich and Royal Kent Dispensaries, for there is no reason why the services of members of our Profession, more than any other, should be "honorary." The system is vicious in principle, and is becoming more and more unsatisfactory and impracticable every day.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Eastbourne.—The recent outbreak of typhoid fever in this town was, we think, due to the impurity of the drinking water in certain localities. Dr. Thorne's report clearly shows this. It is satisfactory to find that the "local board" have determined on taking decided steps in the matter, and that the recommendations of the Government Commission will be carried out. Looking at the death-rate of Eastbourne for several years past, that town certainly can bear comparison with any other watering place. Notwithstanding, the temporary panic, which prevails in consequence of the recent outbreak of disease will soon subside, and Eastbourne maintain its high character as a health resort.

Under Sentence of Death.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Allow me to say a few words on behalf of the poor wretch Spinass, who was condemned to death on Thursday last without any recommendation to mercy. It is perfectly clear that there was no malice prepense on the part of the prisoner, and the judge observed "that apparently there was an absence of all motive." There are strong grounds for believing that the fatal act was committed under the influence of the hallucination that the victim was a devil. Similar cases of sudden and temporary delusion are familiar to Medical men conversant with the treatment of the insane. Brierre de Boismont, in his work "On Hallucination," mentions several instances where the delusion that an individual was a devil had led to murderous attacks. He observes, "There are some hallucinations, like homicidal impulses, which exhibit themselves unexpectedly, without having been announced by any derangement of the mind." Under these circumstances, it is to be hoped the Home Secretary will pause before he allows the sentence of death to be carried into effect. I am, &c.

Harley-street, March 9. J. M. Winn, M.D.

Changes in the Army Medical Department.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I do not know whether India is more the land of "shaves" than other lands, but I have heard it stated so frequently of late, and in such high quarters, that the long-talked-of transformation of the Army Medical Department into a corps exclusively staff is about to take place at once, that I venture to ask whether your people at home know anything about it? If the change is to be, I only hope that in future Medical officers will be attached as much as possible to stations, and not to regiments. If hereafter Surgeons and Assistant-Surgeons were comfortably settled down for a term of years—say, three or five—at one station, and saved the expense of frequent moves, having the military Hospital of their station under their own control, and having time to form friendships for themselves wherever they might be quartered, and, in many places, opportunities by attending local Hospitals of keeping up and increasing their Professional knowledge, the change might have something to recommend it; but to make men into a regular district corps, and then attach them to regiments, could only increase every evil that has been complained of (except the money evil). There are few positions worse in life than being army men and yet not of them; and if Medical officers have complained in time gone by of not being counted as of their regiments, what would it be if they were merely attached, wearing a distinct uniform and paying no regimental subscription, dependent on the charity of the mess. Hoping that you or some of your readers may be able to enlighten us out here, I am, &c.

India, February 17. An Army M.D.

The Employment of Non-legally Qualified Assistants.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—That truly lamentable case of the woman who lately died at Cwm-y-glo soon after her delivery will, I hope, bring into public discussion a usage in the Profession which, like many others in the several departments of human action, requires that some critical event should occur before it be stopped. While the case is still *sub judice*, it would, of course, be out of place to assume more as to the blame to be attached to the parties implicated than we have had given us by the lower court before which it has already been tried. With this precaution, we can say that a non-legally qualified assistant attended the woman so inefficiently that the further services of his employer were required, the child was dead-born, the mother died soon after, and both assistant and principal have been committed by the magistrates to take their trial for manslaughter at the next Spring Assizes. Now, leaving legal technicalities aside as being quite beyond my province, the point I wish to lay stress upon is this broad fact—the employment in Professional work of non-qualified men. While fully admitting the correctness of your own remark some little time since, that the engagement of such assistants is a very difficult question to determine in its limits, I can have no difficulty in declaring that the present system is a gross abuse of a necessity; for what is the real and actual motive for such employment in almost every case, save that of a desire of the principal to monopolise an extent of practice which he would be unable to do himself and unwilling to pay for being done by a legally qualified assistant? The result is that his competitors are excluded from a field of practice which his low-priced services enable him to usurp, that portion of the public to which such services are relegated being by long usage unwilling to give expression to their discontent. Here all discussion may be thought to be closed by the trade maxim, *caveat emptor;* but not so. Not even in trade does this hold, inasmuch as the State takes charge to prevent adulteration of food, and (what is more significant) has passed many Acts to prevent illegal practice. But it seems to be simply an absurdity to make the practice of a non-legally qualified man amenable to law, if certain results follow, while the employment of an unqualified assistant is condoned, thus favouring the exposure to temptation and then seizing hold of the man who falls into it.

As to the influence of this abuse upon Medical practice generally in the treatment of disease, or upon the estimation held by the Profession in public opinion, I shall not occupy your space further by describing it; but this may be said, that in both cases this influence must be, and is, altogether depreciating. It would perhaps go far to remove this abuse if the public were aware that payment for the attendance of such assistants could not be recovered for in a court of law, if it were made an exception of by the defendant.

The system here condemned is one of those injustices in and out of the Profession which the Association of General Practitioners lately proposed should be able to lessen, if not entirely remove. I am, &c.

Hanley, March 9. J. F.

Syncope during Operations.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It must be a relief to the Profession at large, and to individuals in particular, to find so able an advocate as Sir James Y. Simpson coming forward to show them that death from syncope may take place in the operating theatre or in the private surgery, before an operation or during an operation, independent of chloroform being administered. Some individuals are very liable to faint or go into a state of partial syncope. I have seen a girl in my own surgery faint both before getting a tooth extracted and after getting it extracted. Sir James's first case is taken from the writings of John Hunter. "I have seen," writes Mr. Hunter, "a man thrown into such convulsions from the operation of the hydrocele being performed upon him that I began to despair of his recovery." Well, I have also seen something of the kind, and I remember an instance in particular. A ploughman came to my surgery one evening to undergo the operation for the radical cure of hydrocele. I had only injected about half the iodine, when I felt him give way; I caught hold of him with my right hand, but was not able to prevent him from coming to the ground with some force. He was pale as death, and had ceased to breathe. I immediately undid his cravat, bared his chest, and dashed cold water thereon; seized the ammonia bottle, which was near at hand, and thrust it to his nose. Still he made no motion. I then pressed his ribs, tried Hall's method, dashed cold water again on his breast, and again pressed his ribs. At last his chest began to heave, and I need not say how thankful I was for this, seeing I was in my solitary surgery without any one to share the responsibility with me. It may perhaps be said that was a mere case of fainting; but it was deeper than this, as proved by the fact that I had to make up a bed for him in the surgery, and that it was upwards of two hours before he was able to leave it, and then he looked so wretchedly ill that I wanted him to remain all night. Small quantities of brandy and water were given him during the time, as well as a cup of good strong tea.

Blantyre, February 28. I am, &c. Thos. Downie, M.D.

The Profession in the Days of Smollett.

"The other means used to force a trade—such as ordering himself to be called from church, alarming the neighbourhood with knocking at his door in the night, receiving sudden messages in places of resort, and inserting his cures by way of news in the daily papers—had been so injudiciously hackneyed by every desperate sculler in physic that they had lost their effect upon the public. . . . But this he considered as a temporary project only until he should have acquired interest enough to erect an Hospital, Lock, or Infirmary by the voluntary subscription of his friends—a scheme which had succeeded to a miracle with many of the Profession who had raised themselves into notice upon the carcases of the poor. Yet even this branch

was already overstocked, insomuch that almost every street was furnished with one of these charitable receptacles, which, instead of diminishing the taxes for the maintenance of the poor, encouraged the vulgar to be idle and dissolute by opening an asylum to them and their families from the diseases of poverty and intemperance; for it remains to be proved that the parish rates are decreased, the bills of mortality lessened, the people more numerous, or the streets less infested with beggars, notwithstanding the immense sums yearly granted by individuals for the relief of the indigent." —*Ferdinand Count Fathom*, chap. iii.

COMMUNICATIONS have been received from—

Alienist; Dr. S. K. Cotter; Dr. Braxton Hicks; Dr. Bell Fletcher; An Army M.D.; Mr. M. H. Higginbottom; Mr. Durham; Dr. Abeath; Dr. R. Gardiner Hill; Mr. J. Barber; Mr. T. Charters White; Dr. Day; Mr. H. Hewson; Mr. R. G. Whitfield; Dr. N. J. O'Connor; Dr. Phillips; Mr. J. E. Scovell; Mr. Haslewood; Dr. James Munro; Dr. T. Spencer Cobbold; Mr. J. Chatto; Dr. Leared; Mr. Maunder.

BOOKS RECEIVED—

Skey's Lectures on Hysteria—American Practitioner, No. 1—Dr. Rumsey on some Population Statistics for Sanitary Organisation—A Plea for the Compulsory Teaching of the Elements of Physical Education, by Dr. Roth—Gazette Médicale d'Orient, No. 11—Cases of Syphilitic Affection of the Third Nerve producing Mydriasis, by Victor De Méric—A New Method of treating Gonorrhœa by Injections, by A. E. Durham, F.R.C.S.—Dr. Philipson's Report on the Health and Meteorology of Newcastle and Gateshead—Schuppert on Excision of the entire Scapula, with Preservation of a Useful Arm—The Last Illness of Dr. Alden March; a Criticism on the Management of his Case—E. Ray Lankester on Comparative Longevity in Man and the Lower Animals—Chloroform *versus* Pain and Paracentesis of the Bladder, by the late J. H. James, F.R.C.S.—New Orleans Journal of Medicine, January—Russell's Clinical Observations on Hydrate of Chloral as a Hypnotic in Typhus—Dr. Williams's (Boston, U.S.A.) Practical Guide to the Study of the Diseases of the Eye—The Family Friend, part i.—The Policy of the Contagious Diseases Act, 1866 and 1869, Tested by the Principles of Ethical and Political Science—Dr. Williams's Authentic Narrative of the Case of the late Earl St. Maur—The Academy, March—New York Medical Journal.

NEWSPAPERS RECEIVED—

Salford Chronicle—New York Medical Gazette—Eastbourne Gazette—Birmingham Daily Gazette—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

March 19. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Association of Medical Officers of Health, 7½ p.m. Mr. Liddle, "On certain Defects in the several Sanitary Acts, with Suggestions for their Amendment." Mr. Joseph Clegg, "A Scheme for the better Supervision of Sanitary Matters in England."

Royal Institution, 3 p.m. Mr. Lockyer, "The Sun."

21. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

King's College, 8 p.m. "Lectures on the Prevalent and Fatal Diseases of the English Population, from the Earliest Times to the Close of the Eighteenth Century," by William A. Guy, M.B., F.R.S. Lecture 8.

Medical Society of London, 8 p.m. Meeting.

22. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Mr. Campbell (of Islay), "On Current British Mythology and Oral Tradition."

Royal Institution, 3 p.m. Prof. Rolleston, "Nervous System."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Charles Elam, "On Idiopathic General Cerebritis."

23. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society, 8 p.m. Dr. Peacock, "Some Experiences of an American Tour."

Society of Arts, 8 p.m. Meeting.

24. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

Royal Institution, 3 p.m. Prof. Odling, "Chemistry of Vegetable Products."

25. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Dr. Greenhow, "Case of Atrophy of Brain with great Depression of Temperature." Mr. Christopher Heath, "Cases of Imperforate Anus." Dr. Duckworth, "Case of Keloid of Alibert." Dr. Handfield Jones, "A Fatal Case of Epileptic Stupor." Dr. Leared (per Dr. H. Jones), "Artificial Respiration in Apparent Death from Epileptoid Fits."

Quekett Microscopical Club, 8 p.m. Mr. M. C. Cooke, "On Microscopic Moulds," illustrated by diagrams and specimens.

Royal Institution, 8 p.m. Prof. Rolleston, "Anglo-Saxon Conquest."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 12, 1870.

BIRTHS.

Births of Boys, 1270; Girls, 1228; Total, 2498.
Average of 10 corresponding weeks, 1860-69, 2083·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	770	729	1499
Average of the ten years 1860-69	756·3	726·4	1482·7
Average corrected to increased population	...	...	1631
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	12	...	11	...	4	3	2
North ...	618210	2	4	15	1	6	3	8	1	3
Central ...	383321	...	2	1	2	2	...	...	1	2
East	571153	2	4	17	1	7	...	3	1	5
South	773175	2	5	24	2	23	1	4	4	2
Total	2803989	6	17	69	6	49	4	19	10	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·899 in.
Mean temperature	38·4
Highest point of thermometer	48·0
Lowest point of thermometer	30·4
Mean dew-point temperature	33·1
General direction of wind	Variable.
Whole amount of rain in the week	0·02

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 12, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Mar. 12.	Deaths Registered during the week ending Mar. 12.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2498	1499	48·0	30·4	38·4	3·55	0·02	0·05
Portsmouth ...	122084	32	96	69	54·2	30·2	39·6	4·23	0·10	0·25
Norwich	81087	27	56	40	44·5	29·5	37·1	2·84	0·16	0·40
Bristol	171382	90	142	133	53·1	29·4	40·0	4·44	0·02	0·05
Wolverhampton ...	72990	53	52	37	51·0	31·2	39·3	4·06	0·22	0·56
Birmingham ...	369604	117	326	151	51·1	31·0	39·3	4·06	0·07	0·18
Leicester	97427	75	73	32	50·0	28·5	38·7	3·72	0·20	0·51
Nottingham ...	88888	110	56	31	51·0	29·9	40·2	4·55	0·02	0·05
Liverpool	517567	250	412	273	48·0	30·3	39·3	4·06	0·01	0·03
Manchester ...	374993	207	295	214	53·0	31·0	40·6	4·78	0·01	0·03
Salford	121580	58	111	73	50·4	29·2	39·9	4·39	0·00	0·00
Bradford	143197	54	113	60	52·8	30·0	40·2	4·55	0·02	0·05
Leeds	259527	30	207	137	54·0	31·0	40·7	4·83	0·09	0·23
Sheffield	247378	27	179	102	51·0	29·2	39·3	4·06	0·04	0·10
Hull	130869	91	76	69	...	...	...	...	...	...
Sunderland ...	94257	52	53	44	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	96	58	...	...	...	...	...	...
Edinburgh	178970	100	117	72	49·7	26·0	38·6	3·67	0·00	0·00
Glasgow	468189	228	387	305	48·9	26·4	38·1	3·39	0·00	0·00
Dublin (City, etc.*)	321510	82	204	188	51·8	27·5	40·3	4·61	0·00	0·00
Total of 20 Towns in United Kingd'm	7209603	83	5519	3587	54·2	26·0	39·4	4·11	0·06	0·15
Week ending Mar. 12 Paris	1889842	242	...	1263	...	...	...	...	...	...
Week ending Mar. 5 Vienna	605200	162	...	327	...	...	38·1	3·38	...	...
Week ending Mar. 10 Berlin	702437	112	616	448	...	...	32·0	0·00	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·899 in. The barometrical reading decreased from 30·22 in. on Sunday, March 6, to 29·51 in. on Saturday, March 12.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

GUY'S HOSPITAL BIENNIAL FESTIVAL, 1870.

The Gentlemen educated at Guy's Hospital and their Friends will Dine together at WILLIS'S ROOMS, King-street, St. James's, on WEDNESDAY, the 23rd day of MARCH, 1870.

Chairman—EDWARD COCK, Esq., President of the Royal College of Surgeons.

STEWARDS.

Aikin, C. A., F.R.C.S.
Aikin, C. E., Esq.
Aldridge, J. P., M.D., Dorchester.
Ashforth, G. M., M.D., St. Leonard's-on-the-Sea.
Bader, Charles, Esq.
Barlow, Robert, Esq.
Barron, E. E., M.D.
Bateman, William, Esq., Folkestone.
Bealey, Adam, M.D., Harrogate.
Beeby, W. T., M.D., Bromley.
Beedell, John, Esq., Tiverton.
Berney, Edward, Esq., F.R.C.S., Croydon.
Berry, H. T., Esq.
Bianchi, Robert, Esq.
Billinghurst, Henry, M.D., Bromley.
Birkett, John, F.R.C.S.
Bisshopp, James, Esq.
Bossey, Francis, M.D., Mayfield, Redhill.
Brauwell, R., Esq., Brighton.
Brett, Alfred T., M.D., Watford House.
Brook, W. F., Esq., Wye, Kent.
Brookhouse, Charles T., Esq., Deptford.
Brookhouse, J. O., M.D., Nottingham.
Brown, Henry J., F.R.C.S.
Brown, Robert, F.R.C.S., Brixton.
Brown, Samuel S., M.A., Lewisham.
Bryant, Thomas, F.R.C.S.
Budd, Herbert G., Esq., Worcester.
Bureh, S. K., Esq.
Burgess, John Henry, Esq., Glastonbury.
Burroughs, T. J., Esq., Horley.
Burton, John M., F.R.C.S., Lee.
Butler, F. J., M.D., Winchester.
Byass, Thomas S., M.D., Cuckfield.
Cann, F. M., Esq., Dawlish.
Carr, John, Esq.
Cass, E. E., Esq., Goole.
Champneys, H. M., F.R.C.S., Penge.
Charlton, Alfred, Esq., Tunbridge Wells.
Charlton, Egbert, M.D., Farnham.
Chater, George, F.R.C.S., Tenby.
Cockell, Edgar, Esq., Dalston.
Cockell, Frederick E., Esq., Dalston.
Collambell, Charles, F.R.C.S., J.P.
Collett, A. H., B.A., Worthing.
Colley, J. N. C. Davies, M.A., M.B.
Cooper, George, F.R.C.S., Brentford.
Cressy, W. E., Esq., Carshalton.
Croft, John H., Esq., Bicester.
Cross, Richard, M.D., J.P., Scarborough.
Daglish, Rothwell, Esq., New Romney.
Daldy, F. S., Esq.
Dalrymple, Donald, M.P.
Dalton, B. N., Esq., South Norwood.
Daniell, G. W., Esq., Blandford.
Dickson, J. Thompson, M.D., St. Luke's Hospital.
Domville, Henry J., M.D., C.B., Melville Hospital.
Douglas, William T., Esq., J.P., Banbury.
Dryland, Winter, Esq., Kettering.
Durham, Frederic, Esq.
Eastes, Silvester, Esq., Folkestone.
Eddowes, Arthur, Esq., Loughborough.
Evans, B., F.R.C.S., Brixton.
Evans, T. W., Esq., Everton, Liverpool.
Evershed, Arthur, Esq., Ampthill.
Evershed, Charles L., Esq., Arundel.
Fagge, C. Hilton, M.D.
Faircloth, Richard, F.R.C.S., Newmarket.
Farr, Frederick, Esq., Dunstable.
Farr, G. W. F., Esq.
Fearn, S. W., F.R.C.S., Derby.
Finch, Robert, M.D., Blackheath.
Firth, J. T. Forbes, Esq., Rotherhithe.
Forster, J. Cooper, M.B., F.R.C.S.
Foster, Oswald H., M.A., M.B., Hitchin.
France, John F., F.R.C.S., J.P.
Francis, William, Esq., Ilchester.
Galton, Edmund H., F.R.C.S., Brixton.
Galton, Edmund J., Esq., Brixton.
Gowing, B. C., Esq., Daventry.
Greaves, Thomas L., Esq., Great Easton.
Grove, W. R., Esq., M.D., St. Ives, Hunts.
Gull, W. W., M.D., F.R.S.
Habershon, S. O., M.D.
Hall, Christopher, M.D., Swadlincote.
Halls, Thomas, Esq.
Hartree, J. P., M.D.
Hicks, J. B., M.D., F.R.S.
Hills, W. C., M.D., Norwich.
Hilton, John, F.R.C.S., F.R.S.
Hinton, James, Esq.
Holland, P. H., Esq.
Holmes, William, Esq., Lower Norwood.
Holman, Constantine, M.D., J.P., Reigate.
Holman, H. Martin, M.D., Hurstpierpoint.
Howes, H. G., M.S.
Hunt, F. E., Esq., Sydenham.
Iliff, William T., M.D., F.L.S., Epsom.
Jacobs, Henry, Esq., Kensington.
Jalland, W. Hamerton, Esq.
Johnson, Charles, Esq.
Johnson, D., M.D., Old Kent-road.
Jones, F. C., M.D.
Jones, W. H. Podmore, M.D.
Joyce, Thomas, Esq.
Kent, Thomas J., Esq.
Kershaw, W. W., M.D., Kingston-on-Thames.
Kingsford, Edward, F.R.C.S., Sunbury.
Knaggs, Samuel, Esq., Huddersfield.
Knott, W. P., Esq., Bugbrooke.
Lacey, John, Esq.
Lashmar, Charles, M.D., Croydon.
Locke, Thomas W. S., Coatham, Redcar.
Lord, Charles F. J., Esq., Hampstead.
Lovell, William Day, Esq., Croydon.
Lowe, Wm. Thos., F.R.C.S., Highbury.
Lund, Edwd., Esq., F.R.C.S., Manchester.
MacDougal, A. Mason, F.R.C.S.
Martin, Frederick, M.D., Beckenham.
Maunder, C. F., F.R.C.S.
Massey, Hugh H., Esq., Camberwell.
May, E., Esq., Tottenham.
Maughan, Samuel, Esq., Twickenham.
Medwin, A. G., M.D., Blackheath.
Minns, Pembroke, M.D., Thetford.
Montefiore, Nathaniel, F.R.C.S.
Moon, Henry, Esq., Tottenham.
Morris, Henry, M.B.
Morris, Isaac, Esq., Stamford-hill.
Morris, Matthew, Esq.
Moseley, L. J., Esq.
Moxon, Walter, M.D.
Muriel, G. J., Esq., Alrewas.
Musgrave, J. T., Esq., Finchley-road.
Nisbett, R. Innes, Esq., Gravesend.
Odling, William, M.B., F.R.S.
Oldham, Henry, M.D.
Otway, C., F.R.C.S.
Owen, Harvey K., M.D., Clapham-road.
Palmer, F. W., M.D.
Park, William, M.D.
Pavy, F. W., M.D., F.R.S.
Phillips, J. J., M.D.
Phillips, Richard, F.R.C.S.
Poland, Alfred, F.R.C.S.
Prance, R. R., M.D., Hampstead.
Puckle, George, M.D., Denmark-hill.
Pye-Smith, E., F.R.C.S., Hackney.
Pye-Smith, P. H., M.D.
Rees, G. Owen, M.D., F.R.S.
Remington, Thomas, M.D., Brixton.
Rendle, Richard, Esq.
Richards, Samuel, M.D.
Roberts, J. H., F.R.C.S., Finchley New-road.
Rogers, Robert J., Esq., Brighton.
Roots, W. Sudlow, F.R.C.S., Kingston-on-Thames.
Roper, Alfred G., Esq., Croydon.
Roper, Arthur, Esq., Blackheath.
Ross, J. Harris, Esq., Brighton.
Sadler, H. G., Esq., Canterbury.
Salzmann, F. W., Esq., Brighton.
Satchell, W. C., Esq., Tunbridge Wells.
Salter, J. A., M.B., F.R.S.
Shepherd, A. B., M.A., M.B.
Soper, William, Esq., Clapham.
Spry, Frederick, M.D., 2nd Life Guards.
Spurrell, Flaxman, F.R.C.S., Belvedere.
Stedman, John B., Esq., Godalming.
Stedman, James R., M.D., Guildford.
Steele, John Charles, M.D.
Steele, John Sisson, Esq., Reigate.
Stevenson, Thomas, M.D.
Stocker, James, Esq.
Stocker, J. Reginald, M.B.
Sutton, Frederick, Esq., Norwich.
Sutton, H. G., M.D.
Talbot, Richard, Esq.
Tanner, John, M.D.
Taylor, Alfred S., M.D., F.R.S.
Taylor, Charles, M.D., Camberwell.
Taylor, James, F.R.C.S., Wargrave.
Ticehurst, Aug. R., St. Leonard's-on-Sea.
Ticehurst, Frederick, Esq., J.P., Hastings.
Tilley, Samuel, Esq., Rotherhithe.
Toulmin, Frederick J., F.R.C.S.
Toulmin, Francis, F.R.C.S., Clapton.
Toulmin, William C., Esq., Clapton.
Towne, Joseph, Esq.
Townsend, T. Sutton, Esq.
Waddy, H. E., Esq., Gloucester.
Wallace, R. U., M.B., Hackney.
Ward, Martindale, F.R.C.S.
Ward, W., M.D., Huntingdon.
Weber, Hermann, M.D.
White, Charles, Esq., Warrington.
Whittet, James, Esq.
Wilks, Samuel, M.D.
Willett, E. S., M.D., Isleworth.
Wilton, John, Esq., Sutton.

All Gentlemen intending to Dine are requested to signify their intention to the Honorary Secretary on or before Monday, 21st inst.; otherwise places cannot be secured.

Dinner on the Table at Six o'clock precisely.

Tickets, 21s. each, to be had of the Stewards; of the Honorary Secretary; at the Library of the Hospital; and at Willis's Rooms.

ARTHUR E. DURHAM, Hon. Sec.,
82, Brook-street, Grosvenor-square, W.

ORIGINAL LECTURES.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
Lecturer on Clinical Medicine in the University of Berlin.

I.—Cardiac Neuralgia (Angina Pectoris).

The name Angina pectoris is Heberden's. Rougnon is said to have described the disease at the same time (1768). Its synonyms are as follows:—Asthma convulsivum (Elsner, 1778); Diaphragmatic gout (Butler, 1791); Asthma arthriticum (Schidh, 1793); Syncope anginosa (Parry, 1799); Asthma dolorificum (Darwin, 1781); Sternalgia (Baumes, 1806); Sternocardia (Brera, 1810); Pneumogastralgia (Téallier, 1826). If we consider angina pectoris as a form of visceral neuralgia, and place it at the head of the list, we are justified in doing so from a symptomatic aspect, because a spontaneously arising paroxysmal pain of an intense character, and restricted to the regions of certain nerves, forms the characteristic and pathognomonic symptom of the disease. Its frequent or almost constant coincidence with motor disturbances affords no contradiction to this conclusion, since we meet with such in other forms of neuralgia affecting mixed nerve tracts, and since we do not usually consider neuralgia to be a purely sensory lesion, but to be a combination of sensory, motor, and vaso-motor disturbances.

The attacks of pectoral angina—it has also been called "stenocardia"—are characterised by pain arising in the region of the heart, reflected thence over the sternum and the left arm or both arms; in the latter case the pain of the right thorax and arm is less intense than that in the symmetrical parts of the left side. With the pain is combined a peculiar feeling of anxiety and a most intense sensation of constriction around the chest. This inexplicable sensation, which is also met with in other forms of visceral neuralgia—in cardialgia and colic—is so characteristic and predominant that it induced Heberden to give to the disease the name above mentioned (angina, from *angi*). The pain generally comes on suddenly, with no precursory symptoms, so that patients are attacked when walking or when engaged in their work. The duration of a paroxysm is usually short—as a rule, it lasts only a few minutes; but the attack is not always over in that time, as remissions, followed by exacerbations, occur, so that a paroxysm consists of a series of partial attacks, as is the case with superficial neuralgias.

Simultaneously with the changes in sensation, disturbances in the action of the heart, of the circulation, and respiration, as a rule, occur which may influence the course and character of the disease. The cardiac impulse is now weak, asynergic, intermittent, or interrupted by prolonged pauses; now it is increased in activity, violent, and intense. At the height of the pain the action of the heart is generally weakened, and even quite interrupted; during the remissions and intermissions it is sometimes considerably increased, and even very intense. Similar differences may be observed in the pulse, which, at the radial artery, is sometimes small and of diminished tension; at other times, strong and full, whilst, even in cases where the action of the heart is apparently increased, the larger arteries may indicate diminished expansion and low tension. Sometimes, at the beginning of an attack, the peripheric arteries appear cord-like, hard, and contracted, but, at a later period, full and soft. Sphygmographic examination likewise indicates, at the beginning of an attack, increase of, and later on diminution of, arterial tension.(a) Respiration is also now increased, becoming violent, and now slower, retarded, superficial, and even entirely ceasing. These latter phenomena are, however, *consequences of the pain;* the patient is afraid to inspire deeply, but, if induced to do so, can generally accomplish it. This dependence of disturbances of the respiration on pain has also been pointed out by Parry.(b) Respiration may be quite unaffected during an attack, as I have myself observed in several cases. The alterations in the action of the heart and in the circulation are also shown by changes in the blood supply to, and the temperature of peripheric parts. The skin is, during the attack, pale, cold, dry, at the extremities almost bloodless. The face is pale and sunken; there is a general feeling of shivering; paralytic sensations—as prickling and formication—in the tips of the fingers may be caused by cutaneous anæmia. Towards the end of the paroxysm or after it the reverse occurs—redness, turgescence, increased heat of skin, and abundant perspiration may be observed.

Pathogenesis of Pectoral Angina and Physiological Analysis of its Symptoms.—Angina pectoris may occur as a symptom in different diseases of the heart, as insufficiency of the aortic valves, stenosis of the arterial osteum, and fatty degeneration of the heart's muscular fibres. But it seems that *ossification of the arteriæ coronariæ* is more particularly apt to cause stenocardiac symptoms, a fact to which Parry first called attention, and concerning which post-mortem examinations are reported by Wilks,(c) Phillipp,(d) Waldeck,(e) Fincham,(f) Mason,(g) Moorhead,(h) Oppolzer,(i) Dickinson,(k) Colin,(l) etc.

Nevertheless, pectoral angina has been frequently observed without alteration in the coronary arteries and without disease of the heart at all.(m) Again, ossification of the coronary arteries has been found at post-mortem examinations in individuals who have never suffered from steno-cardiac attacks during life. Hence a *nervous dynamic* form of that affection has for a long time been placed side by side with the organic forms—*i.e.*, those complicated with disease of the heart—of angina pectoris.

All the nerves which in general have any connexion with the heart have been looked upon by different authors as the seat of the disease.(n) Now it was the phrenic, and now the intercostals, but oftener the vagus (o) and sympathetic,(p) without the authors having been able to bring the singular phenomena of angina pectoris into accordance with the physiological function of these nerves, the better knowledge of which is of only recent date. Most frequently the affection has been considered as neuralgia of the cardiac nerves; by Trousseau(q) it was looked upon as an epileptiform neuralgia; by Romberg(r) as hyperæsthesia of the cardiac plexus, and the same by Friedreich.(s) Other authors, again, have pointed to the other symptoms, besides those of a neuralgic character, and more particularly to the changes in the heart's action during the attacks. Thus Stokes(t) looks upon it as a transient increase of an already existing weakness of the heart, consequent on fatty degeneration of its tissue coexistent with hyperæsthesia. Bamberger(u), in opposition to Stokes, speaks of it as increased action of the heart—hyperkinesis combined with hyperæsthesia—and Dusch(v) looks upon it as hyperæsthesia with spasm of the heart. I agree with those writers who do not consider angina pectoris as a pure hyperæsthesia of the cardiac plexus, but who assume also implication of some of the motor nerves of the heart; but it seems to me not yet possible to determine the individual nerves themselves diseased, or the functional alteration of which produces the attacks. The cardiac nerves are so intricately connected by anastomosis, and take their origin from such different parts of the nervous system, that an isolated disease or functional impediment in the vagus, in the branches of the sympathetic, or in the cardiac plexuses can scarcely be assumed; and where the nerves of the heart have an isolated course, as, for instance, the nervi cardiaci of the vagus and the cardiac branches of the cervical ganglia of the sympathetic, no anatomical alterations have as yet been discovered in cases of angina pectoris.

(a) Lauder Brunton, *Lancet*, 1867, July 27, p. 97.
(b) Stokes on Diseases of the Heart, page 398.

(e) *Med. Times and Gaz.*, 1855, No. 246.
(d) *Deutsche Klinik*, 1853, No. 41.
(e) *Ibid.* 1856, p. 437; 1862, p. 48.
(f) *Med. Times and Gaz.*, 1859, p. 591.
(g) *Brit. Med. Jour.*, vol. 1859.
(h) *Lancet*, July 26, 1859.
(i) *Wiener Med. Wochenschrift*, 1858, p. 721.
(k) *Med. Times and Gaz.*, January 6, 1866.
(l) *Gaz. Hebdomadaire*, 1867, No. 29, p. 755.
(m) Compare Desportes in Lartigue, "De l'Angine de Poitrine," p. 78. Paris. 1846. Surmay, *Union Médicale*, xxxi., No. 80, p. 34.
(n) Compare Ullersperger, "Die Herzbraune." Leipsic. 1865.
(o) Desportes, "Traité de l'Angine de Poitrine." Alf. Lartigue, "Mémoire sur l'Angine de Poitrine, Couronne, etc." Paris. 1846. (Extract in *Gaz. Méd.*, 1847, No. 39, p. 775.) Gélineau, *Gaz. des Hôpitaux*, 1862, Nos. 114, 117, and 120.
(p) Lobstein, "De Nervi Sympathetici Humanæ Fabricæ, Usu, Morbis, Commentatio Anatomico-physiologico-pathologica." See Ullersperger.
(q) Trousseau, "De la Névralgie Epileptiforme," *Archives générales de Méd.*, Jan., 1853, pp. 33 and 34.
(r) Romberg, "Lehrbuch der Nervenkrankheiten," 3te Auflage, 1855, p. 153.
(s) Friedreich, "Lehrbuch der Herzkrankheiten," 1867, p. 326.
(t) Stokes, "Krankheiten des Herzens," S. 395.
(u) Bamberger, "Krankheiten des Herzens," 1857, S. 363.
(v) Von Dusch, "Lehrbuch der Herzkrankheiten," 1863, S. 337.

We are too deficient in an accurate knowledge of the normal innervation of the heart to determine precisely the part which any particular division of the heart's nerve-system takes in the affection. The investigations of the present decennial period concerning the influence of the sympathetic and the pressure of the blood on the action of the heart have called forth a number of new facts, which have not even yet been systematically arranged, so that anything like a complete knowledge of the normal innervation of the heart remains still in obscurity. But even if a sure physiological footing had been gained its pathological application would be beset with difficulties, since the angina not only arises in consequence of various anatomical changes in the heart, which may implicate perhaps different systems of its nerves, but it occurs also as a pure neurosis without any cardiac disease; and ultimately the phenomena of the attack itself, particularly the changes in the heart's action, are so variable in different cases, that if we could explain the changes in the action of the heart by an alteration of one single group of cardiac nerves—*e.g.*, increase of action of the heart consequent on some influence on the sympathetic—this explanation would not continue to hold good in those cases in which the action of the heart during a paroxysm is rather retarded, or, at least, scarcely differs from the normal. We must not, therefore, start with the idea that the disease under consideration belongs to certain groups of the heart's nerves; we are only able to analyse the complex series of symptoms of angina pectoris physiologically—*i.e.*, to show by means of experimental investigation how single groups of nerves may be implicated.

The pain which ushers in an attack may be assumed with confidence to arise in the plexuses of the heart's nerves. This, it is true, cannot be demonstrated with the same amount of certainty as is possible in pain of peripheric nerves, the causes of which are familiar to us, but we are justified in our supposition by the fact that the pain always arises about the region of the heart, remains there fixed, and is most intense there. The heart is certainly little sensitive under ordinary circumstances, as are all organs which are not under voluntary control; that, nevertheless, irritation of its sensitive nerves under pathological conditions should give rise to so extraordinary a pain is as little to be wondered at as the similar occurrences in the case of other vegetative organs—*e.g.*, gastralgia, colic, and so on.

As has been shown by Goltz,(w) the heart receives its sensitive fibres from the vagus; at least, it is so in the frog. In mammalia it appears that sensitive nerves enter the heart's plexus which are extra vagum, as is seen by the fact that in spite of section of both vagi nerves, the animal exhibited indications of pain when the auricles were mechanically irritated; hence we are obliged to assign sensibility to some fibres of the sympathetic which are implicated in the formation of the cardiac plexuses, and the more so since the character of the pain manifests a close analogy with those pains which occur in other states of irritability of certain sympathetic nerves—*e.g.*, the colic of gall-stones, gastralgia, etc.

This neuralgia of the cardiac nerves is in some rare cases idiopathic, in other cases it is probably consequent on traction of the nerves. In connexion with such mechanical irritation of the nerves in certain organic diseases of the heart—*e.g.*, ossification of the arteriæ coronariæ, valvular disease of aorta, and so on—one must at least remember that the cardiac plexus is situated behind and below the arch of aorta, and the aortic plexus near the arch of the aorta; morbid processes in the aorta may therefore give rise to traction of the nervous plexus close by. Why these violent attacks of pain should occur at certain intervals in paroxysms, although the supposed cause of the traction is continuous, we can as little explain as we can the paroxysmal character of other diseases.

In cases where organic changes in the heart do not exist, we cannot state the proximate cause of the pain. The changes in the action of the heart during an attack, be it increased or diminished in action, cannot be the only source of the vehement pain, since the most extreme departure from its normal action, whether increase as in aortic disease, or diminution as in fatty degeneration of the cardiac muscle, may be connected with constriction, but never with such pain as in any way resembles that of angina pectoris. Moderate degrees of abnormal action of the heart are very often not at all perceived, and hence we cannot implicitly concede to the opinion which Eichwald(x) holds as to the cause of the pain and the nature of stenocardia, to which we shall have to refer in our next lecture.

(w) Goltz, "Vagus und Herz," Virchow's *Archives*, vol. xxvi. S. 1–33.
(x) *Würzburger Medicinische Zeitschrift*, vol. iv. S. 249–269.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 224.)

Diagnosis of Cataract.—Formerly the subjective symptoms of cataract were much discussed. As, however, the disease is palpable when advanced, and as it can be detected in the very earliest state, its existence must be determined by being seen It must, therefore, be looked for, and sought for, according to its stages; by the aid of art through a dilated pupil; by light condensed with a bi-convex lens of an inch and a half focus, or two inches; by oblique illumination with artificial light, a second convex lens being employed for examining the illuminated crystalline lens surface; and by the ophthalmoscope.

Visible symptoms, that is, opacities produced by the primary changes that the lens fibres undergo, and the secondary, and by the deposits on the capsule, are clearly reflected. These physical signs are striæ or stripes, as radiating opacities. Dots or spots, large and punctiform, patches, fringes, flocculent opacities. General cloudiness when the entire surface of the lens is affected. So long as mere striæ exist, only the primary changes have occurred in the lens fibres. Patches denote secondary alterations.

The distinction between well-marked senile colorations and cataract is easy. Coloration is best seen by oblique illumination. It nearly disappears when the ophthalmoscope is used. Cloudiness is not apparent in the lens, and the fundus of the eye is seen, yet not with the clearness and brightness to be observed in youth. In some cases it is much obscured.

The state of the sight will help in the investigation. If the person examined can see distant things well, and if he can read small type without glasses, or even the smallest with them, he cannot have cataract.

Besides making out that cataract is present, it is possible to say in the partial state of some cataracts, the part of the lens that is affected, and that through the different anatomical arrangement of nucleated cells and lens fibres and of the fibres themselves. This will be made apparent as I proceed, and it may serve to point out the probable course the disease will take as regards time before arriving at maturity.

It seems to me better to avoid the division of cataracts into different kinds, and the naming of them, as has been suggested, according to the mere forms or figures that the opacities may assume. I shall rather adopt the same classification for the surgery as I selected for the pathology, and recognise merely hard and soft. This is sufficient for any man engaged in the practice of ophthalmology.

In seeking for cataract and learning to identify the disease, we have the rare opportunity of being able to detect any slight pathological changes, at the earliest period in living delicate tissue. In having the power to obtain this knowledge, the advantage must not be overrated, nor the means used, where Surgery is concerned, to lead beyond what is practical and useful. I say this for the sake of the Surgical student, who ought not to desire to follow after mere curious things. He must not be alarmed by the details that some writers consider necessary here, and turn away panic-stricken, and with the fear that he can never master such an intricate subject. He need not be dismayed. To him it is profitless to go further into the subject of the lens markings, than is necessary for him to be able to detect cataract in all stages, and to learn the difference between hard cataract and soft, in order that he may be fitted to apply the proper treatment for each. The first is easily and quickly learnt, the second is to be ascertained by the age of the patient and outward signs recognisable by the naked eye.

Diagnosis of the lenticular disease.

Hard Cataract.—That is the cataract of adults, elderly people and old. In the early stage it is almost always cortical, and shows itself as opaque streaks, or radii of different lengths on the anterior surface of the lens, and the posterior, branching as they extend towards the equator, and more or less curved. This is due to the disposition of the lens fibres, which are arranged in radii, converging from the outer part of the lens

to the centre in curves, and which curves decrease as they approach the centre. The striæ may be short and thickly set, at the very equator.

Striæ in front are at once detected, and look white. Those deep-seated, especially at the back of the lens, are yellowish, because they are seen through the coloured nuclens.

Sometimes there are more patches of opacity than striæ, especially near the equator. The striæ increase and blend into patches, the lens in general gets hazy, and less light enters the eye. At last all striæ are lost, and only the opaque anterior lens surface can be seen.

Should the cataract be ushered in by nuclear opacity, there is a diffuse brownish gray or yellowish gray cloudiness, which has a more or less curved form from the shape of the nucleus, less dense at the margin through which the light passes to the fundus of the eye. There is then apparent a transparent space, from the opacity to the pupil, in thickness, according to that of the cortical stratum of lens fibres that is not involved. In a most marked case, by weak ophthalmoscopic illumination, there appears a roundish cloudlike opacity in the centre of the pupil.

By high illumination the fundus of the eye is seen as through a mist, very cloudy in the centre, but clearer at the sides, where the several parts may be more or less made out.

Oblique illumination shows better the colour of the nucleus, the form, and the outline.

This cataract is always very slow in forming, and the completion of which may be by the process above described, as when in the first instance the cataract commences in the cortical region, or the whole lens may be overcome by the extension of the opacity.

The rarest form of developing cataract is that in which the entire lens is pervaded from the first by general diffused opacity. If there be distinct markings, they are more like convolutions of fine threads, than the ordinary regular striæ of most cataracts.

The cortical and nuclear changes may proceed together. This is the quickest forming cataract.

The appearance of the fully formed ordinary cataract of primary change is a mixture of dark gray and amber, more deeply shaded in the centre, or mottling of gray and amber, or amber only.

When the secondary atrophic changes take place, the cataract surface generally gets more opaque and white, and more patchy from the addition of earthy matter, and fatty, and molecular, and cholesterin.

In the first edition of my work, I pointed out the fact, that it is very common for cataract in an advanced degree in an old person not to exhibit any amber colour, but to appear whitish or whitish gray, like the soft variety, and after extraction to prove light-coloured on the surface merely, there being a hard amber-coloured nucleus beneath, sometimes with striæ still apparent. I am not aware that there are any diagnostic distinctions between a hard lens so secondarily altered, and full-formed cataract occurring in early life, except that the former is more uniformly of a whitish colour and devoid of cloudiness, never exhibiting radiating or other streaks; that the capsule is rarely, if ever, opaque, and besides such symptoms as alterations in the chambers of the eye may indicate. In hard cataract there is nearly always a posterior chamber, in correspondence in size with the age of the person, and this increases as the cataract gets smaller, as it is apt to do.

In soft cataract, the posterior chamber is very frequently reduced, and may be obliterated, the iris being pushed forwards, its movements impaired, and the anterior chamber reduced. The cataract may even protrude through the pupil. But the age of the individual helps out of the difficulty more than anything.

Besides the size of the posterior chamber in giving a correct idea of the volume of the cataract, the shade cast by the iris in the form of a dark crescent on the cataract surface, shows the distance of the cataract from the iris, and therefore its diminution. There is no shade when the cataract is large and close to the iris. The shadow is the more marked, as the cataract is light-coloured. Slight tremulousness of the iris from the loss of peripheral support, is another proof of the reduction of a cataract. Whether the white degeneration has passed partially into fluidity or not cannot generally be told till operating.

But there may not be any whitening of the surface while the same kind of partial fluid change may proceed. The fluid may be as dark as the cataract, and here also there may be impossibility of detecting it. On one occasion, during extraction, when I proceeded to rupture the capsule, a dark fluid unexpectedly escaped, and for a time interrupted my progress by obscuring the iris. In another case, a lady, seventy-seven years old, with double cataracts, consulted all the present men of ophthalmic eminence in London, and, without an exception, extraction was recommended. I saw her, took the same view, and was selected as the operator. The capsule did not contain a particle of lens, but was filled with material like coffee-grounds. I operated only on one eye; sight was restored. There is always an absence of all striæ or markings that can exist only so long as the lens fibres remain.

Soft Cataract.—This varies more in appearance during the stages of formation, and when fully formed, and during the secondary metamorphoses, than the hard variety.

It may be placed under two heads. First, as opacity invading a lens that has not become amber-coloured and denser by age, and existing in children and young persons.

Secondly, as occurring in a lens in which the coloration is still slight existing in young adults.

There are such dissimilarities between the states of the disease mentioned under the first head, as to warrant separate consideration of them, as they appear from birth to puberty and from puberty to manhood.

Of the cataracts met with from birth to puberty, the greater part are congenital, indeed I am inclined to suppose that nearly all have this origin. When they are discerned a few years after birth, they are but the extension of previously existing opacities. A slight partial cataract is very commonly overlooked altogether in childhood. In a child the power of accommodation is great, and the refracting media in general so clear, and he requires very little illumination of an object, he is therefore less affected by a partial opacity than an adult. Till a child can read, and is old enough to understand questions about his sight, and to investigate it somewhat a little himself, any slight visual defect, is almost certain to be attributed by his parents and friends, to a little nearsightedness.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

PRACTICAL REMARKS

ON THE FOOD OF INFANTS, WITH AN ACCOUNT OF THE USE OF BUTTERMILK IN REARING INFANTS.

By A. M. BALLOT, M.D., Rotterdam.

(*Concluded from page* 307.)

Buttermilk.

Many of my benevolent readers will perhaps laugh at the idea of the buttermilk (*buttermilch* in German, *karnemelk* in Dutch), which is generally given to the pigs, as a thing to administer to babies; and, my dear reader, I do not deny that I thought so myself when I first heard of it. From time to time I heard of a single case where buttermilk was given and with success, but as it was so unheard of, there it rested.

I tried it with such unexpected success that I must narrate the first case. It was the child, some weeks old, of a labourer, whose wage was nearly 9s. per week; when you remember that meat costs here 1s. 6d. the kilo., you will conceive that meat is unknown otherwise than by sight to this sort of people. The mother had milk, but the child was very poorly, and on first sight you would have expected to see it entered on the diet-list under the head "pædatrophia;" the stool was green as spinach. What to do here? no idea of a nurse for this sort of people, medicines could perhaps be useful, but food seemed the most useful. So I advised to give the child buttermilk, to boil a pint (litre) of it with a spoonful of wheatmeal, and to add sugar to each portion given to the child out of a bottle, after having warmed it. The child remained suckling, and took the food. After a week the stool was of a healthy yellow colour; the face and body after some weeks had a healthy expression; every one who had seen the child recover would have been converted with me from the idea that buttermilk was only food for the pigs. The second and third time I tried it with the same effect, so that my belief in it became firm. I gave it then to my own baby, only three weeks old, in addition to the mother's milk, with entire success. After two years, when I wrote my article reprinted in Schmidt's "Jahrbücher," already many colleagues were convinced of its usefulness, and now since some more years have elapsed, nearly the half of my Medical brethren in Rotter-

dam, and especially those whose practice lies more amidst the children of the middle and poorer classes, are totally won over. Not tens or hundreds, but thousands, already are fed in this manner.

Chemical Composition of Buttermilk.

My friend Robertson willingly made the analysis. Only let me say of Nos. 6 and 7 that the milkman knew what use was to be made of them.

Analysis of Buttermilk by W. Robertson.

In 1000 Parts.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Date	Oct. 3	Oct. 5	Oct. 7	Oct. 8	Oct. 10	Oct. 14	Oct. 17	Oct. 19	Oct. 21	April 28	May 3	May 4	May 9
Temperature in degrees Fahr.	44	44	46	47	51	51	54	57	50	61	75	70	70
Lactic acid	...	...	3·87	...	3·82	3·33	2·79	3·78	4·50	1·07	1·73	1·79	8·9
Milk sugar	...	...	19·13	...	16·82	37·14	35·20	27·77	22·19	19·7	23·48	22·54	22·00
Casein	...	...	40·65	...	43·52	40·72	49·46	39·06	36·40	40·4	50·77	47·16	50·95
Salts	...	...	5·46	....	5·00	7·50	5·01	8·00	5·50	4·50	6·43	6·66	4·4
Butter	...	...	4·22	...	4·01	1·31	0·87	4·72	1·40	0·99	0·91	0·21	1·75
Water	920	930	926·67	924·17	926·83	910·00	906·67	916·67	930·00	933·34	916 68	921·67	920·00
Total solids	80	70	73·33	75·83	73·17	90·00	93·33	83·33	70·00	66·66	83·32	78·33	80·00
Lactic acid, twenty-four hours later	...	...	5·49	...	5·01	4·48	4·32	4·43	5·31	2·06	2·96	3·05	2·71

When we look at the table, it is to be seen that the difference between the various numbers is so great that they cannot merely be attributed to occasional circumstances. As an example, I take Nos. 3, 6, 7, 8, all of the same milkmen; of 6 and 7 he knew that it was for investigation, of 3 and 8 not. The milk was bought as soon as it arrived, fresh. Buttermilk is mostly imported here from the neighbourhood. The milk sugar varies from 19·13 to 37·14—the last cipher even high for fresh milk; the total solids differ from 73·33 to 98·33. The buttermilk was examined for lactic acid directly after it had arrived, and twenty-four hours later, because the milk arrives here every other day. It appeared that the average difference was 1½ per mille, only in 13 it was three times more; but then the quantity of lactic acid was very small in the first analysis. Most remarkable is the higher rate of lactic acid in the autumn than in the spring.

The best buttermilk is made by skimming the milk, to churn the cream when it is ready for it, and then to separate the butter; what rests is buttermilk first quality. A second quality of buttermilk is prepared out of the milk, which is churned when it is ready for it. A third quality is made out of skim milk which is churned when it is no longer good to be sold. The first quality we seldom see in our great cities. The second sort of buttermilk is the most desired.

For the separation of the butter it appears to be necessary to add hot water, and this is a beautiful occasion for falsifications. The different sorts of buttermilk are often mixed together, or skim milk, which is no more to be sold, added to buttermilk, so that it is easy to conceive what a variety there must exist between the different specimens. No wonder that no two analyses are like each other.

To find a norm for buttermilk, let us suppose that the second quality is made, that buttermilk must then be similar to the ordinary cow's milk, of which it is made, except in the loss of the greatest part of the butter. The milk sugar will also for a part have been altered into lactic acid. If we now admit that the milk contains 125 total solids per mille, under which are reckoned 30 parts of butter, then there remain 95 total solids when all the butter is taken away. The normal composition of the buttermilk ought then to be 98 total solids per mille, and 902 parts of water. The analysed buttermilk gave wholly other results, for without the suspected numbers, 6 and 7, the total solids differ from 83·33 to 66·66, and the water from 916·67 to 933·34.

It is not my plan to enter into an inquiry after all the falsifications that can occur in buttermilk; what I said was enough to state that I am quite aware of the less favourable side of the food I recommend. It is to show that I am thoroughly well acquainted with it, and that in recommending it I don't recommend an ideal food not to be had for daily use by the poorer class, but a food such as is here daily sold.

The buttermilk as it occurs in the milkshops is an excellent food for babies, and the whole preparation with wheat-meal or flour, which last gives a nicer pap, is so easy that every one can do it. As is natural amongst the better class, there is taken much more care with the preparation, and you will hear your stately drynurse say "the preparation of this food requires a great exactitude." Happily amongst the poor you will find the same results as among the richer people, because in reality the preparation is very simple. And then the chief part, nearly all, is the buttermilk itself.

Very often sorts of food are recommended whose basis rests on theoretical grounds, and may be very good, but fail when not prepared in the prescribed manner. Now the use of buttermilk had a totally practical origin; it existed nobody knows how many years hence. The use anticipated the science. As with all good food, it remains useful, even though it is a little falsified. It will then only be a little less nutritious. It appears that it matters not so much if there be a little more or less water in it, and, what is the more remarkable, even if there be a tolerably great difference in the casein, in which it so greatly differs from the ordinary milk. The child will only take more or less, or will go longer without wanting more food. When the child is once accustomed to it, which mostly requires some days, he can take as much as he likes at once. Let us now inquire into the reason

Why Buttermilk is Easily Digested.

How can we explain that buttermilk is so easily digested whilst we always fear to give acids to the children? How often to the ordinary cow's milk magnesia or carb. calcis are added that the milk only should not, perhaps, become acid? and here we have a food which must be acid, and which is often very acid too, I can assure you. Let us once again compare buttermilk with mother's milk:—

	Average quantity in buttermilk.	Average quantity in mother milk.
Casein	43·8	34·3
Milk sugar	23·6	48·2
Butter	2·0	25·3
Salts	5·6	2·3
Total solids	78·25	116·4
Water	921·75	883·6
Lactic acid	2·75	nil

The reason of the digestibility cannot be found in a conformity between the two foods. The casein in buttermilk is much more, the milk sugar and salts less. Butter there is nearly none. Could that be the case that it is more easily digested? but then some add it to the food. The total solids are much less, but then sugar and wheat flour are added; and last, certainly not least, comes the lactic acid, the most incomprehensible of all, alone a reason for Dr. v. Hoht, in Riga, to reject it as a food without even having read my previous article on it (a)—*tant pis pour lui.*

And precisely, I believe, the presence of the lactic acid is one of the reasons why the buttermilk is so easily digested. In an analogy with the mother's milk the explanation is not to be found, but there is an analogy with the half-digested mother milk and the half-digested cows' milk. There gets no milk into the stomach without being more or less coagulated by the acids of the gastric juice. Now, with the buttermilk the stomach gets a food already partially digested, and, accompanied by the acid, mostly considered as a normal part of the gastric juice, (b) the lactic acid which, in combination with the pepsine, dissolves albuminous substances. Whether this lactic acid is free in the buttermilk, or partially forms salts, even with the casein, it is not my affair to enter upon. But that the lactic acid and lactic salts are held in great value for the digestion of all sorts of food, we have reason to know from the many advertisements of lactic salts we read in the journals.

Then there is yet another question. Is the casein of the buttermilk the same as the casein of the ordinary cows' milk?

(a) Behrend's und Hildebrand's *Journal für Kinderkrankheiten*, 1869, S. 180:—"I also believe I may be permitted to pronounce (myself) against the adviee of Dr. Ballot to give buttermilk to infants as a nourishment even *à priori* (*sic*) without having read his paper, for it is well known that always part of the milk sugar in buttermilk is transformed into lactic acid, because the single parts of the milk come into contact with much oxygen during the act of churning. Therefore litmus paper, when applied to buttermilk, shows an acid reaction." If Dr. v. Hoht had read my previous article, he would have seen that I was aware of all, or at least of many, things that can be said against the buttermilk. He would also have seen that I related facts which, even though they should nowhere else meet with the same success, are nevertheless facts here, and can be seen by every one.

(b) Frerichs, "On Digestion," in Wagner's "Manual of Physiology."

In the first instance, it might be that a lactate of casein was formed, more easily digested; and, secondly, the casein itself may have been altered (its molecular condition), were it alone, by the act of churning. Who thinks not of other substances of the same chemical composition, but wholly different in other physical qualities, as amylene, dextrine, quinine, etc.—the so-called isomeric substances? But, be it so or not, certain it is that the casein appears physically in another form in the milk than in the buttermilk. The casein can no more be coagulated even by the strongest acids and rennet, while the caseine of the milk is coagulated in great lumps, even by a little quantity of acid and rennet.

When a child takes too much mother milk, we see that it vomits out from another reason, that the fluid contains little fibres of coagulated casein; when it takes ordinary cows' milk, you will find in the vomited fluid fibres, but also very often it contains great coagula. On the contrary, when it gets buttermilk you will see no visible change in the ejected fluid.

Now, it is easy to comprehend that the casein of mother milk should be more easily digested than that of the cows' milk. When the former gets into the stomach, it is changed into a gelatinous fluid; but when the latter gets into it the first act of the gastric juice is to coagulate it into great tenacious morsels, after which the digestion begins.(c) No wonder that in feeble stomachs these great coagula irritate them. You will also see them very often making vomiting gestures, and mostly it ends by vomiting those coagula.

As I stated, cows' milk is coagulated by acids and rennet. The buttermilk is already acid; the caseine is no more precipitated by acids. The casein presents itself here very subtly divided; and this subtle division alone may already be a great cause of the easy digestibility of the buttermilk.

I believe, therefore, that the reason why buttermilk is so easily digested consists in the form in which it is presented to the stomach. That it is so easily digested, because it is already, so to say, halfway digested, so that the coagulation of caseine into greater morsels cannot further take place, and the function of the stomach is made much easier. I do not know what part occupies the flour and the sugar combined with the buttermilk. In general I find that it was more easily digested by little children when there was not added too much flour. Some add butter. I do not like it; and the children have, notwithstanding, a very healthy appearance. The deficiency of butter in the buttermilk appears to be amended out of the amyline and sugar.

Mode of Preparation.

The manner in which the buttermilk food is prepared is this:—To a pint (litre) of buttermilk is added a spoonful (0·16 gramme) of wheat flour. When once it boils, it must be kept so not longer than some minutes; the pap must be very thin. Sugar is added to every portion the child uses, so that it may have sweet taste. To a pint of milk are added 8 or 10 decigrammes of sugar. I attach no importance to the addition of wheat flour or meal, and would omit it totally because often there is added too much, and I believe that the utility of the food lies in the buttermilk itself; but then the cook says that when buttermilk is boiled alone it will separate, also with wheat flour the pap is nicer than with wheat meal, otherwise the last would be better. That the buttermilk should boil is necessary, were it only to make inoffensive the added water, which is perhaps of a bad quality. When the child has a little diarrhœa rice meal is often added instead of wheat flour.

Mode of Administration.

Before I proceed I must repeat that I most like to have the buttermilk administered in combination with suckling. Already in the third week I begin with it; in the beginning some teaspoonfuls are given to the baby in order to habituate it to the taste. Then you go over to the use of the bottle, because nature indicates it as the best form in which the child should take its food; the best sort of bottle is an ordinary medicine bottle, with a capsule of gutta-percha, because you can clean it every moment. Those complicated bottles with long tubes, in which you cannot get with your fingers to clean them, are very bad. The food must be administered warm (96° Fahr.), which is done by putting the bottle in hot water. Generally the babies like it in short time, and even though it occurs sometimes that some one not so easily takes to the smell, it is not too soon to be omitted, because in nine cases out of ten it will succeed certainly. So certain am I and several other colleagues with me now of the success, that then, when it does not succeed, we attribute it to the nurse. When the child has once taken a liking to the buttermilk, the best plan is to give it twice a day; you will begin only with very little, but by degrees it will take more and more. He can take *ad libitum* as much as he likes, for in this it agrees with all simple food, that it is not likely that too much should be taken of it; the baby generally takes at once as much as pleases him, and ceases then abruptly; and if you would urge him it would rarely succeed. The best time for administering it will always be when the baby takes a longer sleep, as in the morning after it has been refreshed, and then again towards the night at six or seven o'clock, when it is put into the cradle.

In what cases is it to be administered?—When, now, I am asked in what cases this buttermilk is to be administered, my answer is, in all those cases where the mother has either not milk enough for the baby, or is rather feeble, and is either unwilling to take a nurse or has no means for it.

The child to whom buttermilk is to be given should be healthy. When either there is no money for a nurse, or the child will not suck by another nurse, which happens very often, then an exception can be made; but it is not to be forgiven that the child should not have the best food when money is no impediment.

When there is no money the case alters; but so long as it is only possible the child should suckle sometimes, even from a neighbouring woman. When this also is impossible, then only the child should have buttermilk alone. That they can prosper with it alone I have had myself beautiful examples, and many of my colleagues; cases where former children died, even those who had the breast and bottle, with buttermilk alone became beautiful children.

Then there is another great advantage of buttermilk in addition to mother's milk. The illnesses that occur often when the children are weaned (*sevrés, entwöhnt*) are mostly avoided. By degrees you accustom the child to other food, whilst the buttermilk has become the standard food. Here in Rotterdam I reckon the best time for weaning when the child is eleven months old; after that time it becomes more and more difficult.

When diarrhœa occurs, the use of buttermilk is very rarely advisable. Instead of wheat-flour, rice flour can be added with the buttermilk food, and ricewater half-and-half given.

The following practical illustrations may be given:—When the child suckles, but has green stools, and does not prosper, it lies generally with the mother or nurse that the milk is not nutritious enough.

Case 1.—The child of a labourer, three weeks old, was large; but the mother was anxious over him. She found him rather poorly. She had abundant milk, and laughed at me when I said that I feared that her milk was not nutritious enough. A month later, the child was really poorly. She had given her child pap of biscuit and other things; then I insisted on her giving the child buttermilk in addition to her milk; and after the first week I found the child already altered. Later on, the diarrhœa changed to constipation, as is very usual.

Case 2.—A lady had been very ill in the beginning of her confinement. A nurse was got, but only an outdoor nurse. The child did not prosper. Change of nurse was difficult, because only very few labourers dwell near this part of the town. The child had always a poorly aspect, and mostly diarrhœa. When it was eight months old, buttermilk was given to the child; fourteen days it was afterwards wholly improved. Afterwards the mother showed me with exultation the fatty skin of the neck. Constipation followed, but was remedied by adding from time to time ordinary brown syrup of the sugar manufactories to the buttermilk.

Case 3.—Another lady remained feeble after parturition. The accoucheur advised buttermilk in addition to the breast. The child took it with pleasure. But then there came over to her some one of the family on a visit, a scientific Doctor, and with him the buttermilk found no mercy. He had influence over his family, and without even taking notice of the good success the buttermilk had (which scientific tendency appears to be found everywhere), ass's milk was then administered, but the child was taken with diarrhœa from the day the food was changed. Then my advice was asked. Now, you can change a nurse, but ass's milk is already of different asses; so we gave up the ass's milk, and, after some days, recurred to the buttermilk. The child grew up beautifully, and the only complaint of the mother was the constipation.

(c) "The first change which milk undergoes in the stomach is coagulation. The casein and butterfat separates from the serum, which soon is absorbed unchanged into the blood, according to the laws of diffusion. The real digestion of the milk only begins after the separation of the serum; the walls of the stomach narrowly contract round the globular lumps of cheese, on which the pepsine now begins to operate. The caseine first begins to be solved near the walls of the stomach."—*Frerichs, "On Digestion,"* in Wagner's "Manual of Physiology."

Case 4.—I remember a child of some months old which suffered much from diarrhœa. One day I was called in, and found the child with cholera infantum, and apparently dying. I prescribed some drops of a solution of nitras arg. cum laudano; afterwards buttermilk was taken in addition to the breast, and afterwards the healthy child was a contrast with his poor parents.

Even to elderly children I gave it in after times, when their digestive apparatus was in disorder. In January of this year I was called to a child of sixteen months old. The other children (four of them) had died before or at that age through teething, as the people called it. This child was very bad; the symptoms were diarrhœa, vomiting, an old face, convulsions, turning the head and eyes, etc., so that I feared the reason why lay somewhere in the brain. After some time, when the case became rather worse than better, I came to the conclusion that, the nutrition being very defective—the parents were poor labourers—all the symptoms could possibly be caused by exhaustion, I administered then a solution of nitras arg. cum laud., and ordered buttermilk to be taken with rice flour. In the beginning it was not constantly done, but when the parents saw the child grow better, my orders were strictly obeyed; and should you now pass with me that poor part of our city you could see a stout child of two years, and a mother and grandmother, all of horribly hard features, proclaiming me as having saved their child.

I have seen striking cases of others and myself where other children who had mother milk died, and when afterwards buttermilk was given directly after the delivery, the babies grew up beautifully.

A NEW METHOD OF TREATING OTITIS MEDIA PURULENTA.

By EDWIN VAN MILLINGEN, M.D.

Assistant at the Clinique in Aural Surgery of Dr. A. Politzer, University Lecturer in the General Hospital, Vienna.

Otitis media purulenta is one of the most painful and obstinate diseases of the ear. Its symptoms, the uncertainty of its prognosis, and the difficulty of its cure, are well known to all. I need not, therefore, enter upon the description of an affection which has been so repeatedly and carefully commented upon, and with which no doubt every Practitioner is familiar.

The treatment followed up to the present day, in many cases meets with success, but one is often brought in contact with such cases as defy all treatment hitherto employed. All the astringents and caustics known may be used, the catheter may be used freely, and the outer ear syringed daily, and yet the disease persists, and the discharge does not diminish; in some individuals the disease goes on from worse to worse. It is not only to simple purulent catarrhal inflammation of the ear that I wish to draw attention, but chiefly to such cases which, in spite of all treatment, progress, and, advancing to the bone, threaten to destroy all the neighbouring parts by carious degeneration. I beg at the same time to communicate a method for the treatment of such cases, which has lately suggested itself to me, and, having been adopted here in the clinique of Dr. A. Politzer, has met with the most favourable results.

This treatment is very simple, and founded on the fact that cleanliness of the parts affected is the chief point to be aimed at in order to meet with success. The object to be attained is the healing of the diseased mucous membrane. This cannot take place until thorough cleanliness of its surface is maintained, then one may use astringents, which may help the healing and formation of a new epithelial layer.

Forcing of air through the catheter is by no means sufficient to remove a mass of thick secretion accumulated in and adhering to the sides of the tympanic cavity. This may be easily proved on the dead subject. Let a perforation be made in the membrana tympani, and the cavity be filled with a substance of the consistency of the secretion usually discharged from an ear in such cases. On blowing air with a catheter through the Eustachian tube, it will be noticed that very little, if any, of the substance is pushed out into the external meatus, and that the greatest part remains where it was, or is carried along with the current of air into the opening leading to the mastoid cells.

Syringing the external meatus does very little good, as no more of the pus can be removed than what lies in the external meatus itself, very little of the matter in the tympanic cavity being affected by this operation, even though a considerable perforation should exist. It is to be remembered also that this affection is not, or may not, be confined to the mucous membrane of the tympanic cavity. The Eustachian tube, generally the starting-point of the disease, is also affected. If the mouth of the tube be examined, it will be found to be, in most cases, inflamed, if not ulcerated. It is to be inferred, then, that the whole mucous membrane of the ear, beginning from the membrana tympani to the mouth of the Eustachian, is covered with purulent secretion. Syringing the meatus does not suffice to clean the surface of the whole mucous membrane of the ear. Hence it is evident that, by the method of treatment hitherto employed, we really can effect but little in such cases.

The idea presented itself to me to try a remedy, which as yet seems to me unknown. It consists in catheterising the patient, and after having insured the passage of air into the tympanic cavity, by means of the otoscope, to syringe tepid water several times successively, through the catheter into the cavity, with sufficient force to bring out all the pus that may be there contained; the second step is to blow air again in order to drive away any water which may have remained in the tympanum; and lastly, whenever the case requires it, to blow in through the same catheter a few drops of some astringent solution.

The very first time that a catheter was used for the ear, water was syringed through it in exactly the same way. Guyot, a postmaster at Versailles, was the first who, in 1724, tried this experiment upon himself for the purpose of curing his deafness. This operation was practised by Cleland, Voiten, Itard, Saissy, Boyer, etc., but in our days it has been altogether abandoned, chiefly because it has been so much spoken against in most of the standard works on Aural Surgery. It will be noticed, however, that this operation was never performed in cases where a perforation was present, or in catarrhal inflammation of the ear. I wish it therefore to be plainly understood that tepid water should be syringed into the ear through the catheter only in cases where a perforation exists, and I also agree with those who believe that such an operation is dangerous when the membrana tympani has not been perforated by disease. It is besides a rare exception that in purulent inflammation of the ear no perforation should exist.

The following is a case which may help to illustrate this method of treatment:—

A. P., a Jewish female, aged 33, first presented herself in Dr. Politzer's Clinique on July 20, 1869. Her complaint, which was confined to the left ear, began, according to her account, in the summer of 1866, after an attack of typhus fever. At first she felt a shooting pain in the left ear, which lasted one week. This disappeared, and recommenced at the end of another week. Pain and relief alternately succeeded, coming on at intervals of one week, and lasting for six months, after which time the pain began to be continual. She was advised to take salt and sulphur baths, and in the summer of 1867 she proceeded to the baths at Ivonitch. There the pain became more and more acute, until a copious discharge came out of the ear, giving her immediate relief. The pain came on again by degrees, and did not cease until another discharge. And so it went on to the summer of 1869. The pain would last from two to three days, and would then be followed by a discharge, which would also last two or three days. The pain by this time, however, became insupportable, and she decided to come to Vienna.

When the patient first presented herself, she was suffering from intense pain on the whole left side of her head. She was pale and anæmic; her pulse quick and feverish. Now and then her under-jaw would tremble involuntarily, and the muscles of the face contract. She complained of loud noises in the ear.

On examining the diseased ear, it was inflamed and full of pus, which was syringed out. The membrana tympani was red, inflamed, and projected outwards. A thick mass of yellow pus was lying on the inferior part of the membrane, hiding its lower half from view. On making her force air into her ears by blowing with nose and mouth closed (Valsalva's experiment), the secretion was seen to increase by degrees, until it had filled the whole meatus. On syringing this out, a yellow mass would still be seen lying at the bottom of the meatus, against the inferior half of the membrane. Valsalva's method would be repeated several times successively, and still the thick yellow pus would come out. The mouth of the Eustachian tube, and the throat on the affected side, were red and inflamed, and from the opening of the tube to the fauces behind the tonsils was seen an ulcerated streak. The patient complained of a

had no sleep during the night. To take an effervescing saline, with ice to suck, and one grain of morphia injected. 1.50 p.m.: Sickness abated, but still no rest. Another grain of morphia was injected now, and repeated (the symptoms remaining unrelieved) at 5.5 p.m. and 8.15 p.m. Patient slept more or less during the night, and next morning nearly another grain was injected. The restlessness increasing, three more grains were injected during the day and night.

Next morning (February 19), the excitement and wakefulness persisting, the subcutaneous injection was discontinued, and f.ʒj. of liq. opii sed. given in a draught, followed by mxxx. of the liquor every three hours through the day and night. The patient was, however, with difficulty kept in bed, and next day (February 20) all opium was cut off, and tinct. digitalis f.ʒij. in water given at noon, f.ʒj. being repeated every three hours up to 11 p.m., when he fell asleep, and slept soundly until 6 a.m. At 10.30 a.m. he seemed fairly rational, and was given one more dose of the tincture. This was followed by five hours' sleep, from which he awoke quite relieved, ate a good dinner, and was finally discharged well on March 2, having had no return of the symptoms.

Remarks.—Mr. Nankivell's object in bringing these two cases before the notice of the Profession is to show that when opium has had a fair trial without producing sleep, it is worse than useless to persist with it. In the first case the man was decidedly more violent at the time when the opium was given up than he was upon admission, whilst the digitalis speedily produced sleep. In the second case the subcutaneous injection of morphia did procure two or three short naps; but after each of these the patient woke up more violent than before. It was consequently deemed advisable, as it did not produce any lengthened sleep, to give it up and try opium by the mouth. This latter, however, failed utterly, for the patient was decidedly more violent when the digitalis was commenced than at any previous period. In neither of the cases was the digitalis given in the larger doses recommended by the late Mr. Jones, but in doses of a drachm repeated every three hours, this method of administration having appeared, in Mr. Nankivell's experience at St. Bartholomew's Hospital, to be safe as well as perfectly successful treatment.

GLASGOW ROYAL INFIRMARY.

CASE OF "OBSCURE STRANGULATED INGUINAL HERNIA."

(Under the care of Dr. WATSON.)

[Reported by J. W. Allan, M.B., C.M., House-Surgeon, G.R.I.]

The patient, John M., a carter, aged 60, was admitted to the Hospital on Nov. 20, 1869. He complained of pain situated above Poupart's ligament. Pressure here caused great pain, and a peculiar rough tense feeling was communicated to the finger. There was no distinct hernial tumour to be seen or felt. He had a twisting sensation about umbilicus. He had vomited, but it was after the administration of chloroform. Although there was no distinct hernial tumour, still a "fulness" existed in the right inguinal region, which was very apt to mislead. It may be remarked that there was an unnatural prominence above Poupart's ligament on both sides of the abdomen.

Some chloroform was given by one of the House-Surgeons, and the pelvis elevated in the hope that the strain so produced by the dragging of the abdominal viscera might effect reduction; but no distinct result followed. One of the House-Surgeons was able to introduce his finger into the ring, thus showing that the gut had not protrnded from the canal.

The patient stated that he had been troubled with rupture for fifteen or twenty years, that he had always succeeded in returning the bowel himself until on the last two occasions, that at this time the rupture had been troubling him for a week, that he had a Doctor who administered chloroform, etc. He also said that the last passage from his bowels was on the morning of the previous day, and that he had afterwards got enemata.

When Dr. Watson saw the case he expressed an opinion that the gut was probably strangulated in the canal. He ordered the patient to have a long-shot injection of warm water, soap, and common salt, a large poultice, and at 6 o'clock next morning a dose of castor oil. The enema returned, no fæcal matter being detected in it.

Next morning patient was considered worse by the nurse—he had vomited. According to instructions a consultation was called, and the operation was performed on Sunday morning, November 21. Some difficulty was experienced in the operation. After the incisions were made no bowel was discovered, and it was only on slitting up the canal that the hernia was detected. A tense and dark-coloured tumour presented itself. This was surmised to be the sac. A small puncture was made in it, when some reddish fluid spurted forth, and it at once became evident that the sac had been entered. It was then ascertained that the constriction existed at the internal ring. Owing to the dubious state of the bowel, great reluctance was displayed to drawing it down before returning. The constriction having been relieved, the bowel was returned, the wound stitched up and dressed with spirituous solution of carbolic acid. The patient was ordered a one-grain opium pill every three hours, beef-tea for nourishment, arrowroot, if he would take it, and a little whisky. He was to have ice to suck. After the operation he had a free motion from his bowels. Pulse on that same day about 84. Pain was pretty severe.

November 22.—Wound dressed. Patient slept a good deal, especially towards afternoon. Altogether he appeared to be doing very well. He had no whisky from 9 o'clock in the morning of that day. Had a mustard poultice applied to abdomen. He sucked ice, drank some beef-tea, and took some thin arrowroot.

November 23.—He did not sleep much till 3 o'clock in the morning; he then slept till 5. After that he seemed inclined to "doze." The wound was dressed. On the afternoon or evening of same date the pulse was rather rapid, and not very strong. There was a tendency to clamminess. Got whisky toddy, beef-tea, and arrowroot. Died at 10.30 that night.

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Medical Times and Gazette.

SATURDAY, MARCH 26, 1870.

THE PRESENT POSITION OF THE "CONJOINT EXAMINATION" SCHEME.

We have been compelled lately to write so much and so repeatedly about the General Medical Council, the conjoint examining board scheme, and the hoped-for Amended Medical Acts Bill, that we fear our readers will be growing utterly wearied of such subjects; but so long as the transition stage lasts, and there is a chance of our speaking to any purpose, it is our duty, even at the risk of tiring our readers, to declare our opinions, and what we believe to be the opinions of the majority of the Profession, on the matter under discussion; and this week we shall confine our remarks chiefly to the subject of the proposed conjoint examining board.

It is well known that for some weeks past a plan has been under consideration for forming one examining board for England, the members of which should be appointed by the various English universities and corporations, and that the scheme, elaborated originally by the Colleges of Physicians and Surgeons, had met with so much acceptance from the

other bodies concerned, that a speedy announcement of its final arrangement was looked for. But a rumour has spread abroad lately that so serious a difficulty has arisen that the project is almost at a standstill; and, with great regret, we feel obliged to believe that, in this instance, rumour does not lie, nor even exaggerate. It is, we fear, but too true that the negotiations between the corporations are at a dead lock, and the responsibility of this, which we regard as a serious misfortune, rests, according to common report, with the College of Physicians. It is said that that College claims for itself the exclusive power of nominating examiners in Medicine, and persists in refusing to allow the Society of Apothecaries any share, however small numerically, in the appointment of these examiners, while the Society stands firmly on its legal and long-exercised right to examine in Medicine as well as in chemistry, therapeutics, materia medica, etc. We confess that it appears almost incredible that the College of Physicians should seriously insist on any such proposition, and morally impossible that the Society of Apothecaries should submit to it. If we look at the history of Medical education during the last fifty-five years, it seems very difficult to find any foundation or excuse for the position said to be taken by the College. In 1815 that body, standing upon its dignity as a College of pure Physicians, declined to undertake in any way to systematise and improve the education of or to examine the General Practitioner. The necessity of such work being undertaken by some legally authorised body was wofully apparent and imperative, but the College of Physicians would have none of it; and, in consequence of their default, the Society of Apothecaries accepted the labour and responsibility, and was authorised by Parliament to examine in the art and science of Medicine. From that day to the present it has steadfastly and honourably laboured at the task it then took upon itself, that of improving the education and social status of the General Practitioner. It will not be denied, we suppose, that the average General Practitioner of the present day is greatly superior in general, scientific, and Professional acquirements to his predecessors of a generation ago, and we venture to affirm that, without any possibility of denial, this improvement is, in very large measure at least, due to the action and care of the Society of Apothecaries. Yet the College of Physicians—or perhaps it would be more correct to say the Committee of the College appointed to treat with the other examining bodies—says the Society of Apothecaries shall not presume to examine in Medicine! By the Medical Act of 1858 the powers of the Society of Apothecaries were reaffirmed, and then, as in all the previous forty-three years, the Medical education of the Practitioner was cared for by that Society alone, and it took, as before and since, the lead in almost every improvement made in Medical education. In 1860 the College of Physicians, moved somehow to take larger views of its position and responsibilities, determined to examine and license for general practice, and instituted a new order of Licentiates, and only since that date has it in a modest degree shared with the Apothecaries' Society in the Medical education of the rank and file of the Profession. And yet, if report is to be believed, the Committee of the College now claims the sole right of examining in Medicine, and would push the Society of Apothecaries on one side! The Royal College having come forward at the eleventh hour to undertake the work, the Society must retire to humbler duties, and must not aspire to the nomination of examiners in Medicine, for that would be in it "a grievous fault." "Yet Brutus says he was ambitious; and Brutus is an honourable man." So are all the members of the Committee, all honourable men. But, though tempted to employ this borrowed language to depict "the situation," we use the term "honourable" simply and honestly; and because the Committee of the College are truly "all honourable men," we cannot but hope that they will review the position they have taken up. On reflection, they must see that by no kind of justice can the Society of Apothecaries be deprived of a right it has so long exercised with so much credit to itself and such benefit to the Profession and the public. Nor do we see how it can voluntarily resign it: to do so would be casting a slur on the immense body of its licentiates. We feel no doubt that the Society will maintain its right to the uttermost by every constitutional means, and if in consequence the whole scheme of amalgamation falls through, the responsibility of such failure will lie with the College of Physicians. And we beg that body to think what the result will probably be. Either the Amended Medical Acts Bill now preparing will be lost for this year at least, or, still worse, the power of nominating the central examining board or boards will be thrown into the hands of the Government of the day.

THE WELSH FASTING GIRL.—PROSECUTION OF THE "DOCTORS."

The preliminary inquiry into the affair of the Welsh fasting girl before the Llandyssil justices having come to a close, we now feel at liberty to express ourselves more freely upon the subject than we have hitherto. We were not at all surprised to hear that Mr. Coleridge had been instructed by the Treasury to include in the charge of manslaughter the Medical gentlemen who had taken part in promoting the watching under which the poor girl Sarah Jacob ultimately succumbed. But it was tolerably clear from the first that the charge of participation in the crime of manslaughter by these gentlemen would break down, inasmuch as they placed no direct impediment in the way of the girl being supplied with food, and had no authority over her. All that they did was to take measures for observing whether, during the fortnight that the watching was to last, anything and what, in the way of nutriment, was administered. That they were placed in the position of defendants at all, however, was their own fault; and although, for their sakes and for the reputation of our Profession for good sense, we were sorry to see them included in the prosecution, we must say that the folly which caused it was inexcusable. They committed a double error, in that they abstained from doing what they ought to have done, and did that which they ought not to have done. In both respects they have compromised the Profession of which they are members. The practical rebuke which has been administered will doubtless be beneficial to themselves, and perhaps teach one or two useful lessons.

In the first place it was a logical blunder to call this "watching" a *scientific* investigation, or to pretend that it was instituted in the interest of *science*. There are truths in science which, if not themselves axioms, yet rank with axioms in force and in the extent of their applicability. They are generalisations based upon the common observation, not of men who are specially called scientific, but of the whole human race. They are accepted so fully and implicitly that their denial, or the expression of a doubt, involves the imputation of a lack of "common sense." They have established their axiomatic character by being found applicable and trustworthy as guides in the transactions of daily life, and in their conformity with the results of the more abstruse investigations of men of science.

Surely it would be difficult to name any one popular axiom on which more reliance is to be placed than that neither man, woman, nor child can live and maintain the appearance even of health, much less can preserve fleshiness, for any lengthened period, without being supplied with food. As soon would it be credible that a person could see without eyes. With such an axiom science has nothing whatever to do, unless to accept it and to employ it by way of deduction. This is, scientifically, its only legitimate use; and, thus used, it is, like every other axiom, fruitful in practical applications. We have thus good reason to complain when gentlemen, who claim the status of men of science, so far mistake their vocation as to sanction by their authority the semblance even of a doubt in one of the few

things that may be regarded as absolutely and long ago settled, once for all, as an unquestionable truth. We are sufficiently reproached, as it is, with the uncertainties of Medicine, and with the tentative character of many of our proceedings; and if to this we are to have added the assertion that Medical men have not yet determined whether or not a girl can live for two years without food, it is only to be expected that we should rebel and throw blame on those who have given cause for so absurd an imputation.

That the marvellous should have charms for the untutored minds of ignorant people is nothing to be wondered at. That the educated even should hesitate in its presence when more accustomed to spiritual than to material contemplations may possibly be excused. But the function of the Medical man brought face to face with it is to declare its incompatibility with the laws of nature, and at once to expose and denounce the imposture. It was quite needless to make any examination of the girl in this case in order to declare that an imposition was being practised; although, apart from the impossibility of the averred fact, there was evidence in the dramatic accessories of the case that an appeal was being made through the medium of sensationalism to the credulity of the public. As was made clear by the post-mortem examination of the unfortunate child, that such a vulgar thing as a teaspoonful of castor-oil would have sufficed to dispel the illusion in a couple of hours, had it been necessary to afford ocular demonstration of the lie that was being enacted. *E nihilo nihil fit*. Besides, Medical men are only too familiar with the vagaries of spoilt and hysterical girls, and are supposed to be quite aware of the odd things they will do and the painful things they will suffer if only they can succeed in creating the sympathy that they seem to glory in and live for. Greater adepts in the art of deception are to be found nowhere; and the "Doctor's" business is to match his craft against their cunning. A girl who will indignantly resist so long as she thinks her deception is successful will submit to treatment when she is satisfied that she is found out, and when the shame of exposure is imminent. That Sarah Jacobs, the Welsh fasting girl, would have been more refractory to judicious management than other fasting girls or than other shamming girls, we cannot believe. Unfortunately the course taken was diametrically opposite to that which professional experience would have sanctioned. The line of conduct pursued implied, if it did not express a belief in, the reality of that which she knew not to be real, but a pretence, and naturally encouraged her and her parents in a course which probably neither the one nor the other expected to terminate fatally, but from the success of which they might have anticipated an abundant harvest of sympathy and silver.

THE WEEK.

TOPICS OF THE DAY.

At the next election for Members of the Council of the Royal College of Surgeons, there will be two vacancies to be filled up. One is occasioned by the absolute retirement of Mr. Swan, and the other by the retirement of Mr. Thomas Paget, who vacates his seat in rotation, but is eligible for re-election should he decide upon again offering himself. At present we have heard the names of four probable candidates mentioned. They are Mr. Erasmus Wilson, Professor of Dermatology in the College, Mr. Henry Lee, Mr. Barnard Holt, and Mr. T. Spencer Wells. The two former, having received very considerable support at the last election, may both perhaps with reason anticipate success at the coming one. But as there will be only two vacancies, and the election is as yet a long way off, any speculation on the event or computation of chances must be very hazardous. There would have been a third vacancy by the retirement in rotation of Mr. Edward Cock, but that gentleman holds the office of President of the College, and therefore does not go out until next year.

The resolutions carried at the extraordinary meeting of the Council of the Royal College of Surgeons, held on Tuesday last, which appear in another column, must mark an era in the history of the College examinations. Mr. Quain's very important motion that half of the Court of Examiners shall be composed of Fellows who are not and have not been members of the Council, and Mr. Curling's motion that the examiners on Anatomy and Physiology shall be distinct from the examiners on Surgery, both for the Fellowship and Membership Examinations, both of which were carried, cannot fail to work a very substantial and welcome reform. Much of the outcry against the examinations of the College has been raised by the advancing school of physiologists and anatomists, who felt, and reasonably felt, that the views both of structure and function which they taught were excluded from any scheme of examination framed by a number of Hospital Surgeons, whose time for scientific work, except in the actual practice of their Profession, had expired some thirty or forty years ago. This objection, which doubtless was valid in some, although not in all cases, has its root cut away by the resolutions of Tuesday. Half the examiners are to be Fellows who are not and have not been Members of the Council—in other words, they are to be men whose years of maturity are not so far advanced as to make them ambitious of a seat at the Council board. As the examiners in Anatomy and Physiology will be distinct from those in Surgery, it is almost certain that, as a rule, the anatomical examinerships will fall to the Fellows and the Surgical to the Councillors of the College. The acceptance of this very wise reform is very creditable to the good sense of the Council, and is a practical proof that that body are actuated by a wise spirit of improvement, which, in time, will not fail to secure lasting benefits to the Profession of Surgery. We are glad to see from the clause appended to Mr. Quain's resolution that there is to be no unnecessary delay in carrying it into action.

The Medical Acts Amendment Bill is on the stocks. Those who may be supposed to be most intimately acquainted with the views and intentions of the Government say that the plan of a conjoint board will be accepted by the framers of the Bill, provided that the corporations can combine and offer a liberal and efficient plan of examination. But, on the other hand, any delay or appearance of squabbling and disputing amongst the bodies named in Schedule A of the Medical Act of 1858, whether for honour or for pelf, will be certain to be seized upon by the enemies of the licensing bodies and urged upon the Lord President of the Privy Council as a reason for his taking the reins in his own hands and making a clean sweep of the contending parties and their rivalry. Disastrous as we believe such a resolve on the part of the Government would be to the independence and future efficiency of the Medical Profession, we cannot be surprised if, whilst corporations are disputing over their rights, the Government should relieve them of their duties. It was said by Sydney Smith of a living statesman that he thought himself fit for anything, and would take the command of the Channel fleet at a day's notice. A much lower flame of self-confidence, fanned by the sonorous sentences of Mr. Gamgee and his friends, might warm her Majesty's present advisers to undertake the, at first sight, easy task of forming examining boards for the Profession of Medicine, especially as a revenue would accrue from the business. If the English corporations and universities have not been able to agree upon a scheme by the meeting of the General Council in June next, we think it not at all unlikely that their doom as public examining bodies will be sealed. We have already in another place expressed our opinion of the present cause of delay in the acceptance of the English scheme, a cause which would be at once removed if the ordinary rules of justice were allowed to govern the counsels of the contracting parties.

A statement to be forwarded to the General Medical Council as to the minimum time to be devoted to the study of anatomy has been drawn up, and has received a large number of signatures from teachers of anatomy in England, Ireland, and Scotland. These gentlemen agree with the Educational Committee of the General Council that anatomy should be studied during eighteen months, but they fail to see how this can be done unless the student devote a portion of his third winter or his first and second summers to the subject. The report of the Educational Committee of the General Council recommends that dissections should be practised during the first two winter sessions only. To this the teachers of anatomy object. They think that the practical study of anatomy in the dissecting-room is not incompatible with Hospital study. On this we may remark that however possible it may be that the two studies should be pursued together, we doubt whether such an arrangement is for the benefit either of pupils or patients. We think that the eighteen months of dissection, which we agree with the teachers of anatomy is not too long, should be obtained, if possible, when the student is not examining patients or spending many hours a day in the Hospital wards. We fully agree, however, with the gentlemen whose names are appended to the statement under consideration that the final anatomical examination should not be held so early as the end of the second winter session, after which the study is practically to be abandoned. By all means let there be an examination in anatomy in the middle of the students' career, but let his knowledge be again tested in this very important subject before he receive his licence. We appeal to the experience of examiners as to whether they do not frequently meet with proof that students have forgotten much of the "preparatory" matter with which they were familiar at their first examination when they present themselves to be examined in the practical subjects of the second. Knowing this to be the fact, we think that a kind of recapitulatory test might with great benefit be applied in so important a subject as anatomy before the student finally closes his period of education.

We learn from our Calcutta correspondent that the Viceroy of India has appointed Dr. Fayrer, C.S.I., the distinguished Indian Surgeon, to whom our readers are under no little obligation for a series of admirable Surgical papers which have appeared in our columns, to travel in India with H.R.H. the Duke of Edinburgh. This appointment must give great satisfaction, not only as an acknowledgment by the Government of India of the merits of one of the most distinguished Surgeons of the day, but it will be felt as a compliment to the whole Indian Medical service. The other Medical man who accompanies his Royal Highness's suite is Dr. Watson, of the Royal Navy.

We notice that the remains of Mr. Lever, who perished in the recent fire at the Star and Garter, Richmond, have probably been discovered. The unfortunate gentleman, it will be remembered, was the son of the late Dr. Lever, the well-known Obstetric Physician. Identification of the remains was not possible, as fragments of bone and flesh were only found.

Messrs. Beacheroft and Thompson, solicitors to the Duke of Somerset, have written a letter to the *Times* impugning the truth of the statements made by Dr. Williams in his pamphlet, "The Case of the late Earl of St. Maur," which we reviewed last week. We will not remark on the tone of the solicitors' letter, which, were it not on so serious a subject, would be almost amusing. In proof of our remark, we extract the following *morceau* :—"There are many less important mistakes of a Medical nature which lead her Grace to hope the work has not been compiled by a Medical hand." Of course Dr. Williams will have not the slightest difficulty in giving full and ample reply to the charges of misrepresentation which the Duchess of Somerset has now brought against him.

The Poor-law Board have at length pronounced upon the matters in dispute between Dr. Ellis and the guardians of St. Pancras. The charges against Dr. Ellis were four in number. The first was that Dr. Ellis, either wilfully or negligently, so managed the ventilating apparatus of the Infirmary as to produce a wrong impression upon the minds of Medical men who came round to examine the Infirmary. This charge was combined with a more general one—namely, that the ventilating apparatus was never properly managed by Dr. Ellis, and that if it had been it would have been sufficient for the purpose for which it was constructed. On this the Inspectors, Mr. Bere and Dr. Seaton, informed the Board that they have satisfied themselves that, under ordinary circumstances, the existing ventilating apparatus is sufficient to prevent any excessive foulness of air in the wards. They are not, however, prepared to say that in an overcrowded state of the wards the ventilating apparatus could be so regulated as to give air to the wards without giving cold to the patients. Dr. Ellis, it was proved, did give orders that the windows and doors should be shut at 6 p.m. on the evenings in the month of November, but the inspectors are of opinion that such orders and directions were given from "a belief that they were right ones, and not from any wish to cause the state of the atmosphere in any ward to be foul and abominable." The Poor-law Board see no reason to dissent from the opinion expressed by their special inspectors in respect of this branch of the first charge. With regard to the second part of the charge, that the ventilating apparatus was never properly managed, the inspectors say that Dr. Ellis leant very much more than Medical authorities generally would approve to the opinion that foul air was less injurious to patients than risks of draughts, such directions as he was proved to have given being all directed against the latter contingency. Nevertheless, they think that the circumstances were sufficient to justify the individual discretion of the Medical officer, and they are of opinion that no charge of culpable negligence has been established against Dr. Ellis. In this the Poor-law Board coincide. The second charge was that of retaining unfit persons in the wards for the purpose of producing overcrowding. Of this the Poor-law Board acquit Dr. Ellis. They also acquit Dr. Ellis most emphatically of the charge of warding cases of contagious fever in order to produce an epidemic. With regard to the fourth charge, that of holding unnecessary inquests, the inspectors consider that inquests should not have been called for on the grounds assigned by Dr. Ellis. They state that "no proof was given" that Dr. Ellis made use of the inquests to support his view of the insufficiency of the infirmary. With regard, however, to the allegation of a pecuniary motive, the inspectors state that it derives force from the fact, "which was in evidence before them, that in this infirmary, as compared with other similar parochial infirmaries in London, an extraordinary number of inquests had been called for by Dr. Ellis." The following is the conclusion of Mr. Secretary Fleming's letter :—

"The Board regret that Dr. Ellis, by initiating inquests on what the inspectors have found to be slight and insufficient reasons, should have exposed himself to the suspicion to which the inspectors refer, and from which it appears that he did not succeed in exonerating himself. But the Board, in the absence of any proof that the imputed motive existed, must confine themselves to expressing their view that the evidence taken at the inquiry leads to the conclusion that Dr. Ellis was injudicious and hasty in some of the instances in which he required inquests to be held."

ARMY MEDICAL DEPARTMENT.

The War Office *Gazette* of the 22nd inst. contains the following announcement :—"Medical Department : Staff-Surgeon Major Thomas Crawford, M.D., to be Deputy Inspector-General of Hospitals." The promotion of Dr. Crawford over the heads of seventy seniors is a typical instance of the advantages and disadvantages of the system of promotion of

Medical officers to the administrative ranks by selection rather than by seniority. To see a junior officer promoted by selection is no doubt gratifying to those gentlemen in whom the sanguine temperament, buoyant energy, and perhaps a rather flattering estimate of their own powers beget the hope that similar good fortune may be their own at some not very distant day. On the other hand, those who have been passed over—particularly those of them who consider that they have established claims for promotion at least as powerful as those of their more fortunate junior—cannot but feel aggrieved. On the whole we consider the balance of advantages to be decidedly on the side of promotion by selection, although we fully sympathise with those who have been passed over.

We understand Dr. Crawford's promotion to have been recommended on the grounds of his having for five years performed with remarkable ability, and, we may add, with unvarying courtesy to Medical officers and zeal for the interests of the department generally, the duties of head of the Medical Branch of the Director-General's Office in Whitehall-yard. He has also seen a large share of service in the field with the 51st Regiment in Burmah, and the 18th Royal Irish in the Crimea. Mr. Cardwell's answer to Mr. Grove the other night in the House of Commons, to the effect that the appointments in the Director-General's Office are not made for five years or for any definite period, indicates that Dr. Crawford may probably remain in his present position.

We have more than once drawn attention to the stagnation of promotion in the Army Medical Department as being to a great extent attributable to the promotion some years ago of young men to the administrative ranks in which they now remain to the disadvantage of older men in the lower grades. We now again urge upon the attention of the authorities the only remedy for this state of affairs—namely, compulsory retirement from the administrative ranks, on the same terms for both grades, within a certain fixed period, or at the age of 65, should this age be attained before the expiration of such period as may be decided on. Dr. Crawford's promotion affords another strong instance in support of the necessity for some such plan. We may at the same time remark that it appears to have been an augmentation of the establishment, as no vacancy has been filled up.

The same *Gazette* contains the following promotion:—"Colour-Sergeant Henry James Sylvester, Army Hospital Corps, to be Apothecary to the Forces, *vice* David Walter Williams, deceased." Mr. Sylvester has been long and most favourably known to the Medical officers and candidates in the Army Medical School at Netley as Laboratory Assistant to Dr. Parkes. He has acquired, by his own talents and exertions, a knowledge of chemistry and physics which entitles him to a high standing among scientific men, and we are certain that his promotion will be seen with much pleasure by all who have known him and profited by his assistance in the laboratory at Netley.

MR. TAYLOR AND THE GOVERNORS OF THE SHEFFIELD HOSPITAL.

It will be recollected that Mr. John Taylor was dismissed from his office of Assistant House-Surgeon to the Sheffield General Hospital in consequence of circumstances arising out of his attendance upon a poor girl of the name of Wragg, for whom he ordered wine and other comforts while she was suffering from typhoid fever. The guardians at first supplied the articles so ordered, but afterwards withheld them, and the girl died. Under the circumstances, Mr. Taylor considered a coroner's inquest was necessary; this was held, and Mr. Taylor subsequently wrote to the *Sheffield Telegraph* respecting the case, and defended himself in the pages of one of the Medical journals. The Poor-law Board upheld the conduct of Mr. Taylor, but some of the governors of the Hospital felt annoyed at Mr. Taylor's contributions, though they in no way affected them. Mr. Taylor was subsequently dismissed under the plea that he was "insubordinate and unmanageable;" although shortly before his dismissal a report of the Medical staff was presented, which unequivocally expressed their satisfaction with his conduct as an officer of the Hospital. He has recently brought an action for breach of contract, and the jury found a verdict for the plaintiff, with £50 damages. The judge, Mr. Baron Cleasby, however, stayed the *postea* on the application of the defendants, and it is probable that there will be another trial.

FROM ABROAD.—THE ELECTION OF M. LATOUR—M. LE FORT ON REGISTRATION OF ENGLISH INFANTS—ABSORPTION OF PLEURITIC EFFUSION BY ABSTINENCE FROM FLUIDS.

The election of M. Amédée Latour as a Free Associate of the Académie de Médecine has given rise to expressions of great satisfaction on the part of the Paris Medical press. It is justly regarded as a proof of the great progress of liberal opinion in that learned body, once so exclusive in all matters relating to the press, that it has consented to elect a member whose sole qualification is the fame he has attained as a Medical journalist. It is true the position he occupies is remarkable and unique, for he has devoted his entire life, or very nearly so, to Medical journalism, and during his long career first as *feuilletoniste* to the *Gazette des Hôpitaux*, and then as editor of the *Union Médicale*, of which he was one of the principal founders, he has ever had the honour, dignity, and true interests of the Profession at heart. A determined enemy of abuses, whether of long duration or of recent origin (as the abolition of the *concours*), a powerful advocate of useful and yet not destructive reforms, an acute and eloquent reasoner, and a master in that incisive and *spirituel* style of writing in which the French so excel, he never employs the great influence he has acquired for unworthy purposes or personal detraction. An invaluable advocate for the cause he espouses, he yet has frequently exhibited that rare quality of knowing how to do full justice to the actions and intentions of an adversary. His approaching retirement from the *feuilleton* of the *Union Médicale*, where his loss will be with difficulty replaced, is worthily preceded by this honourable position just conferred upon him. His election was, however, hotly contested, the veteran *savant* of the Institute, M. Payen, having, indeed, been placed first on the list of candidates by the Committee of Selection. Still the Academy gave M. Latour a majority on the first round of the ballot-box—viz., 47 to 41—but as the absolute majority of the voters present was not attained, a second trial took place, giving 49 to 40, which sufficed.

It is remarkable what a difficulty even the best-intentioned observers seem to have in informing themselves of what is done in other countries, even when these are close at hand and the means of information abundant. An example of this is furnished in the *Revue des Deux Mondes* for March 15, which contains an interesting article from the pen of M. Léon Le Fort on the subject of infantile mortality, which has during the last two or three years been so much discussed in France. Now, M. Le Fort is one of the best-informed of French Practitioners, has frequently visited this country, possesses friends among us, and has been employed here and elsewhere on Government missions; and yet we find him, when speaking of the relative small mortality among infants which occurs in England, making the following statement:—

"Unfortunately, we can only receive with great reserve the English statistical statements, as far as the figures relating to the births and deaths of infants are concerned. Their registration (*état civil*) is confided to the clergy, and this fact alone exhibits its uncertainty. Moreover, infants who die before their fifth day are regarded as stillborn; while in France, the registration at the *état civil* before the third day being obligatory (and, we may add, the cause of not a few deaths), a great number of what would be regarded as stillborn in England are in France enumerated as infants dying between their birth and their first year."

Of course, for our readers, to translate this passage is to

exhibit its erroneousness. But, for M. Le Fort's information, we may state that it is now more than thirty years since the clergy had anything to do with the registration of births and deaths, and that this business is conducted by the Registrar-General, whose annual reports have a world-wide reputation for completeness and accuracy, nothing approaching them, in these respects, having as yet been produced in any other country. As to registering children as still-born if they die before the fifth day, the statement is as wrong as the foregoing. It is true that no child *born dead* is registered either as regards its birth or death; and this is a defect in our registration law, which we hope soon to see amended, as it is very desirable that the number of still-born should be recorded. But the interment of a child which has lived even for a few hours, still less for days, as a still-born infant would be a penal offence, and such a child would be registered, just as M. le Fort says it is in France, as having died between its birth and its first year.

Dr. Glauert has recently published in the *Berliner Klinische Wochenserift* an interesting case observed in Professor Von Niemeyer's Clinic at Tübingen, in which rapid absorption of pleuritic effusion was obtained by depriving the patient of water and fluid nutriment. He observes that the ordinary treatment of pleuritic effusion, which remains stationary after the subsidence of febrile action, is not satisfactory, and that it is desirable to abstain from thoracentesis except in those cases where other means have failed. Diuretics or purgatives are of little use in this affection; but Niemeyer has repeatedly shown in his Clinic the great utility of energetic diaphoresis in the various forms of dropsy. That by its agency a larger quantity of water can be abstracted from the body than gains admission to it has been repeatedly shown by careful weighings; and in all probability hot baths, followed by woollen coverings, as recommended by Ziemssen in other forms of dropsy, would prove useful in pleuritic effusion. But there is another mode by which the necessary inspissation of the blood and consequent energetic absorption of fluid may be obtained, and that consists in limitation of the amount of liquid taken. Experience proves that, in persons exposed to absolute hunger and thirst, the excretion of water by the kidneys, as well as the insensible perspiration, although diminished, do not cease; and that a very considerable diminution of fluid may be borne without danger is shown by its irrational employment in the treatment of various diseases in the bread or Scroth-cure.

The case now under consideration occurred in the person of a robust man, aged 42, who took cold November 5, 1869, and came to the Clinic on the 20th the subject of pleuritic effusion on the right side reaching to the third intercostal space, the febrile action having subsided. Being very anxious to get well speedily, he readily consented to abstain from all fluid nourishment, and to live on bread and slightly salted sausage. On the first and second days, however, he complained sadly of this diet, and was, on account of the dryness of his mouth, able to eat hardly any of the bread or sausage. He asked for a slice of apple now and then, and licked the ironwork of the window. During the first twenty-four hours of the treatment the entire amount of urine was 550 cubic centimetres, containing 4·4 per cent of urea. Next day this had diminished to 450 cubic centimetres, with 6 per cent. of urea, and the patient found that the oppression of breathing had ceased, and that he could ascend stairs much easier. Half a pint of wine and a cup of coffee were allowed. On the 23rd the urine had diminished to 420 cubic centimetres, with 6·8 per cent. of urea, and the effusion had sunk to below the nipple. During the next three days (24th—26th) he took only half a pint of wine daily, the urine averaging 417 cubic centimetres, with 6·6 per cent. of urea. By the 27th there remained only a little dulness just above the liver, and the patient could run upstairs rapidly with ease. Next day he was dismissed cured, having an excellent appetite.

This is a remarkable example of the rapid removal of recent effusion, but in another case, in which the effusion had existed for months and which was similarly treated, the effect was only temporary. In this case a daily diminution of weight by a pound or two occurred, together with a spare secretion of urine, and the effusion and all the symptoms diminished; but in a few days afterwards the former weight was recovered, and the effusion again increased.

PARLIAMENTARY.—THE ARMY MEDICAL DEPARTMENT.

On Friday, March 18, in the House of Commons,

Mr. Grove asked the Secretary of State for War whether it was considered desirable to retain the appointment of Assistant Professors at the Army Medical School at Netley; whether the officers employed at the Army Medical Board were appointed for five years, in accordance with the regulations for staff employment in the Army; what were the particular duties performed by Staff-Surgeon Fitzgerald, of the Army Medical Board, and whether that officer had not been employed there continuously since the termination of the Crimean war, and also promoted to his present rank while so employed without undertaking any term of foreign service; and whether the retention of Staff-Surgeon Fitzgerald and other officers of the Army Medical Board beyond the period of five years was fair in principle as compared with other Medical officers of the army.

Mr. Cardwell: As I stated last year, advantage was taken of the circumstance that no new Medical officers are being trained at Netley, to train older officers who had returned from India and the colonies, without having had the advantage of being trained at Netley. This has been found very advantageous. It was thought expedient to reduce the number of Staff Assistant-Surgeons instead of the Assistant-Professors, and to allow the latter to discharge the duties previously discharged by the Staff Assistant-Surgeons. There are four Assistant-Professors; three Assistant-Surgeons have been reduced. The officers employed at the Board are not appointed for five years. The Director-General is appointed for seven years, the others for no definite period. Staff-Surgeon Fitzgerald is employed in the control of Medical supplies and the examination of Medical accounts. It has not been thought expedient that the controller of these supplies and accounts should be changed every five years. Dr. Fitzgerald was at the Medical Department in 1859, in which year he was promoted on the ground of seniority. These regulations have been laid down by my predecessors, on the ground, not of fairness to the parties, but of efficiency in the service.

The German Periodical Press.—According to the list of journals entitled to pass through the post of the North German Bund, there are 2043 stamped journals—viz., 983 political and 1060 non-political. Besides these, there are 970 special unstamped journals, making a total of 3013 periodical publications, to which may be added 27 others edited in foreign languages.—*Journal de Statistique*, January.

Small-pox in Paris.—In an article in the *Gazette Hebdomadaire* (March 18), M. Dechambre states that the epidemic seems stationary, ninety deaths being returned for the week ending March 12. He also states that vaccination is practised amidst great difficulties and uncertainties, being often imperfectly performed, and with very doubtful virus. The vacciniferous infants, too, have become so rare that they are transported from house to house long after the virus of their pustules is exhausted, especially in the performance of revaccinations, for which the selection of the virus is often made very carelessly. The child's arm, too, when so many vaccinations are made, often becomes dangerously inflamed. In animal vaccination there is also great uncertainty, seeing that at the Beaujon twenty first vaccinations on infants, performed by M. Lanoix himself, the introducer of the practice, all failed. M. Blot, on the contrary, who always employs animal vaccine on the fifth day, says that he never fails. At the Académie, M. Guérin accused M. Depaul, the Director of Vaccine, of excluding the Jennerian vaccination in favour of the animal; but M. Depaul declared this to be untrue, as one-half of the vaccinations are performed with Jennerian virus, and the other with heifer virus. He added that as from 2000 to 3000 persons apply daily for revaccination, it is obvious that an adequate supply of virus could never be obtained from children's arms, and the heifer is resorted to perforce.

THE LEGISLATURE AND THE PROFESSION.

A MEETING of the Fellows and Members of the Royal College of Surgeons, convened for the purpose of considering and discussing the present position of the College with respect to public legislation and the formation of a single examining board for each division of the United Kingdom, was held in the lecture-hall of the College on Thursday afternoon, the 24th inst. Mr. Cock, President of the College, took the chair. About 250 gentlemen attended the meeting.

The CHAIRMAN, in opening the proceedings, congratulated the audience on being present at that, the first occasion of a meeting of the Members and Fellows of the College within these walls, and then suggested that, for the purpose of meeting the convenience of the many Professional gentlemen present, each speaker should be as brief in his remarks as possible, and strictly confine himself to the subject which had been advertised.

Dr. MORRIS (of Spalding) said that he had the distinguished honour of having to propose the first of a series of resolutions which would be brought before the meeting, and in doing so he might be permitted to congratulate the Fellows and Members upon the great triumph they had achieved in thus being able to stand within the walls of that time-honoured institution to discuss freely and fairly, without fear, favour, or affection, the interest of the College. The object of the meeting was to consider the present position of the College with respect to public legislation, and he did not see how he could approach that subject without taking a view of the past and reverting to the year 1800, when the first charter was granted to the then Barber-Surgeons of London, constituting a Court of Assistants of twenty-one persons, out of whom ten were elected examiners and held their appointment for life. In the year 1822 an amended charter was obtained, and the name of "Master and Governors" was changed to "President and Vice-Presidents." The progress of affairs from that time was not at all satisfactory to the Members of the College, and hence in 1843 a new charter was obtained, taking away from the Council the right of self-election and giving the right of election to the Fellows. This was a great stride, but he (Dr. Morris) would have given a vote not only to every Fellow, but also to every Member. It was sufficient to create a separate class called "Fellows" by way of giving them a distinction of superiority over the general body, without restricting to them the right to the College franchise. The charter of 1843 gave the Fellows the right to weed the Council, but that power had long lain dormant. At last, however, the Fellows had realised the fact that the remedy for whatever was objectionable in the Council lay in their own hands, and they had begun to avail themselves of their powers. After the charter of 1843 dissatisfaction still prevailed, and another charter was procured in the year 1852, limiting the time of the examiners to five years. The College had now arrived at very stirring times, and he hoped that the action now being taken was the forerunner of great changes in the institution. The first resolution bore very materially upon that point. It was—"That, in the opinion of this meeting, it is highly desirable that a single examining and licensing board should be established in each division of the United Kingdom as the sole portal to Professional practice." That would be a very great change, and one which would effect much good. Unfortunately, when fresh powers had been sought by the Medical Profession, there had been much vested interest in the way to impede the change; but, if the Government would take a sponge and wipe the opposing bodies out, it would be better for Medical science and better for everybody. He would take away all power of examining from those governing bodies which protected scientific institutions like this; and, as in the University of London, which had done much for science, he would make it a disqualification for being an examiner to be a member of the executive. ("No, no," and applause.)

Dr. CARR (of Blackheath) said that he had much pleasure in seconding the motion, and he would take that opportunity of congratulating the chairman on presiding over so distinguished an assembly as the present on the first occasion that the Fellows and Members had had the power of speaking their minds in this way to the governing body of the institution. It was a proud occasion for the chairman to be inaugurating a change so essentially provident and beneficial, and he (Dr. Carr) hoped that the chairman would also live to see the further change to which the resolution related, and which would promote the well-being of the whole Profession and tend to the improvement of Medical education. It had been said with truth that, as a rule, Physicians knew nothing of Surgery, and Surgeons knew nothing of Medicine, but rather repudiated it. He believed that this was very much due to the defective system of education; and he had no doubt that when a power had been established for the purpose of compelling men to submit to a curriculum of education which would teach them both Medicine and Surgery, the opprobrium justly excited against the Profession would no longer exist. The human body was but one body, and he maintained that those persons who professed to treat that body in disease ought to be educated both as Surgeons and as Physicians. It was due to the right regard and treatment of the body that the education of men who were called upon to treat disease should include both branches of Medical science. (Applause.)

Dr. EDWARDS CRISP said that, as one of the oldest Medical reformers present, he would take the liberty of saying a few words, but he laboured under a great difficulty, which he was sure was felt by all present, in not knowing beforehand anything of the nature of the resolutions which were to be brought forward. The first resolution said that there should be one examining board. That was what he had contended for from the year 1837, but that board must be a representative one. The other day nearly ten thousand members of the British Medical Association went to the Medical Council and asked for the establishment of one examining board; and what treatment did they receive? Mr. Cæsar Hawkins, the representative of this College, or rather the representative of the Council of the College, said, "What is this reform association? Who knows anything about it?" Dr. Aquilla Smith (an Irish member) would "go on to the business of the meeting." Dr. Fleming moved that the memorial should not be entered on the minutes. A greater insult was never offered to a respectable body of men than that, and a more suicidal act was never committed by the Medical Council. Everybody present was aware of the chaotic state of the Profession. Twenty different diplomas could be obtained at various places. There were 79 teachers and examiners and 930 annual Medical students. There were 45 degrees, or, as some made out, 51; and the Medical Council was elected by less than 300 of the 21,000 members of the Profession. Of the members of the Council eight were Englishmen, nine were Scotchmen, and seven were Irishmen. The Scotch members were in the proportion of one in about 330,000 of the inhabitants, while the English members were in the proportion of only one in two and a half millions. Nineteen-twentieths of the general Practitioners of England were entirely unrepresented on the Medical Council; and that Council, as everybody knew, was composed of men whose interest it was to glut the diploma market. Seven or eight fresh diplomas had been created since the Council was established, and a great deal of time was taken up at its last two meetings in considering the propriety of having a degree of "Doctor of State Medicine." (Laughter.) There were belonging to the College of Surgeons 2173 men with one degree only. He did not wish to make any invidious comparison, for a man with one degree, if he had a good knowledge of both branches, might be as useful as a man with seven or eight; but the Medical Council had admitted on the Register a large number of men possessing only the non-medical qualification of this College, and thus enabled them to be recognised while they would not have been recognised in any other way. The object of the meeting should be to look to the future, but here they were met with the difficulty which he had already mentioned, that of not knowing the course it was intended that the resolution should take. They were called upon to pass the present resolution without knowing whether the examining board was to be a representative board, or whether the College of Surgeons and the College of Physicians were to put their heads together, as they had done on former occasions, and constitute an examining board in their own interest.

Dr. MORRIS said that the constitution of the board was referred to in another resolution.

Dr. CRISP said that they ought to know at once whether it was to be a representative board.

Mr. HECKSTALL SMITH said that he would, on his own responsibility, move an amendment. They must all feel that what had been said by Dr. Carr was perfectly true—namely,

that there ought to be no distinction between different branches of the Profession, or, indeed, that there ought not to be any branches at all, and that all Practitioners should possess qualifications in both departments of the Profession, by whatever name such Practitioners were called. The only difference which he could allow was that a Surgeon ought to be a Physician and something more. He therefore congratulated the Profession on the approach of a time when every person admitted to practice should pass through the same portal, whether he wished to cultivate one or both departments of Medical practice. The difficulty which the Profession had long had to contend with was the competition which existed between various licensing bodies as to whom they should or could admit into the Profession. Ireland was, to a great extent, to be excepted from this remark; but with regard to the other parts of the United Kingdom there had not seemed to be, unless it was very recently, a desire to apply a true test to those who were permitted to enter upon the arena of practice, and certainly not until very lately had there been any test which would give those who were admitted a decent pretext for calling themselves literate men. The resolution before the meeting would allow the competition between licensing bodies still to exist. There would be three licensing bodies, one in each branch of the United Kingdom. There would be no security that there would not still be a considerable difference in the tests which candidates were submitted to, and a strong difference of feeling between the different portions of the kingdom, and also a strong desire to get as many admissions for themselves as they reasonably or unreasonably could. (Applause.) This amendment, therefore, was an expression of opinion that there should be no such division of the portal examination, and to secure this he proposed to omit from the original resolution the words "each division of." The resolution would then read as follows:—"That in the opinion of this meeting it is highly desirable that a single examining and licensing board shall be established in the United Kingdom as the sole portal to Professional practice."

Mr. Erasmus Wilson said that the amendment appeared to him to involve a principle of so much importance that he would with great pleasure second it. (Applause.) He felt that there ought to be no distinctions between Medical men but those which they were capable of making for themselves, by showing their real worth. The present distinctions, instead of doing honour to them, contributed to the opposite result. (Hear, hear.)

Mr. Gant said that he heartily concurred in the principles laid down in the first resolution, but at the same time he was not a revolutionist. He was desirous of being only a constitutional reformer. He could never understand the incompatibility between the office of a councillor of the College and that of examiner. He had heard that there was a sort of antagonism between the two, but he could not comprehend why one office should disqualify for the other. It had been said that the duties of the Council were chiefly of an administrative character; but it was nevertheless true that the Council of the College of Surgeons had from time to time comprised some of the greatest Surgeons of the day, who were peculiarly fitted to be examiners. It was a very grave question what proportion of the Council should serve on the board of examiners.

Mr. Heckstall Smith said that the next resolution would deal with the question of examiners.

Mr. J. Baxter Langley said that it would be a convenient mode of procedure to read to the meeting the resolutions which were in prospect, some of which might materially affect the consideration of the first one.

The Chairman said that he presumed that there was somebody who had had the arrangement of the meeting, and who therefore possessed all the resolutions. (Laughter, and cries of "Who is he?" and "Name.")

Dr. Morris: Mr. Chairman, if you will allow me, I will hand in a copy of the resolutions.

The following prospective resolutions were then read by the secretary at the request of the chairman:—

"2. That, in the opinion of this meeting, the establishment and regulation of the single examining and licensing board should not be left in the hands of the existing Medical corporations."

"3. That, if representatives of the Medical corporations should be continued by a new Medical Act, the Fellows and Members of the Royal College of Surgeons have, as a corporation, the right to elect a representative."

"4. That a copy of the foregoing resolutions be forwarded to the Lord President of the Privy Council."

Dr. Brady said that, as an old Medical reformer, he would ask the assembly to seriously weigh any resolution which might be proposed having for its object great and important changes. He admitted that up to this time the Profession had been in a most unsatisfactory state, and he could not help saying that the corporate bodies, both of England and Scotland, had contributed largely to the present almost degraded state of the Profession. (Hear, hear.) The corporate bodies, up to the present time, had not sought proper protection for the members once passed through their hands. Had they done their duty towards their alumni, the present dissatisfaction would not have been produced. He, however, looked forward with great hope to the future, believing that the corporate bodies of the United Kingdom had arisen from their sleep, and were now desirous to make amends to the Profession. As a member of the House of Commons he had endeavoured from time to time to serve the Profession, and had he been supported in his efforts by the corporate bodies his success would have been much greater. He prayed the Members of the College to deliberate well before passing the resolution, for it was one which wore a mask, and they could not tell whither it would lead. If the proposal were carried out, it would take away the supporters of this College, and the Profession itself would sink in consequence. (No, no.) Another evil of the plan would be that it would compel men in Scotland and Ireland to come to London to pass their examination. (No, no.)

Mr. Thomas Boor Crosby said that, as a General Practitioner, he would advocate the system of having one general licensing board. He believed it was much wanted, and whether it was nominated by the Government or elected by the general assembly of the Council it mattered not. The examiners could go from place to place whenever there were students to be examined.

Mr. J. Baxter Langley said that he understood the mover of the resolution to mean that the State licence to practise should be a sort of minimum qualification. It would be undesirable, and even impossible, to deprive existing corporations of the right to confer their own diplomas if they thought fit. Any man had clearly a right to take advantage of whatever additional influence he could gain by voluntarily undergoing the examinations of the corporate bodies; and no course should be taken which would exclude competition between talent in various localities.

The amendment was then put and negatived.

Mr. Walter Rivington suggested the addition to the resolution of the words "means should be taken to secure uniformity of examination and equality of fees."

The resolution was ultimately passed with the foregoing addition.

Mr. Thomas Nunneley (of Leeds) moved the following resolution:—"That, in the opinion of this meeting, the establishment and regulation of the single examining and licensing board should not be left in the hands of the existing Medical corporations." In a somewhat lengthy speech Mr. Nunneley maintained that mere corporate feelings should be merged in the desire to secure a uniform and efficient system of examination for all Practitioners, and contended that, although the plan proposed would to some extent deprive the present corporations of the power they possessed, it would not tend to degrade them in the eyes of the public. With regard to the College of Surgeons, whether it derived its support from examination fees or from the fees produced by its degree, he had no fear that its position would suffer, for he believed that its degree would be more and more sought for as it was separated from the right to practise and its full value became known.

Mr. Brudenell Carter seconded the resolution. He held that the combination of corporations for the purpose of fixing a minimum examination, which had been recently proposed, was a mistake. A meeting of the Colleges must be a meeting of compromise. The examiners should be appointed by a small council, partly elected by the Profession and partly nominated by the Government.

Mr. J. Fernandez Clarke said that the resolution was one of such vital importance that it ought not to be carried without very serious consideration. The meeting were proceeding in a circle. On the one side they were talking of representation and of enlarging the franchise, and, on the other hand, this resolution would hand over the resolution to the government of the time. (No, no.) Gentlemen might say what they pleased about it, but let them consider what had taken place in the Medical Council. If that had been a thoroughly representative body, could the Profession have been treated as they had been? He had taken as active a part in the politics of the Profession as any one in the room, and he could

not forget that they were living in days of great progress, and that this College, whatever its faults had been, had lately shown a disposition to act honestly and fairly to the great body of the Profession. Let the meeting pause before sending the resolution up to the Privy Council; for if it were taken as the opinion of the Profession that the corporations should be entirely excluded, he wanted to know where their representation was to come from? How could they be represented except through the corporations? Should they, who constituted one of the three learned professions, be placed in a different position from the other two? What would be thought of a body of lawyers—for instance, the benchers of Lincoln's-inn—meeting to petition the Government to take the whole of the education and examination of law students out of their hands? If this was the kind of improvement which the Medical Profession were to have, he for one held up his hands in dismay. This was not the principle which had been acted upon by reformers, nor ought it to be allowed to regulate the College for the future. It was very much indeed to be regretted that resolutions of this character, affecting a Profession like theirs, should be handed to them only as they entered the room. There had been no opportunity of even looking at them five minutes before they assembled. He was astounded to see such a series of resolutions evidently concocted by somebody—(great laughter)—and brought forward in this hole-and-corner way. (Cheers.) He would say that these resolutions had been concocted by a clique, and he would defy any one to tell him that they had received the sanction of twenty men. There had been a hole-and-corner proceeding in this matter. Every one of the resolutions should have been placed before the Profession in order that the members of the Profession could consider them, and then those concerned would have held a meeting ten times larger than the present in order to show what their opinion is with regard to the future of this and other Colleges. It must not be supposed that he was going to flatter the College of Surgeons. He had said as much against it as any man; but he believed that, when the "good time" appeared to be coming, it would be suicidal for them to throw down the structure. It had been said that the degree of the College would still be sought for; but it was well known that many a man would get into the Profession at the least possible cost, and with as little personal exertion as would enable him to do so, and this would be particularly the case if he could get the Government stamp upon him like a patent medicine, and so gull every fool in the kingdom. (Laughter and cheers.) He should like to know who prompted the remarkable expression in the resolution "should not be left in the hands of the existing Medical corporations." Well, whose hands was the examination to go into? that was what he (Mr. Clarke) wanted to know. Was the Profession to be reduced to the position of a ship at sea without a captain or a helmsman? They might have all their sails set, but without proper guidance they would go below. (Cheers and laughter.) What they required was for the College to do as it had done, only with a quicker step. Go forward with a quicker step; make every Member of a certain standing a Fellow of the College. Put more men upon the franchise, and then they would get the hearts and souls of twenty thousand men. That was the point for which they should fight, instead of about the little petty differences as to colleges and fees, and so forth. What they wanted was to be a representative and represented Profession; and they wanted not only that, but also to be strong to fight the Government instead of putting themselves in their hands. (Loud cheers.) They did not want the right of admission to the Profession to be entirely in the hands of the Government. He would conclude his remarks by a short anecdote. Some years ago a very large association was formed for the purpose of establishing a College of General Practitioners. The association carried everything before it for a time, and it would have inevitably succeeded, but the cry was raised, "You will cease to be a Surgeon; your Membership of the College will be wholly ignored. You will be neither fish, flesh, nor fowl." This cry went through the land, and thousands of names were appended to petitions against the proposal, and thus the College of General Practitioners was swamped. Now, there was a great attachment to the College of Surgeons in the Medical Profession. They loved the offender, but detested the offence. (Laughter.) They would be delighted to meet the Council under any circumstances, except in cases where they had to fight them upon their rights and privileges. The Council were now inclined to hold out the olive branch of peace. He believed there was "a good time coming," and he hoped they might all live to see it. At all events, let not the Profession hand themselves over hand and foot to the Government, which had already kicked them, and would keep them perpetually manacled. (Loud applause.)

Mr. C. H. Rogers Harrison moved, as an amendment, the omission of the word "not" in the resolution, thus entirely reversing its meaning.

Mr. Gant seconded the amendment.

Mr. Timothy Holmes said that the mover and supporters of the resolution had not laid before the meeting any definite alternative scheme to be adopted if the examinations were taken out of the hands of the corporate bodies. He believed the meeting had not been able sufficiently to consider the question to come to a decision to-day. He was sure that they would do wrong if the first step they took on meeting for the first time as Members of the College was to abrogate one of the great functions which the College had so long held. The nomination of examiners by the Government would be a fertile source of jobbery. (Applause.) He would move the adjournment of the meeting.

A discussion took place on the subject of the adjournment, with respect to the time and place of the next meeting. It was at length resolved that the meeting should be adjourned until that day month, or to a day as near to that as would meet the convenience of the Council.

The Chairman said that he should have much pleasure in representing to the Council the desire of the meeting.

A brief expression of thanks to the Chairman brought the proceedings to a close.

REVIEWS.

Lectures on Surgery. By James Spence, F.R.S.E. Part II. Edinburgh: Adam and Charles Black. 1869.

The second instalment of Professor Spence's work, numbering 632 pages, is devoted to an important section of Surgery, for it treats of the diseases and injuries of bones, joints, and vessels. There are two points which require to be kept prominently before the writer of a text-book for students, and they are these:—First, that the language must be absolutely clear and intelligible, and to attain this, one must not be afraid of repetition, or of too great simplicity of expression; and secondly, the views set forth should be corrected by the most recent observations and theories published. With the yearly increasing work demanded of Medical students before they present themselves to examining boards to have their fitness for practice tested, it becomes most important that their class-books at least should contain as much as possible of clear dogmatic teaching, arranged in a convenient form for reference, and simplified, where this is possible, by good drawings of the subject discussed. Now we venture to think that these wants have not been sufficiently recognised in the book under consideration. Thus, we observe that with abundance of illustrations, many of which are very neatly finished, these, instead of being woodcuts inserted each in its proper place in the text, are grouped together in sixteen pages of lithographs, so that the reader has to turn up the sketch which is to help him from many pages off, and that without any page reference to guide him to the plate. Moreover, some of the drawings — as, for instance the chromo-lithograph representing two appalling compound fractures of the leg (Plate XIV.) and the coloured plate of diseases of bones and joints (Plate XI.) — are of hardly any value for teaching purposes. Indeed, the chromo-lithographs in this, as in other Medical works lately published, are ,from their indistinctness, obviously less useful than plain woodcuts, and they are surely little more ornamental. What we mean by the lack of clearness of style and care to embody modern doctrines may be seen by studying the description of "phebitis" given at page 461, in the course of which we read — "Wherever there is a large venous circulation, there venous congestion and effusion take place; irritation is set up, and circumscribed suppuration or secondary abscesses follow. Hence we meet with such abscesses most frequently in the liver, lungs, and in the interior of joints." At the same time it is right to add that there is plenty of highly instructive and original matter in the work which will amply repay a careful reader, even although the views expressed may not be always the most modern. The numerous and carefully recorded clinical cases, which are introduced here and there to illustrate the subject under treatment, form, perhaps, the most valuable feature of the book.

The first five lectures are devoted to the consideration of diseases of bone and their treatment. The large space given

here to the comparison between caries and necrosis contains much interesting matter for the student, but we doubt whether the question of the relation between the two forms of local death and that of the curability of caries need such careful discussion in a text-book, since modern Surgical opinion is tolerably settled on these points. On the other hand, we are disappointed to find so important a disease as rickets disposed of in three pages. The result of so cursory a notice is that we find no definite view expressed of its pathology, although the fact of its being coupled with mollities ossium renders this the more necessary, nor any useful hints for diagnosis, so prominent a symptom as the enlargement of the ends of the long bones not being alluded to, and even the very common cause in insufficiency of nutritious food being overlooked. Five more lectures follow on diseases of joints, in which these affections are fully considered, and in respect of treatment some valuable remarks are made upon the application of continuous cold to wounded joints and to stumps after amputation. Much—and, as we think, undue—stress is laid upon the employment of *dry* cold in these cases, and the experience of the army Surgeons during the late campaign in Schleswig-Holstein is quoted in corroboration of the author's views. The Surgeons in both armies applied ice to all wounded joints and to nearly every stump after amputation, and the general conclusion arrived at was that where it was employed, primary union was more frequent and more extensive, and that the ensuing suppuration was always less, and these results followed the use of ice both before and after inflammation had set in. Professor Spence goes on to suggest that "it would be worth while to investigate whether or not a lower temperature than that produced by ice might not advantageously be employed in some cases where the tendency to inflammation is unusually decided, either from constitutional peculiarity or the nature of the wound. . . . Should it be found that a lower temperature than that produced by ice can be borne, its production could be effected without much difficulty by the employment of various frigorific mixtures graduated according to the temperature required." (P. 295.) Here is an instance of the lack of sufficient reference to already published observations to which we have before alluded. Mr. Spence must surely be aware that extreme cold has been employed in the manner he suggests, and with excellent results, not only by Dr. James Arnott, who succeeded in overcoming the prejudice of the Profession to the use of congelation more than twenty years ago, but also by many English and foreign Surgeons after him. Esmarck and Langenbeck are also quoted as originating methods of treatment by continuous low temperature, although it is obvious that the practices adopted by these Surgeons were on the principle of the "current apparatus" of the writer just mentioned, which was introduced by him as an improvement upon the ordinary irrigation methods, and employed at Brighton, Paris, and elsewhere, some years before Langenbeck wrote upon the subject. It seems to us that as a controller of inflammation, it matters little whether the cold be dry or moist. Where there is danger of harm resulting from a sodden condition of the parts, the dry application may be readily secured by the interposition of any thin membranous substance between the frigorific and the inflamed surface. The stout india-rubber bags, commonly used for ice applications, are, however, ill-suited for cases in which a more intense degree of cold is desired. In discussing the question of excision of diseased joints in consumptive patients, the author wisely insists upon the importance of the operation not being deferred on account of the lung mischief, and he mentions many cases of "gelatinous degeneration of the knee" so treated by himself with marked amelioration of the chest symptoms, the sufferers rapidly recovering from the operation, and quickly regaining strength and flesh. We are told that "as to the dread which formerly existed, that the local disease acted as a sort of counter-irritant, and that its removal would be followed by a more rapid development of the disease of the lungs, I can only say that after a very considerable experience in such cases I have always found amputation followed by amelioration, not exacerbation, of the chest affection." This view seems to be so entirely in harmony with the most recent views of the etiology and pathology of tubercular phthisis, that it cannot be too forcibly impressed upon young Surgeons. Another reason for early interference in these cases, and perhaps more particularly in cases of necrosis with long-continued suppuration, is that (as the researches of Dr. Dickinson and others have lately shown us) a constant drain of pus seems to be intimately connected with the production of amyloid degeneration of the viscera—a point which might well be mentioned in a text-book of Surgery. Twelve chapters are devoted to the injuries of bones and joints, in which we notice that Mr. Spence has introduced a plan of cutting off just the rounded ends of the bones with bone-pliers in cases of ununited fracture without disturbing the soft parts to any extent, by which he gets much better results than by the ordinary method of sawing off the ends. He conceives that the pliers secure a lesion more closely resembling fracture than that produced by the saw, and that, moreover, less bone being removed, there is more chance of a firm and speedy union. It is disappointing to find that the beautiful and valuable plan of Dr. Reid, of Rochester, U.S., for reduction of dislocation of the hip by manipulation is described in four lines of a lecture devoted to the consideration of this accident. We are sorry also to notice that Professor Spence is opposed to the treatment of leg fractures with the various stiff bandages in use for this purpose. He does not, indeed, mention the lightest and most elegant of these—the French glued bandage; but he objects to the starch and plaster-of-paris bandages as being too often "whited sepulchres," concealing a distorted limb from the Surgeon's eye. No doubt English Surgeons no longer put up even the simplest fractures *at once* in these bandages; but after two or three days of rest and cold lotions we are convinced that a light glue, or even a comparatively heavy starch bandage, is of the greatest importance in saving the health, which is too often lost by a prolonged confinement to bed. To defer the use of these means until "after the lapse of some weeks" is to lose more than half of their advantages.

Nearly a third of the volume is devoted to the injuries and diseases of the blood-vessels, and it is evidently here that Professor Spence is most at home, for he dwells with fond minuteness upon the subject of artificial hæmostatics, giving to it six lectures, of which three are almost wholly concerned with an historical sketch of the subject, and a considerable space is given to an interesting relation of certain original investigations made by the author some years previously. We wish we had space to follow him into this subject, for it is undoubtedly the most interesting portion of the work, but we must be content to indicate the chief practical deductions drawn from the experiments quoted. Professor Spence regards the external plastic effusion as one of the essentials to the safe obliteration of an artery after ligature, having observed that the mass becomes highly vascularised by the end of sixty hours, the vessels ramifying in its substance in all directions, and passing from it upon and into the proper coats of the artery. He believes that the chief office of this very vascular material is to follow up the track of the ulcerating ligature at the time of its separation with a reparative process, in a manner precisely analogous to the old operation for fistula with the gradually tightened wire. Hence it is important not to disturb the surrounding tissues whose vessels supply this effusion, and if these tissues be greatly damaged by disease or accident it is safer to ligature at a distance, amongst healthy parts. The necessity for supplying good plain nutritious diet to a patient in whom large vessels have been tied, that the blood may be in a healthy condition, is also dwelt upon. The clot is not regarded as an essential, although of considerable use as an adjunct, to the other parts of the process. Torsion is disposed of in one page, and stated to be "far inferior either to the ligature or acupressure," an opinion singularly at variance with the latest experience of some of our London Surgeons. Acupressure itself, however, finds little favour with Mr. Spence, and is not considered at any length, making way for five good lectures on aneurism, which conclude the volume. We shall gladly welcome the last part of this valuable work on Surgery, for doubtless Mr. Spence's great experience as an operating Surgeon will enable him to give us some useful hints on this most important branch of the art. We are curious, too, to read more of the operation statistics of Edinburgh, as hitherto the facts published have been somewhat of a conflicting character; we refer specially to the results after the use of disinfectants, ligatures, acupressure, and torsion.

PARASITICIDE OINTMENT.—Corrosive sublimate 12 to 16 parts; lard 500 parts; ivory black q.s. The ivory black to be carefully triturated with the sublimate, and then incorporated with the lard, so as to produce a homogeneous grey ointment, in which the mercury is equally diffused. It is more efficacious in the destruction of pediculi than mercurial ointment; but it also requires more care in its employment.—*Rev. Méd.* November 30.

GENERAL CORRESPONDENCE.

ON THE FORMATION OF A ROYAL ACADEMY OF MEDICINE.

By Dr. J. Braxton Hicks.

Letter III.

[To the Editor of the Medical Times and Gazette.]

Sir,—Let me now consider the important subject—viz., the formation of sections. And here I fear any remarks I may make on this subject will by some be looked upon as having necessarily a bias in favour of specialities? But why not have separation? Is it not a fact that there are separate branches of the *res medicina?* If it is an everyday and very extensive fact, why not admit it? Does the Physician extract a cataract? Does a pure Surgeon take out teeth? Does the pure Surgeon turn the fœtus? Then why ignore and brand as specialists those who do? Can the head say to the hand, I have no need of thee? And the foot to the eye, I have no need of thee? If all are educated up to the full standard required by the demands of an exacting Profession, why is not the one equal to the other practically and personally? May I not ask is it not this habit of invidiously applying the term "specialism" which has caused the very tendency which "specialism" has towards a narrow view? Are not Practitioners of departments thrust aside more or less from the higher positions in the Profession? Does it cause the best men to seek the various and necessary divisions, and would it not tend to cramp their mind to find that when they have done work worthy of the greatest it has been utterly ignored and even smiled at by those whose position should have enabled them to appreciate in a liberal spirit work worthy of high honour, and the worker fit for high place? So long as this spirit is fostered, so long will it tend to drive specialists to "specialism;" its opposite will wean them from it, and place good men equally. But in any case, whether division of labour be inveighed against or not, the division does and must exist, and it is for the leaders of the Profession to see how far by liberal treatment it can counteract its disadvantages, drawing each division from too narrow views and cramped practice by a liberal and equal position in union. Supposing we had no existing societies and wished to start a comprehensive one, should we not look around and endeavour to see how many divisions of practice there were already existing? Taking as a basis for selection those who practised principally a branch of which the other took no cognisance, or to a very limited degree, we should find Medicine, Surgery, Obstetrics, Psychology (particularly in its relation to the State), Ophthalmics, and Dental Surgery, besides some smaller sections not yet dignified by proper names, as the representatives of the practical art of Medicine. Then in its scientific aspect we should find Anatomy and Physiology, Pathology, Therapeutics, Hygiene, Medical Chemistry, and Medical Jurisprudence (I have not included Epidemiology, as it is only a part of Medicine proper. Still, in any new society there could be no possible difficulty in including it in the scientific group, its relations to State Medicine being of the utmost importance). These are probably all at present which it is needful to specify, presenting two groups, practical and scientific, the latter the gatherers, the former the dispersers of the good things of the Profession, equally important, none perfect without the other. Why should any be placed in such a position as to feel it not worth while throwing its whole energy into the common weal? Why should any two combine to say, "We two are chief, and will have the command"? Such a position it is for the Council to take, not the sections singly nor combined. Still the precedence of position should be given according to the degree to which its inquiry or practice extends over the human frame, and I have endeavoured in the list above to place them accordingly.

If a society is made in order to join sections, it must of necessity have sections to join. If two are united—viz., Medicine and Surgery—then any amalgamation would be rather to join the others to the Medico-Chirurgical section than to unite each to the other. But if Medicine and Surgery cannot be disjoined, neither can the others; all should be joined or all separate. Medicine has not so much with Surgery as Surgery has with Medicine, obstetrics has more to do with Medicine than with Surgery, and so on; the principle of separation applies equally to all. By what logic can Medicine and Surgery be joined while the others are kept separate?

The truth is, that the attempt to form a Royal Academy of Medicine by amalgamating some of the societies, has been fettered by the existence of the societies; and hence it has failed to make a true basis on which a grand society should rest. If to separate Medicine and Surgery should endanger the advance of the Profession, then to practise them separately also must do so. But truly the danger does not arise from this point. There are other much more active causes at work amongst us. It is in having separate colleges for Medicine and Surgery, in which other divisions of work have not been even mentioned till a very few years since. It is in the (shall I say) contempt, at any rate want of appreciation, shown by Practitioners of one branch to the knowledge acquired by the other, which, though rapidly decreasing, is still to be seen in some places. It is in the lower status accorded by the Practitioners of Medicine and Surgery to the Practitioners of the other branches above named, although their equal in point of education, skill, originality, and general information. Till this petty spirit is done away with, simultaneous advance of all the departments of the Profession must be retarded, much more than by the separation in an Academy of two sections notoriously separate otherwise.

Regarding the formation of the Council, it would not be difficult to arrange the numbers, provided a broad basis were made, say two or three from each section elected by the section. They would be probably the best men of each; whether it would be desirable to give the practical sections the greater number, may be a matter for discussion. It would be difficult to give any of the sections more than the other, but if it were thought the latter named sections in the practical group would outvote the former, this would be scarcely likely, because doubtless many would belong to other sections, so that a question would be more likely to be voted on its merits than as a party affair. Indeed, in the largeness of the numbers, cliquism is less likely to prevail.

But of whatever elements the Council should be composed, there seem to be three aspects which it should present—one financial and routine; a second scientific, towards the sections for their true work; and a third political or social, to the public in relation to State Medicine in all its bearings. Regarding its scientific aspect, besides other points, it would supervise the work of the sections, pointing out new work, suggesting attention to special subjects, forming a medium by which any section may request help and information of another. But, in its social aspect, the great and increasing attention given by the public to State Medicine makes it highly necessary that the council should largely direct its action to the collection of information on the one hand, and on the other to give advice voluntarily or on solicitation, to use their influence with Government in questions affecting the welfare of the Profession and the health of the public, and thus it would gain a position of power as the exponent of the opinion of the Medical Profession, and of the scientific elements assisting it; and therefore, as already observed. it would be highly desirable that a liberal admission should be given to the scientific element.

It appears to me that every section should send at least one delegate out of the allotted number for council, elected specially as the representative of the section on the subject of State Medicine, who might, conjoined, form a sub-committee in the General Council, for reference or consideration of questions appropriate to it.

With such a basis as this, the election of the annual President might safely be left to the council, without any rules as to choice by rotation.

Should such a scheme be thought too Utopian, then it might be so arranged that all the existing societies be asked to send (3) delegates to form a common council, each society furnishing at same time a certain sum of money for the expenses of the council. Which of the societies should be invited would have to be determined, but they should be numerous, and should not be confined to the Medical only; the Chemical Society, of necessity, would have to be included.

But any attempt to form a society of so great a bearing as understood by the term Royal Academy of Medicine will assuredly fail if the basis be not at least as wide as the one I have suggested, with still further powers of expansion, and unless it is born free from the ungenial feelings of the past. Otherwise a greater amount of work would be done by decentralisation, and therefore it would be better to let things stand as they are than produce a combination which should render individually each section less active and more restrained.

I am, &c. J. Braxton Hicks, M.D., F.R.S.

PUPILAGE.

Letter from Dr. W. P. Swain.

[To the Editor of the Medical Times and Gazette.]

Sir,—The question how best to qualify students for the responsible positions they are to hold as members of our Profession is one worthy of discussion from various points of view. With your permission, I desire to call attention to what I am bold to call the great loss of teaching power which has been sustained by the almost entire suspension of pupilage. I need only refer to Dr. Headland's lecture "On Medical Education" in the last number of the *Lancet* to show that I do not stand alone in holding the opinion that those students lose great advantages who do not avail themselves of the opportunities which are afforded them even now of spending some portion of their time as pupils to general Practitioners. "The country Practitioner," says Dr. Headland, "seems of all men the most fitted to prepare the aspirant for the more elaborate teaching which he is expecting in a school of Medicine. I hold an apprenticeship to such a man . . . the very best introduction to the more elaborate studies which await him." By a fortunate coincidence, giving great additional weight to this opinion, we have a report agreed upon by the Court of Examiners of the Royal College of Surgeons, and approved by the Council, in which it is stated that since the almost entire assertion of apprenticeship students enter upon their Professional studies at the schools without any preliminary knowledge.

The report states, "Under the old system, the learner, before commencing his school career, had gained some knowledge of the common facts of chemistry and of the appearances and the doses of drugs. He had also attained by observation and in communication with a master some familiarity with the names and the aspects of diseases; at the same time, no little skill in manipulation was acquired." There can be no doubt of the truth of these remarks, and there can be equally little doubt that, up to the present time, no plan has been advised to supply the place of all that practical teaching which the pupil under the old *régime* received. To say that the system of apprenticeship is faultless would be, of course, absurd. That the master should be competent to teach and the pupil diligent to learn are elements of success not always present; but an idle apprentice will be as idle a student, and an incompetent master is better than no master at all. Besides, in by far the majority of instances, the master is well competent to instruct his pupil. It is the pupil's own fault if he does not go up to his school well grounded in osteology, with a perfect knowledge of pharmacy, and a fair understanding of Materia Medica, chemistry, botany, and clinical microscopy. Take as examples of men capable of giving elementary instruction the Physicians and Surgeons holding appointments at our provincial Hospitals. Where will you find, as a class, men better suited to give early Medical training to young students? They are able to afford their pupils opportunities of practical Hospital work such as fall only to the lot of comparatively very few students who obtain Hospital dresserships at their schools. In addition to this, they can also give an insight into private practice—most useful to young men in after-life—and, being for the most part, general Practitioners, they are able to instruct in dispensing and in the management of cases both Medical and Surgical. These cases are just the very ones that young men will have to get their living out of hereafter; the very ones, too, which, as a rule, when they commence practice they are in total ignorance of. I can do no more now than simply bring this subject under the notice of your readers, hoping that it will attract the notice it deserves. I am, &c.

Devonport, March 15. W. P. Swain, F.R.C.S.

MR. MAUNDER'S OPERATION ON THE LOWER JAW.

Letter from Mr. Alfred Emson.

[To the Editor of the Medical Times and Gazette.]

Sir,—The "new operation on the lower jaw" by Mr. Maunder at the London Hospital reminds me of a case which was under my care ten years since, in which I effected the removal in the same way of the entire left half of the lower jaw, with the exception of the articulating head, for necrosis, and with very favourable results, and, with the exception of some flattening of that side of the face, no deformity.

The patient, a very respectable man, about 50 years of age, of a weakly flabby constitution, came under my care for disease in the lower jaw, in May or June, 1859. I removed several teeth in June, and another in August; an abscess was also opened on the 13th of that month, and on the 27th I removed a small piece of bone, the alveolus principally. The disease appeared to be arrested, and I did not see the patient for some weeks. In December, however, he came again, and I found there was a piece of diseased bone, which appeared partially detached, and which I proposed to remove. On the morning of December 17, 1859, I cut down to the bone, near the place of the lower canine tooth, and carried the incision backwards along the ramus, and easily exposed the necrosed bone; and with a pair of forceps raised the whole ramus from the symphysis, where it was but slightly attached to the end of the incision. It was now quite evident that the entire half of the bone should be taken away. How was this to be done? I determined on trying the new plan. I carried the incision backwards up to the point of the coronoid process, and then with the edge and handle of the knife, guided by the left forefinger, I detached the insertion of the temporal muscle from that process; in the same way I detached the masseter from the outer angle, and the internal pterygoid from the inner angle of the jaw. The bone was now freely movable; it was only necessary to disarticulate the joint, which I attempted to do. The bone was brought well out, and with the left forefinger pressed well on the condyle, I cut down on the front, or rather inner, part of the head of the bone, and divided all the structures remaining in front of the condyle. I found, however, that disarticulation could not be effected without an outer wound, and therefore I applied a pair of bone forceps and cut through the condyle close to the joint. The hæmorrhage was considerable, but nearly all venous, and never at any time alarming. I kept so close to the bone at every point that no important vessel could have been wounded. The patient bore the operation heroically; the wound in the mouth healed, and for a time the improvement in his health was great. The operation was a complete success; very little inconvenience was felt from the loss of bone, and very little deformity was visible. The patient survived the operation five or six years. Two or three years after necrosis of the left parietal bone took place, from which he recovered after losing the greater part of it. Ultimately he sank from disease of the same kind in the bodies, I believe, of the cervical vertebra, which produced difficulty of swallowing and starvation. I was very ably but solely assisted in the operation I have detailed, as I had been in many former cases, by a very old friend, Mr. Henry Alban Arden, then practising in this town.

I shall be glad to have the case inserted in the *Medical Times and Gazette*, as probably we may hear of the same operation having been performed many times before. I am, &c.

Dorchester, March 17. Alfred Emson.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Monday, March 14.

Dr. Burrows, F.R.S., President, in the chair.

SPECIAL MEETING.

The President said this meeting had been summoned for the further consideration of the amalgamation scheme agreed on last year. In order to bring this matter more rapidly to a conclusion, the scheme had been printed, with the alterations made in committee in italics, and it would be best to limit their consideration to these portions.

Dr. Pitman moved the adoption of Section IV., which provided for the election of two representatives by each section to sit in the General Council.

Mr. Holmes seconded, and pointed out that the alteration here was from nomination to election.

Dr. Pitman moved, and Mr. Gascoyen seconded, the adoption of Section VIII., which was the corollary of the former, giving the election of representatives to the body of each section.

Dr. Pitman moved, and Mr. Gascoyen seconded, the adoption of Section IX., which gives certain functions to the Royal Society as a body—to meet at least four times a year for the discussion of important questions not so well adapted for sections, the election of Fellows, and the appointing of committees for special investigations, as has been done by the Royal Medical and Chirurgical Society.

Mr. Solly asked if the questions to be discussed were to be merely scientific, or if they were to include Medical polity also.

disagreeable smell and taste, and of some pain on the left side of her throat.

The tuning fork, when held near the external ear, was heard faintly. The right ear was normal in all respects. When placed on the sagittal suture, the tuning fork was heard more clearly in the diseased ear, which proved that both labyrinths were normal, but that vibrations reaching the left labyrinth were there retained, and consequently heard better, owing to the obstructions lying in the tympanic cavity. The watch was heard only when in contact with the ear. When placed on the head it was heard better in the left than in the right, which was another proof of the normal condition of the left labyrinth.

The results of this examination showed the existence of purulent inflammation of the left ear. It was also clear that the disease extended throughout the whole layer of the mucous membrane of the ear. The disease was not confined to the mucous membrane, but had already extended itself to the periosteum and bone, and judging from the reflex symptoms on the facial muscles, the portio dura must have been more or less impaired. The disease, although of such long duration, had not yet reached the labyrinth. The noises in the ear were only caused by pressure on the fenestræ. The membrana tympani was evidently perforated, the opening being not large enough to allow the free exit of the thick secretion constantly accumulating in the cavity.

It being evident that the perforation in the membrana tympani was not large enough to allow the secretion to run freely into the meatus, Dr. Politzer made an incision with a paracentesis knife, on the most prominent part of the then convex membrane. A great quantity of pus ran out into the meatus after this operation. This was removed with the syringe. She was also catheterised, and a solution of the sulphate of zinc, 5 gr. to the oz., was dropped into the ear. Great relief followed this treatment, but the pain began gradually to come on. She came daily and was catheterised, her ear being syringed out and the zinc solution introduced. But fourteen days after the first operation, the pain, which had been increasing, was as strong as ever. Exactly the same subjective and objective phenomena reappeared, and the patient was in the same state as on the first day she saw us. She was again operated upon. The sulphate of zinc was introduced through the catheter and external meatus, but a fortnight had hardly elapsed before the same bad symptoms reappeared. This treatment was continued for two months with no better success, in which space of time she had been operated on five times. Other astringents were tried, nitrate of silver was used in solution, but nothing would stop the discharge.

On September 10 the patient came suffering extremely. I then thought of trying the method I have above spoken of. I consequently catheterised her with a broad catheter, and being sure that it was well fixed in the Eustachian tube, I filled the ordinary ear syringe with tepid water and forced it through the catheter, telling the patient to spit out all that should come into her mouth. I repeated the operation four times before removing the catheter, and lastly I blew in a few drops of the zinc solution. The water which the patient spat out contained large masses of stringy yellow pus ; the water had come out to the external ear, and even ran into the otoscope. I then syringed the meatus and also dropped in some of the zinc solution. On the following day the patient came, her expression revealed the amelioration which followed this latter treatment ; the pain had left her, and the discharge had decreased. Continuing the same treatment, the discharge abated by degrees, the inflammation went down, and on September 17 I had the pleasure of seeing that hardly any traces were left of the disease. Out of precaution I continued the treatment till the end of the month, and on the 27th I examined her for the last time. The membrana tympani, with the exception of the perforation below, was normal, the hearing good, no noises, and the Eustachian tube normal. The facial symptoms had altogether disappeared. The patient remained in Vienna for one month longer, during which time no signs of the disease troubled her again.

F. B., aged 27, a female, first presented herself on October 5. Six months ago she was first troubled with a sensation of fulness in the right ear. This lasted eight weeks, and then began pain. This disappeared for a fortnight, and then came on stronger than at first. She then noticed that matter ran out of her ear, and a fortnight after its first appearance she perceived that something was wrong with the muscles of her face. She also complained of giddiness, sick headache, and vomiting. On examining her it was found that the muscles on the right side of her face were paralysed, and consequently her face was drawn up to the left side. The meatus was red and hypertrophied, so that it was impossible to see the membrana tympani. Thick yellow pus was constantly discharged from her ear.

It was evident in this case that the disease had advanced to the bone. On examining her with the watch and tuning-fork it was found that a slight secondary affection of the labyrinth was present. The patient was at once treated with injections of tepid water. The pain, which was intense on the day she first presented herself, disappeared after the first operation, and after the third the discharge also ceased. The same treatment, without any astringent solutions, was continued for two weeks, at the end of which time all inflammatory symptoms disappeared, and a cicatricial tissue had closed the perforation. The facial paralysis was treated by electricity, and was decidedly ameliorated. I had the opportunity of seeing the patient a few days ago. The facial paralysis is hardly visible, and the ear in a normal state. I could give several cases more illustrating this disease and treatment, but I have already occupied too much space in your valuable columns. I shall only say in conclusion, that one thing more is indispensable for effecting a cure by this method of treatment ; let no one try it or expect to meet with success, unless he is sure that he can handle the catheter with perfect security. I have seen gentlemen who have tried it and could never get the water into the ear. The operation is not perfect until the water comes into the meatus and runs out from it; and this is not so easily accomplished as one may be led to think. The syringe must be a powerful one, and force should be used. The best syringes for this purpose are those which Toynbee recommends in his book on the diseases of the ear.

It is to Dr. Politzer that I am indebted for his kindness in allowing me to try this method on his patients, and I take advantage of this opportunity to thank him for it.

MEMORANDA OF A CASE OF GALL-STONE CAUSING SYMPTOMS OF ILEUS;

WITH A FEW OBSERVATIONS ON BILIARY CALCULI GENERALLY.

By PETER CAMPBELL, M.D., L.R.C.S. Edin.

Towards the end of 1868 I was called one evening to see a lady visitor here, about 70 years of age, of tenacious constitution, who was suddenly seized with severe pain in the abdomen. From the character of the pain, and its site in the epigastric region, I cursorily concluded it to be simply gastralgia, and prescribed accordingly a draught of Battley's liquor opii and sulphuric ether, with linseed-meal and mustard poultices externally. The following morning there was no abatement, with the addition of distressing retching and straw-coloured watery vomiting, thirst, and parched mouth, but pulse quiet and regular—68. I then learned from her that on more than one occasion previously she had suffered from hepatic colic, and voided gall-stones of large size, attended with excruciating boring pain in the right hypochondrium, extending to the scapula and shoulder; whereas, on the present occasion, it was absent from the shoulder, and lower down, being to the right of, and on a level with, the umbilicus, of a somewhat dragging nature, and radiating towards the scrobiculus cordis. This history, coupled with the symptoms, even though subjectively different in their quality and seat from former attacks, led me to attribute the present to the same cause.

I recommended fomentations, medicated with laudanum, locally, and draughts of hot water with bicarbonate of soda internally, but refrained from sedatives and antispasmodics, as she opined having derived little benefit from these in the past. No new feature presented itself until the evening, when the vomiting had become unmistakably stercoraceous ; countenance pinched ; dark areola beneath the eyes ; pulse sharper, and slightly accelerated ; bowels obstinately constipated, with distension and uneasiness in the ileo-lumbar region. There was no jaundice, and the urine excreted was of average quantity.

At my request, Dr. Gordon saw her with me in consultation, and, from the serious aspect of the case, we deemed it advisable to give a guarded prognosis. Was ordered one-third of a grain of extract of belladonna and two grains of calomel in pill, one every three hours, and repeated enemata of turpentine and castor oil in warm water.

On the following day, about one p.m., these measures, supplemented by a dose of oil in the morning, had the desired effect of producing a copious alvine evacuation, with the expulsion of a cylindrical gall-stone, and affording immediate relief to the urgent symptoms. Considerable tenderness of the bowel and dry glazed tongue continued for eight days, which

gradually subsided under the use of borax and glycerine, with nourishment at short intervals, chiefly in a liquid form. Judging from outward appearance, the concretion seemed composed principally of cholesterine, the bevelled ends exhibiting a crystalline micaceous structure of yellowish colour encircled by two or three lines of dark brown amorphous matter. It measured two inches and five-eighths in circumference and seven-eighths of an inch in length.

Observations.—The few cases of biliary calculi on record, easily accessible, complicated with such formidable symptoms, have induced me to note the foregoing case. Frerichs(a) mentions only two similar in his large experience. The one died; the other recovered. The concretion in the latter was of the size of a walnut, and should therefore have traversed the intestinal canal with less difficulty than the above truncated cylindrical one, which, note in passing, gave rise to such disturbance in its onward passage through the bowel, but apparently making its exit with comparative facility from the bile ducts, owing probably to a relaxed and patent condition from prior attacks.

Habershon(b) also quotes two cases terminating fatally where calculi were found impacted in the small intestines; the usual signs of incarceration having preceded death, but without feculent vomiting.

Bearing on the etiology and treatment of these hepatic concretions, one or two remarks by way of addenda.

Various theories have been propounded as to their origin and mode of formation. Dr. Thudichum,(c) a high authority on such a subject, considers they are formed by a process akin to putrefaction. This conclusion he arrives at from observing that the constituents of gall-stones are similar to the products precipitated during the decomposition of bile out of the body.

Frerichs(d) favours much the same view, *plus* stagnation of the bile, putrefaction being induced by the mucus of the gall-bladder acting as a ferment.

Dr. Harley, in his excellent monograph on jaundice, has shown that cholesterine and biliverdine — the ordinary constituents of biliary calculi—are not formed in the liver, whereas the bile acids are, and that the latter hold the former in solution; consequently, if the solvent is deficient, precipitation of the cholesterine and colouring matter is favoured. Hence the *rationale*, plausible at least, of the frequent existence of these deposits when the liver is invaded by organic disease, or its enervation disturbed by mental and emotional influences, thereby diminishing or suppressing the secretion of the bile acids and salts. Such a view explains best the majority of the cases that have come under my own observation, being mostly elderly females, "who have known many things of joy and grief," and who are naturally of an anxious disposition, mind and body mutually responding.

Diagnosis.—The "surest signs" of hepatic colic, according to Wolff,(e) are pain, followed by rigors and retarded pulse, though the latter is by no means constant. A case in point I will shortly advert to which I witnessed recently. The patient, a farmer advanced in years, complained daily, or every alternate day, for fully a week of agonising paroxysms of pain in the epigastrium, continuing for one, two, or three hours at a time. During the exacerbations the pulse and heart's action became "acutely irregular," and quickened anon almost imperceptible, pain shooting more towards the left and cardiac region; skin pallid and clammy; eyes fixed and staring—in short, a cataleptic condition seemed at times impending. From this rather anomalous train of symptoms, I felt unable to decide whether the suffering was of hepatic or cardiac origin—anginous—till the expulsion of a biliary calculus dispelled the uncertainty—pardonable, I imagine, in the circumstances. In this instance also there was no jaundice, indicating no prolonged obstruction of the common duct, and inferentially the little value of jaundice as a distinctive sign.

Treatment.— During the attack the repeated administration of draughts of warm water as hot as the patient can partake of it with a teaspoonful or so of bicarbonate of soda to the half-pint has proved useful in this and other irritable states of the stomach, making the vomiting more free, neutralising the acrid acid contents of the stomach and somewhat allaying the spasm and retching, owing probably to the carbonic acid necessarily evolved along with the inward fomentation aided by its outward application. Of the sedatives generally employed—viz., belladonna, opium, and chloroform—their claims are perhaps nearly equal, though I prefer the former partly from noticing its good effects, with or without nux vomica, in other colicky affections of the bowels associated with constipation. In Frerichs' case of gall-stone ileus, expulsion followed the use of two injections of an infusion of the leaves, five grains to each. Moreover the subcutaneous injection of atropine(f) would very likely prove equally serviceable.

As regards treatment directed to the prevention of these concretions, Durande's remedy, consisting of oil of turpentine and ether, whatever may be its intrinsic virtues, presents serious gustatory objections to its general adoption. The testimony of writers is almost unanimously in favour of saline and alkaline remedies, whether in the form of the pharmaceutical fixed alkalies, or, better, the use of the natural mineral waters containing these ingredients—those of most repute being Cheltenham and Bath in England; Carlsbad and Vichy on the Continent. Indeed, Willemin, a French writer, considers the latter antagonistic to their formation. From what has come under my notice of the beneficial effects of the mineral springs of this place—Bridge of Allan—in various gastro-bilious affections, where a catarrhal or arthritic state of system obtains, I should anticipate good results, though not yet having had any case of gall-stones, using it sufficiently long to speak dogmatically. For the benefit of those unacquainted with this northern spa, I append the analysis of the stronger spring:—

1000 grains contain—

Chloride of sodium . . .	6·746 grains.
,, ,, calcium . . .	5·826 ,,
,, ,, magnesium . .	0·086 ,,
Sulphate of lime	0·716 ,,

Other prophylactic measures are avoidance of too much fatty and due allowance of vegetable diet—eschewing depressing sedentary habits, taking sufficient outdoor exercise, riding or walking, and the cultivation of a cheerful equable frame of mind.

Bridge of Allan.

(a) Vol. ii. p. 524, Sydenham Society's Translation.
(b) "Diseases of the Alimentary Canal," pp. 154-5.
(c) *Medical Times and Gazette*, August 8, 1863.
(d) P. 507.
(e) *Sydenham Society's Year-book*, 1861, p. 222.

(f) I saw a gentleman last summer along with a Medical friend where dangerous symptoms, causing much anxiety for five or six hours, followed the subcutaneous injection of the one-twenty-fifth of a grain of atropine. Possibly the surviving translators of Trousseau's Clinical Medicine may notice this (see vol. i. p. 501).

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

TWO CASES OF DELIRIUM TREMENS SUCCESSFULLY TREATED BY DIGITALIS AFTER FAILURE OF OPIUM.

(Under the care of Mr. A. W. NANKIVELL, F.R.C.S.)

Case 1.—C. P., aged 42, a clerk, was admitted July 3, 1869. On admission the patient presented all the usual appearances of delirium tremens, and was stated to have been already ill for four days. He was ordered—℞ Liq. opii sed. ɱxxx., aquæ f.ʒj., 3tiis horis. During the night he was quite unmanageable, and it was found necessary to have a man to watch him. He continued to take the above mixture till July 7 (four days), but with no benefit; on the contrary, he became more violent, shouting at the top of his voice, and once he got out of bed, and, in spite of the attendant, succeeded in breaking one of the ward windows.

On July 7 he was ordered—℞ Tinct. digitalis f.ʒij., aquæ f.ʒj., 3tiis horis. He took this through the night, and until 3 p.m. the day following, when he fell asleep. He awoke next morning, feeling perfectly rational, and was discharged cured on July 10.

Case 2.—G. M., a man aged 42, was admitted on February 16, 1870, with all the same symptoms of delirium tremens. He was stated to have been very seldom sober for a month past. Pulse 80; tongue furred; some nausea. Ordered pil. coloc. co. gr. x. immediately. 5.40 p.m.: Quarter of a grain of morphia injected subcutaneously into right arm. 8.5 p.m.: Bowels freely moved; very sick; no sleep. Half a grain injected.

February 17, 12.15 a.m.—No sleep. Another half-grain injected. 6 a.m.: Still awake and restless. Two-thirds of a grain injected. 10.30 a.m.: Sickness still continues. Has

Dr. Pitman thought the Society itself would regulate that.

Mr. Holmes said the subjects might be fixed at a previous meeting of Council, and moved that this clause be introduced.

This was seconded by Mr. Solly, and carried *nem. con.*

Mr. Gascoyen moved, and Mr. Holmes seconded, the adoption of Section XIV., which was intended to meet a difficulty with regard to India by substituting the words "British dominions" for "colonies" with reference to those eligible for election into the new society.

Dr. Pitman moved, and Mr. Solly seconded, the adoption of Section XV., "That any Fellow who is a member of more than one section may retire from one or more of them without resigning the Fellowship of the Society."

Mr. Holmes pointed out that this might be so construed as to allow a Fellow to resign all sections and yet remain a Fellow.

Dr. Pitman said it was intended to give a Fellow the right of selecting the section to which he should belong, but thought if Section XVIII. came before XV. all would be explained. He moved accordingly "That XVIII., 'That all Fellows of the Society shall pay to its funds an annual contribution of three guineas, which shall make them members of any one section, with the privilege of using the library of the Society,' become XV."

Mr. Wood seconded.

Mr. Solly asked what provision had been made for those who had compounded.

Mr. Holmes said their rights must be preserved, and provision made accordingly.

Mr. Moore thought there would be difficulty with regard to other societies in money matters. He thought two guineas quite enough for a Fellow's subscription. As matters now stood, this Society was saving annually about the amount of the additional guinea. He proposed that two guineas be inserted instead of three.

Mr. Brodhurst seconded, and said there had been much talk about this in Council, and that some even proposed one.

Dr. Webster said that with two guineas they would not be able to keep up the library and appoint scientific committees.

Mr. Solly felt strongly on this matter. The admission fee was done away with. The Fellows would have the run of the library, which even now was a saving to young men.

Mr. Holmes said he was sorry that Dr. Greenhow was not present, as his figures had compelled the Committee to adopt the rates proposed. They had been most anxious to lower the subscription, but had not been able to do more than abolish the entrance fee. Additional Fellows would imply more books in the library, and it was therefore too dangerous to start with conditions at all likely to end in bankruptcy.

Dr. Pitman said all had been exceedingly anxious to diminish the fee, but if they began with too small a sum, they would have to increase it, and an outcry would be raised; whereas they could easily lower it if necessary.

The amendment was lost.

Returning to Section XV., Mr. Holmes moved, and Mr. Savory seconded, the motion that the words "all except one" be inserted instead of "one or more of them." This was adopted.

Dr. Powell thought that provision might be made whereby one attending a certain number of sections or paying a certain fee might be entitled to attend all.

Mr. Holmes said some curious statistics had been brought out in this inquiry as to the numbers belonging to more than one society. Only 1 gentleman belonged to all, 15 belonged to four, 109 to three.

Mr. Solly thought that Fellows of the Royal Medical and Chirurgical Society ought to have some privileges for what they were giving up.

Dr. Powell moved in accordance with his observations. His motion was carried, as was also Section XX.

Section XXI., which provides that the obstetrical section shall retain as its private property the existing library and museum of the Obstetrical Society, was moved by Mr. Holmes and seconded by Mr. Brodhurst.

Dr. Webster thought it objectionable as tending to propagate existing distinctions between societies which it was desirable to merge into one.

Dr. Heywood Smith thought any section might have a private library.

Mr. Michell moved, and Dr. Webster seconded as an amendment, that this section be omitted.

Mr. Holmes thought it quite possible the library and museum might remain where they now were. They did not wish to withdraw any existing privileges from the societies. The position of this Society was peculiar. It had already given up the right of entering on its own premises, while occupied by other bodies, for a money consideration; it was only proposed now to alter the kind of consideration.

Mr. Moore regretted this clause; it would be sure to keep up the distinctions between societies.

Mr. Gascoyen said the library and museum would form part of the general property, only they would be kept apart from the rest.

The original motion was carried.

A motion to the effect that all existing rights and privileges should be preserved was also carried.

Section XXVI. was next moved. Its effect is to give each section an undisputed right to dispose of three-quarters of its income, the remainder to be at the disposal of the main body. Mr. Holmes said the original motion was that they should have one-half, but this was thought rather too little, especially for the *Transactions* of the Pathological Society. He remarked that the proceeds of the sale of *Transactions* were included in the total income.

Dr. Cholmeley seconded the motion, which was carried.

Sections XXIX. and XXX., the one providing for the election of Honorary Fellows and Members, and the other for the expulsion of objectionable Fellows or Members, were also carried *nem. con.*

Whereupon Mr. Holmes moved, as a rider to the foregoing, "That this Society, while not objecting to modifications of detail, will not consent to any fundamental alteration in the scheme now agreed upon." This, he said, would show that they were still open to negotiation, but that they would not consent to have their scheme radically altered.

Mr. Thomas Smith seconded the motion, which was carried *nem. con.*

The President said that an ordinary meeting would have to be made special to confirm these resolutions.

Mr. Moore proposed, and Mr. G. Pollock seconded, a vote of thanks to their delegates for the trouble they had taken in this matter. This was carried by acclamation, as was also a vote of thanks to the President proposed by Dr. Webster.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 15, 1870.

Richard Quain, M.D., President, in the Chair.

Mr. Nunn exhibited a portion of obstructed intestine, with a model, removed from the body of a gentleman, aged 65, who had died of the obstruction. Three weeks before, he saw him with symptoms of strangulated hernia, and having a small tumour in his groin, which had been discovered the day before. A short time previously he had slipped, fallen, and injured his head, and shortly after was seized with the abdominal pain and vomiting. Mr. Nunn operated on the hernia, and relieved it, but the symptoms remained; he explored the inguinal canal, but nothing could be found. After death adhesions of the ileum at various points, so as to form knuckles of intestine, were discovered; here the intestine was doubled back, and had grown together to the abdominal wall. This had probably been going on for eight years.

Dr. Moxon asked if the condition was general or local; twice he had found near the ileum something similar, with the twisted convolutions cohering, but he had seen no adhesion to the wall.

Mr. Nunn said the mass was eight inches above the cæcum, and that the inflammation was not general.

Drs. Greenhow and Cayley reported on Dr. Moxon's specimen of occluded coronary veins. They found them completely obstructed, but, on the other hand, the foramina Thebesii were very large.

Dr. Morell Mackenzie showed a specimen of Primary Necrosis of the Cricoid Cartilage with Secondary Abscess, occurring in a lady aged 65. It was one of those exceedingly rare cases in which the disease had commenced in the cartilage, and secondarily had affected the perichondrium and submucous tissues. The abscess which subsequently formed pressed upon the œsophagus to such an extent that swallowing became impossible, and all food attempted to be taken passed into the larynx. The patient was therefore fed by means of an œsophageal tube for three months.

Dr. Mackenzie also showed a specimen of Post-œsophageal Abscess with Secondary Disease of the Cricoid Cartilage occurring in a woman aged 38. In this case fistulous communication took place between the trachea and pharynx, and

the posterior surface of the lower third of the cricoid cartilage was, after death, found to be completely exposed, though not ossified. In this instance, though the microscopical characters rather pointed to malignant disease, the absence of any considerable amount of thickening, the formation of pus in large quantities during life, and the very sudden invasion of the disease, led Dr. Mackenzie to place it in the category of post-œsophageal abscess.

Dr. Mackenzie also exhibited a third specimen illustrating that almost unique disease—Ruhle being the only author who had seen a case—Fibroid Degeneration of the Cartilages of the Larynx. The patient was a gentleman, aged 60, in whom tracheotomy was performed a year previous to his death on account of chronic disease of the larynx. About four months later disease of the cartilages set in, and death took place from exhaustion consequent on inability to swallow. The patient was for some days previous to death fed by the œsophageal tube.

Mr. Hulke did not quite understand the conditions of the cartilage—whether it was that of caries or of necrosis.

Dr. Pye Smith said the drawing seemed to show that the process began in ossified cartilage.

Dr. Mackenzie said we should use the word caries when speaking of cartilage—he used the term necrosis merely because it was customary. The contents of the sac were pus and sanious matter.

Mr. De Morgan exhibited some Secondary Deposits in the lung of a female who was supposed to have syphilitic tumours on her vulva. It was found, however, that they spread up the vagina to the bladder, and were taking on the form of cancer. There were only three or four tumours. She seemed well, but continued to waste. Ten or twelve days before death she complained of headache, and lay quiet. One day she was found insensible, and remained so for three days. The pupils were dilated, and, when exposed, they began to vibrate sixty to the minute. The eyes were also rolling. When forcibly pushed, her arm moved. With a forcible inspiration, her larynx was drawn up, and her chest drawn in, in a curious fashion. After death her brain was found perfectly healthy. The lungs were filled with tumours; so were the uterus and bladder, from which last the urine had been dribbling away. The secondary deposits were assumed to be cancerous, but on examination they proved to be fibro-plastic. There were some also in the liver and kidneys. The fact that the woman died of coma was unaccountable, except by the condition of the kidneys, one being wasted. All the tumours could be enucleated. Referred to committee.

In reply to the President, Mr. De Morgan said she had been all along in a Surgical ward.

Dr. Payne brought forward a case of Coagulation in the Portal System of Veins. The specimen was taken from the body of a man, aged 38, who died in St. Mary's Hospital, under the care of Dr. Sieveking. The portal vein, at its entrance into the liver, was completely filled with a form of coagulum, part of which was adherent and decolorised, part softer, dark red, and apparently of later formation. The coagulum extended into the principal factors of the portal vein—more especially into the superior mesenteric, one of the intestinal branches of which was blocked up as far as its ultimate twigs. The portion of ileum from which this branch arose, was in a remarkable state of congestion, being of a dark chocolate colour; its walls greatly thickened and rigid, and the whole infiltrated with extravasated blood, after the manner of what is called pulmonary apoplexy in the lung. The splenic vein was distended with dark red clot, which seemed more recent than that in the superior mesenteric. It extended but a little way into the inferior mesenteric, and the hæmorrhoidal veins were empty, of the branches distributed to the liver, that in the left lobe was filled with coagulum, that in the right contained only small isolated clots. The substance of the liver was gorged with bile, and contained also much blood, but there was no other sign of disease. The heart showed no important abnormality. In the lungs two small branches of the pulmonary artery were occupied by coagulum. There was a moderate quantity of fluid in the peritoneum, and the legs were œdematous. The intestines were natural, except at the part spoken of, and there the mucous surface was unaffected. During life the symptoms were somewhat ambiguous. When under treatment as an out-patient, there was remarkable acceleration of the pulse, which varied from 130 to 150, and afterwards rose to 180 without other sign of fever, and without any abnormal cardiac sounds. On admission to the Hospital, the liver was found enlarged, and jaundice subsequently came on. The patient also suffered from dyspnœa with cough and expectoration. It appeared to the exhibitor probable that the coagulation had commenced in a branch of the superior mesenteric veins, thence crept along to the portal brink, the complete occlusion of which must have taken place only a short time before death. The remarkable acceleration of the pulse remained quite unexplained.—Referred to Drs. Bristowe and Murchison.

Dr. Payne also brought forward a case of Coagulation in the Pulmonary Artery. The specimen was taken from a woman aged 45, patient of Dr. Sieveking's, in St. Mary's Hospital. Both branches of the pulmonary artery were occupied by firm clots, not continuous with those in the heart, and terminated in the central direction by abrupt blunt, rounded extremities. Beyond these masses some of the secondary branches were filled with branched thrombi, which exactly occupied the calibre of the vessels, but did not reach their capillary terminations. The clots generally were white and granular on the outside, and black internally. In one instance a clot was doubled on itself; the lungs were congested posteriorly, but not inflamed; there was regurgitant mitral disease of the heart; no coagulation was found in any other part. The patient was admitted with symptoms of mitral disease and œdema of the legs, but did not appear dangerously ill till one day getting out of bed she fainted, and after rallying a little had another fainting fit, which was fatal. The specimen was brought to the Society with the view of illustrating the vexed question of pulmonary embolism or pulmonary thrombosis, and of eliciting an opinion upon the case. The exhibitor inclined to the belief that while the great mass of coagulum was evidently formed *in situ*, its formation had been determined by the occlusion of the main trunk with blocks carried from a distant part.—Referred to a committee.

Mr. Holmes exhibited a Urethra in which Holt's operation for stricture had been performed. He said there was a difference of opinion as to what it is that gives way—the mucous membrane or the submucous tissue. The patient, a man nearly 60, had long had stricture, and had been subjected to a great variety of treatment. He had been operated on by Holt's method in 1861. When seen he had retention, and a catheter was passed, but had to be removed, as it gave rise to intense irritation. The stricture was ruptured. He had rigors the same night. No. 10 catheter was passed a day or two after, but rigors still continued. Two small swellings appeared at the site of the two strictures, but they contained no pus. Gradually he became worse, vomiting ensued, and pyæmia with secondary deposits followed. After death it was found that at both strictures the mucous membrane was lacerated, most so at the posterior one. Such lacerations imply the risk of infiltration.

Mr. Nunn was convinced that Holt's operation was too much used. He thought the effect of syphilis on stricture was too much overlooked. It tends to make them recalcitrant.

The President asked if the second operation afforded a fair test.

Mr. Holmes said the former operation was so long antecedent that all its effects must have passed away. Once before he had done the operation a second time.

Mr. Sidney Jones thought the case hardly constituted a fair test.

Mr. Hulke said the question whether the mucous membrane suffers or not depends on the closeness of its connexions with the subjacent tissue. That it was often ruptured was proved by the bleeding.

Mr. J. D. Hill had one patient who died of pyæmia.

Dr. Bristowe exhibited a specimen of Malignant Disease of the Ovary and Peritoneum. The woman was 25 years old, and in service. When the abdomen began to enlarge, pregnancy was suspected. She died three weeks after entering the Hospital. The abdomen contained a nodulated hard mass, which was painful, and gave rise to ascites. Her health for a time was tolerably good, but it gradually got worse, and she sank. There were many cancerous nodules in the peritoneum, and the left ovary was affected. Its parietes seemed cancerous, but its contents ordinary. The uterus was enlarged and cancerous.

Dr. Bristowe also exhibited a portion of the Duodenum the subject of malignant disease, removed from a man, aged 63. He was ill first in August, and died in January. He suffered from cough and hæmoptysis, and gradually wasted. There was malignant disease of both lungs. There was perforation of the duodenum extending from the neighbouring glands, which was the cause of death, as it gave rise to peritonitis. There was nothing peculiar about his digestion.

Dr. Bristowe exhibited a third specimen, consisting of a portion of Strangulated Bowel removed from a drover, who died in three or four hours after his attack. He had been well up to that

time, and was seized while straining at closet. The strangulation was internal at the lower portion of the ileum, and was produced by means of a band.

Dr. Greenhow showed a specimen of Insufficient Tricuspid Valve from a woman about 40, who had suffered from bronchitis and emphysema. A loud murmur had been heard over both apices, but loudest on the right side. The heart was found large, the mitral orifice narrowed and roughened. The tricuspid valve consisted of four cusps. The posterior was normal; the left rather short; the anterior also small, but normal as to shape; between the small ones was a fourth, which sent a band to the septum and the opposite wall. Chordæ tendineæ proceeded from the posterior segment. This band had caused the murmur. There had been much dyspnœa, yet the heart was not dilated.

Mr. Lawson Tait exhibited a fresh specimen of Medullary Growth of the Femur growing high up in the bone. Fracture had twice occurred during the disease. The patient was a female, and had suffered great pain. In lifting her up, the limb was broken. Electrolysis had been tried without any apparent change. After the second application, however, the pain ceased.

A photograph of a child with obstruction of the Common Iliac Vein from psoas abscess, and consequent hypertrophy of the limb, was also exhibited.

CLINICAL SOCIETY.

Friday, February 25.

Mr. Prescot Hewett, Vice-President, in the Chair.

Mr. C. H. Moore read a paper on Expansion of the Antrum of Highmore. The patient was a gentleman, above whose right bicuspid and first molar teeth a rounded bony tumour projected into the mouth. At two parts circular apertures in the bone could be felt through the mucous membrane. The tumour was painless, and it increased very slowly for two or three years. The mucous membrane covering the posterior aperture then gave way, and an excessively fœtid, pultaceous, brown substance escaped slowly into the mouth. Mr. Moore made a more free opening into an anterior part of the tumour, and, syringing out much of its offensive contents, examined the cavity with a probe. He found the space to correspond with the normal relations of the antrum, except towards the malar portion, where in a third place the bone was defective, and the probe could be felt against the cheek. No dead bone could be detected, and throughout the progress of the case no trace of the fœtid substance was ever recognised by the patient in the nostril. The teeth next the tumour were sound, but outside the first molar the gum had receded; and a fine probe, introduced with light pressure at that spot, passed up the socket for an inch or three-quarters above the crown of the tooth, when it struck against the floor of the orbit. There being expansion of the anterior and outer part of the antrum, circular apertures in its wall, resulting from distension, not from ulceration, the orbit and palate being free from deformity, and the nostril also natural, and having no communication with the fœtid stuff in the bony antrum; there being, moreover, no burrowing suppuration and no necrosis, Mr. Moore concluded that the cause of the expansion lay in the communication of the bony antrum with the mouth, and that the peculiar substance was food, driven up by mastication through the socket of the healthy molar tooth. It had slowly stripped off the lining membrane of the antrum, and thrust it inwards, obliterating the antrum as a mucous cavity. A vulcanite tube being worn in the opening which had been made with the knife, and frequent cleansing of the cavity practised, the bony expanded shell of the tumour receded, and in a few months the natural form of the features was restored.

Professor Humphry thought Mr. Moore had drawn a little on his imagination in describing this case. It was in this direction the antrum did enlarge, that is to say, where the wall was thin. Similar cases had been described. He could hardly admit of distension by food. The dilatation was natural, and the fluid had accumulated there. Such accumulations do not escape by the nose.

Mr. Heath also thought Mr. Moore had gone rather far afield for a causation of this swelling. Cysts formed in the interior of the antrum, excited by the teeth. In this case the tooth had gone first, the cyst had formed, and an accumulation in it had followed. Why did not Mr. Moore interfere earlier?

Mr. Prescott Hewett thought there would be some difficulty in proving that the accumulation was in the antrum. It was rather in the cysts found in most bodies. On the subject he would refer to a paper by Giraldès. It was hardly admissible to suppose the mucous membrane pushed on one side. He remembered a case he was called in to see, when he found a quantity of lint in the antrum.

Mr. Moore, in reply, confessed the case was an obscure one, but he thought the suggestions did not meet the case. If in the mucous cavity, such a fœtid mass must have affected the nose; further, no sort of cyst contains such matter.

Dr. Bristowe read a case of Ataxic Aphemia, in which the patient, who had been dumb for nine months following an attack of insensibility, with convulsions and resulting paralysis of all four limbs, as well as of hearing, was taught to utter articulate sounds, and thus recognise the use of speech in the course of about a month. He had before this recovered the use of his right limbs and left arm, and later the power of the left leg was regained under treatment by galvanism.

Mr. Kesteven said that fifteen years ago he saw a girl after typhus, who was incapable of speaking, having forgotten the process. She had to be taught again.

Dr. Langdon Down said this was merely improving the gymnastics of the tongue, not building up the faculty of speech. He had found great benefit in teaching other organs first, as treating the paralysis first, speaking after. Five years ago he had under him a child 10 years old who had never spoken. She practised by herself in the mornings till she acquired the proper power, and then went into full-blown language. Dr. Broadbent said no one would have mistaken this for aphasia; it was merely ataxy of the vocal organs from a lesion about the pons, not in the left frontal region. In aphasia there were always one or two words spared. He had a case now where no nouns could be used; but Dr. Bristowe's was a case of ataxic aphemia.

Dr. Powell said he had seen a case something like this two years ago. A girl had a fit, and fell down; when she rose she could not speak properly, but rather like a child. There was no paralysis, and she was afterwards instructed.

Dr. Wilks thought it interesting to know whether these patients were really educated, or suddenly recovered, like an hysterical girl's leg.

Dr. Bristowe said the patient was educated to a certain point; he already possessed the language.

Mr. Reeves read a paper on the Treatment of Urethral Stricture by means of the "Laminaria Dilator," in which he brought forward some cases with the view of showing that the instrument dilates the stricture speedily, equally, and without risk. He exhibited it, and described its mode of application. He also made some remarks on some causes and symptoms of stricture not generally acknowledged, and advocated the treatment of the diathetic states often present in severe urethritis.

Mr. Teevan thought they must compare different kinds of operations, as dilatation not unfrequently proved fatal. It was said there was no rupture of the mucous membrane. Whence, then, came the blood. There were difficult cases of stricture where only small bougies could pass; here the bougie olivaire was best. Our old friend, the dilator, had done good work, and would yet do good work. They could regulate pressure by it. A small series of cases were dangerous whence to draw any conclusion.

Dr. Oppert said a German proposed to introduce two or three horsehairs glued together first of all, and then to slip a canula over them.

Mr. T. Smith asked if there was any difficulty in withdrawing the instrument.

Mr. Cooper Forster had tried laminaria in a case where the orifice of the urethra was contracted. The pain was so great the man would not stand it.

Mr. Sydney Jones had used laminaria for dilatation; the pain was very great, and he had always great difficulty in withdrawing the dilator.

Mr. Hinton had used it to dilate the Eustachian tube, and had found it useful, producing no great pain. There was a certain risk of fracture; this occurred in one case, but the portion afterwards came away.

Mr. Reeves had not found the bougie olivaire good, and this was also Mr. Hutchinson's experience. He had always been able to withdraw the laminaria without difficulty.

The Great Northern Hospital.—The committee acknowledge the receipt of a second donation of £1000 from S. W. Y.

NEW BOOKS, WITH SHORT CRITIQUES.

1. *The Policy of the Contagious Diseases Act.* By Sheldon Amos, M.A.
2. *The Threefold Cord; or, the United Testimonies of British Ladies, Ministers of the Gospel, and Medical Men in favour of the Total and Immediate Repeal of the Contagious Diseases Act.*

*** These pamphlets, both written with the same object, and in somewhat the same style, denounce, in unmeasured terms, the "immoral, unconstitutional, and unjust" effects of the Contagious Diseases Act. There can be no question of the sincerity and single-mindedness of their authors, and of those forming the various committees, to obtain a repeal of the Act; but they take so entirely a one-sided view of the whole subject as to render their opinions nearly valueless.

The New York Medical Journal for March, 1870,

*** Contains two capital articles on Relapsing Fever, which prevails rather extensively in that city. The one is a paper by Dr. Meredith Clymer, who reported the first cases which occurred in the United States twenty-five years ago. The other consists of two clinical lectures by Dr. Austin Flint, sen., delivered at the Bellevue Hospital, where 103 cases have been treated. There is also a curious reply to a critique on the Medical history of a late Albany Professor. Both are written in rather powerful language.

Letters of Sir Charles Bell, K.H., F.R.S., etc. Selected from his Correspondence with his brother George Joseph Bell. London: Murray.

*** Few will read these letters without being the better for their perusal. The kindliness of their author's heart peeps out everywhere. It is curious, too, to note how one who, within a few days of his arrival in London, was hand in glove with all the notabilities of the time, soon soured of the great city. We strongly commend the book to our readers as one of the best memorials of one of England's anatomists, physiologists, and artists of undisputed eminence.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, March 17, 1870:—

Bailey, Henry Bennett, Falmouth-road, Borough.
Hind, Henry, Stockton-on-Tees.
Holman, Robert Colgate, East Hoathley, Sussex.
Sutcliffe, John, Ashton-under-Lyne.
Trezise, William Richards, St. Just, Cornwall.

The following gentlemen also on the same day passed their First Professional Examination:—

Cable, George Hughes, Guy's Hospital.
Favell, Richard, St. Bartholomew's Hospital.
Head, William Cave, St. Bartholomew's Hospital.
Roper, William Robert, St. Mary's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Weld, Surgeon-Major William Walter.—Assistant Visiting Surgeon for Chatham, Maidstone, and Gravesend, under the Contagious Diseases Acts.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointments have been made:—Robert Creighton, Surgeon, to the *Wivern;* Dr. James E. Saunderson, Assistant-Surgeon to the *Clio*.

27th Foot.—Surgeon Thomas Llewellyn Nash, M.D., from 63rd Foot, to be Surgeon, *vice* Allen Bryson, M.D., who exchanges.

51st Foot.—Staff Assistant-Surgeon Thomas Sillery Cogan to be Assistant-Surgeon, *vice* John Folliott, deceased.

63rd Foot.—Surgeon Allen Bryson, M.D., from the 27th Foot, to be Surgeon, *vice* Thomas Llewellyn Nash, M.D., who exchanges.

83rd Foot.—Staff Assistant-Surgeon Francis George Adye-Curran, M.B., to be Assistant-Surgeon, *vice* Edward Coffey, appointed to the Staff.

Medical Department.—Staff Surgeon-Major Thomas Crawford, M.D., to be Deputy Inspector-General of Hospitals; Assistant-Surgeon Edward Coffey, from the 83rd Foot, to be Staff Assistant-Surgeon, *vice* Francis George Adye Curran, M.B., appointed to the 83rd Foot; Colour-Sergeant Henry James Sylvester, Army Hospital Corps, to be Apothecary to the Forces, *vice* David Walter Williams, deceased.

BIRTHS.

Diver.—On March 17, at Holloway, the wife of Dr. H. W. Diver, of Bombay, of a son.

Evans.—On March 18, at Cheshunt, Herts, the wife of Nicholl Evans, M.D., of a daughter.

Gillespie.—On March 12, at Pembroke Dock, the wife of F. Gillespie, M.D., Staff Assistant-Surgeon, of a son.

Jones.—On March 9, at Ty-maur, Aberdare, Glamorganshire, the wife of Evan Jones, Surgeon, of a daughter.

Smith.—On March 20, at Ivy House, Cheshunt, the wife of Abbotts Smith, M.D., of Princes-street, Hanover-square, of a son.

MARRIAGES.

Everard—Parkin.—On February 17, at St. George's Church, Truro, Robert A. Arundell, youngest son of the late James Everard, ninth Baron Lord Arundell, of Wardour, to Charlotte Stuart, youngest daughter of the late Henry Parkin, Esq., R.M., Inspector-General of Hospitals and Fleets.

Scott—Hutchison.—On March 8, at the British Consulate, Funchal, Madeira, William Benjamin Archibald, younger son of Geddes Mackenzie Scott, M.D., of Hampstead, to Mary Anne Tupie, only daughter of John Hutchison, Esq.

Sewell—Webster.—On March 21, at the parish church, Esher, Colin Sewell, M.D., of Montreal, second son of James A. Sewell, M.D., of Quebec, to Helen Amelia, second daughter of the late James Webster, Esq., of Bellevue-terrace, Edinburgh.

DEATHS.

Hammond, Beatrice Lucy Kaines, eldest daughter of Dr. Hammond, of Bentley, Hants, on March 12, aged 3 years and 4 months.

Richards, Henry H., younger son of the late Joseph Richards, Surgeon, of Newcastle-street, Strand, on March 10, at Surrey-street, Strand.

Tyler, Frank Dewing, youngest son of E. A. Tyler, M.R.C.S., at 8, High-street, Marylebone, on March 17.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Birmingham General Dispensary.—Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before April 16.

Brighton and Hove Dispensary.—Resident House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to "the Chairman of the Committee of Management," on or before April 4. Election on May 3.

Chard Union.—Medical Officer and Public Vaccinator for one of the Ilminster Districts. Candidates must be duly qualified and registered. Applications and testimonials to Mr. T. B. Gould, Clerk, on or before the 28th inst.

Great Northern Hospital.—Junior Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, 46, Great Coram-street, W.C., on or before April 6.

Liverpool Dispensaries.—Assistant Resident House-Surgeon; must be unmarried and duly qualified. Applications and testimonials to the Secretary on or before March 30.

Newcastle-upon-Tyne Infirmary.—Senior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before April 6. Election on the 14th.

Newport Infirmary.—Resident Medical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary at the Infirmary, Newport, Monmouth, on or before April 4.

Royal Isle of Wight Infirmary.—House-Surgeon. Applications and testimonials to the Hon. Secretary, Ryde, on or before March 29.

Royal Pimlico Dispensary.—Honorary Physician; must be a resident in Pimlico. Applications and testimonials to the Honorary Secretary, at the Dispensary, 104, Buckingham-palace-road, on or before April 4.

Royal South Hants Infirmary, Southampton.—House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary on or before April 2. Election on the 11th.

St. Mary's Hospital and Dispensary for Women and Children, Manchester.—Medical Officer to attend patients at their own homes. Candidates must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Barber, Esq., 41, John Dalton-street, on or before April 2.

St. Peter's Hospital for Stone and Urinary Diseases.—House-Surgeon. Applications and testimonials to the Hon. Sec., 54, Berners-street, on or before March 26.

Samaritan Free Hospital for Women and Children, Lower Seymour-street, Portman-square.—Physician for out-patients; must be M.D., registered, and not practising pharmacy. Applications and testimonials to the Secretary on or before April 7.

Stamford, Rutland, and General Infirmary.—House-Surgeon, Apothecary, and Secretary; must be M.R.C.S. and L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before April 12. Election on the 19th.

Stockport Infirmary.—House-Surgeon's Assistant. Applications and testimonials to the Hon. Secretary on or before April 2.

Tavistock Union, Devon.—Medical Officer for the Whitchurch and South Lidford District. Candidates must be duly qualified and registered. Applications and testimonials to Mr. R. Luxton, Clerk, on or before the 28th inst.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Aberayron Union.—Mr. Thomas Jones has resigned the Landisilio District; area 31,697; population 6473; salary £40 per annum.

Bideford Union.—Mr. Wavell A. Done has resigned the Hartland District; area 21,953; population 2950; salary £37 per annum.

APPOINTMENTS.

Bedminster Union.—William F. Carter, M.R.C.S. Irel., L.R.C.P. Edin., to the First A District.

Honiton Union.—Christopher M. Vowell, F.R.C.S.E., L.S.A., to the Fourth District.

Isle of Thanet Union.—Thomas F. Raven, L.R.C.P., M.R.C.S.E., L.S.A., to the St. Peter's District.

Dr. Hooker has been elected an Honorary Member of the French Acclimatisation Society for his exertions in promoting the cultivation of the cinchona plant.

Royal College of Surgeons of England.—The following were the motions for consideration at the extraordinary Council held last Tuesday:—Proposed by Mr. Quain, seconded by Sir Wm. Fergusson—"It is desirable that not less than half of the members of the Court of Examiners shall be Fellows who are not and have not been members of the Council; and that this resolution shall be carried out as soon as practicable." Carried.—Proposed by Mr. Simon, seconded by Mr. Erichsen—"That, for the future, in the opinion of the Council, the two offices of Examiner and Councillor of the College ought, as far as practicable, to be made disqualifications, each for the other; and that a committee, with power to take legal advice, be appointed to consider and report to the Council as to the steps by which effect may be given to this principle, prospectively, as vacancies occur." Not carried.—Proposed by Mr. Humphry—"That the members of the Court of Examiners shall in future be elected on alternate occasions from the Fellows who are not members of the Council; and that a committee, with power to take legal advice, be appointed to consider and report to the Council as to the steps by which effect may be given to this principle." Withdrawn.—Proposed by Mr. Curling, seconded by Mr. Hancock—"It is hereby resolved, that for the future the elections of examiners on anatomy and physiology shall be distinct from those of examiners on Surgery, for the Fellowship as well as for the Membership of the College." Carried, 20 for, 0 against.

Poor-law Medical Officers.—The following petition from the Council of the Royal College of Surgeons of England has just been sent to Dr. Brady, the member for Leitrim, for presentation to the House of Commons:—

"To the Honourable the Commons of the United Kingdom in Parliament assembled.

"The humble petition of the undersigned Members of the Council of the Royal College of Surgeons of England showeth:

"That in discharge of the duty of maintaining the best interests of the Medical Profession and promoting the welfare of the Members of this College, we cordially support the petition in favour of the Bill for providing for the Poor-law Medical Officers of England and Wales a superannuation allowance.

"That, in our opinion, the reasons set forth in that petition give the Poor-law Medical Officers the strongest possible claim to the grant of their request.

"Your petitioners, therefore, pray your honourable House to take into favourable consideration the petition of the Poor-law Medical Officers now before your honourable House, and to afford them the relief they ask.

"And your petitioners, as in duty bound, will ever pray.

"Edward Cock, President.

Samuel Solly, } Vice-Presidents.
Wm. Fergusson, }

John F. Smith.	Charles Hawkins.
John Hilton.	Prescott Hewett.
Richard Quain.	H. Spencer Smith.
Thomas Paget.	John Birkett.
Samuel A. Lane.	John Simon.
George Busk.	G. M. Humphry.
Henry Hancock.	Luther Holden.
T. B. Curling.	John Gay.
F. Le Gros Clark.	John Eric Erichsen."
James Paget.	

American Jottings.—Dr. John Stevens, of Castine, U.S., now 80 years old, recently went, in an open boat, seven miles in the night, during a storm, to visit a patient. For more than fifty years much of his practice has required him to visit his patients in a small boat, and to be oftentimes exposed to great peril.——Mrs. Doctor Mary Walker has had a very uncomfortable time of it in New Orleans.——Dr. Garnett, the leader of the Conservative Physicians of Washington, has written a letter characterising the various allegations in Mr. Sumner's report, respecting the Medical Society, as falsehoods. It is expected that Mr. Sumner's Bill to repeal the charter of the Society will meet with considerable discussion. ——Insanity is on the increase in California. It is calculated that there is one insane person for every six hundred of the inhabitants. Since 1851 the number of patients admitted into the State Asylum was 4596; of this number 1001 died; the number cured is 2243, a percentage of nearly 50. The mortality was 25 per cent. of the admissions.——Dr. T. Dillard, one of the oldest Surgeons of the United States' navy, died a few days since in his seventieth year. He was much esteemed both in his private and official capacity.——The annual meeting of the alumni of the New York College of Physicians and Surgeons was held on February 25. Dr. Roberts presided. The Committee of Prize Essays reported that seven essays had been received in competition. The first prize was awarded to Dr. A. H. Smith. The subject of the essay was "Oxygen as a Remedy for Disease." The award was 200 dollars. The second prize of 100 dollars was awarded to Dr. A. H. Buck, of New York, for an essay entitled "Mechanism of the Ossicula of the Ear." Dr. G. H. Peters was elected president for the ensuing year.——There are 338 students of Medicine and Surgery in the University of Michigan.—— A Syracuse druggist has just been fined 100 dollars for putting up a dose of laudanum instead of tincture of rhubarb, the prescription asked for.——The White Mountain Medical Society of New Hampshire has adopted a bylaw, that any member who advertises himself by "reporting his operations in newspapers" shall first be reprimanded, and for the second offence expelled.——The small-pox is decreasing in New York, chiefly, says the *Evening Post*, "from the co-operation of the German Physicians, and the faithful vaccination pursued by them."——A *conversazione* of druggists has been held at New Jersey for the purpose of instituting a Society something like the Pharmaceutical Society here, but with more stringent laws against unregistered druggists.

A New Mode of Medical Puffing.—The New York *Nation* has the following among its literary notes. Our American cousins are ahead of us even in puffing:—"We have receeived a printed circular from the 'National Publishing Company' of Cincinnati, informing us that they '*have in press, and will soon issue*,' a 'full and plain treatise, called "The Medical Adviser," by Rezin Thompson, M.D., Permanent Member of the National Medical Association,' and 'author of "Thompson on Fever."' The circular says, with a show of Professional testimony, that some of the ablest members of the Medical Profession have examined it, and highly approve of it—in fact, allege that it is 'the best' work of the kind ever published—and adds other praise of the publisher's own. It closes by promising that on receipt of a copy of the *Nation* 'containing commendatory notice of the work,' the publisher will send us, 'at his expense, a copy of the work as soon as issued.' In other words, he invites us to join him in practising a fraud on the public, by commending a book we have never seen and which is not yet issued, and of which we know nothing except what the persons interested in selling it say about it. As it is hardly likely that this dodge was resorted to without the author's knowledge, we beg to call the attention of the 'National Medical Association'—if there be such a body—to the performance, and should like to hear what provision the 'Code of Ethics' makes for such cases. The public will understand that all 'commendatory notices' of the book which they may see about this time are simply mendacious puffs."

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Dyce Davidson.—The paper shall appear as soon as possible.

W. A. P.—See articles on chloral in this journal by Sir J. Y. Simpson, January 1, 1870; Dr. B. W. Richardson, September 4, October 30, November 6; Mr. Spencer Wells, September 18, October 2; and Dr. Bence Jones, September 4, December 18.

Eastbourne.—There has been a good deal of "cry," but little "wool," in the late investigation. The result, however, has been satisfactory so far, that the "local board" are fully alive to the importance of sanitary legislation. A town that stands lower in its death-rate than thirty-seven similar towns cannot suffer from an investigation like that lately pursued.

Dr. M. J. O'Connor.—We think that as Dr. Bathurst Woodman has acknowledged himself "wrong" in his first statement of what Dr. O'Connor said at the inquest, the matter had better now be allowed to rest. The verdict of the Beaumont Medical Society has, after full hearing, completely exonerated Dr. O'Connor from all charges of unprofessional or questionable conduct, and we have no doubt, as Dr. Woodman has acknowledged his mistake, that the Profession will ratify the verdict of the Society.

X.—1. The series is in course of publication. See our last number. 2. We believe not. 3. The papers will be continued at as short intervals as the demands on our space will allow.

Constant Subscriber.—The guardians are right. Article 180 provides that, "if several of the fees become payable with respect to the same person at the same time, and in consequence of the same cause and injury, the Medical officer shall be entitled only to one of such fees, and, if they be unequal, to the highest."

Mr. H. C.—1. It is not necessary to enclose a card if the name be attached to the communication. 2. The case is peculiar in many respects; but the circumstances should be undoubtedly stated to the guardians. 3. The Medical officer has no power to compel a pauper under such circumstances to enter the workhouse.

Medical Reform Union for the Amendment of the Medical Acts.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I shall feel obliged by your allowing me to inform the Profession, through your columns, that I have now received £262 11s. towards the expenses of this movement, including two donations of £5 each from the Manchester Medico-Ethical Association and from the proprietors of the *Lancet*.

To the 14th inst. I had received £173 19s. 7d. From the 15th to the 20th inclusive 5119 circulars were posted to members of the Profession who had signed the memorial, but had not contributed. I have now received 370 replies to those circulars, enclosing in cheques, stamps, and post-office orders the gross amount of £88 11s. 5d.

To give an idea of the expenses, I may state that the issue of 17,139 copies of the memorial to the members of the Profession in England, Scotland, and Ireland, according to Messrs. Churchill's Directories for 1869, involved a first outlay in postage-stamps of £142 16s. 6d., each copy being accompanied with a stamped envelope for reply to Dr. Bell Fletcher.

The question now at issue is—Will the Profession practically support a movement to obtain the amendment of the Medical Acts on the basis of the memorial signed by a clear majority of the men in actual practice in the three kingdoms?

Of the 9724 who signed the memorial, upwards of 8500 have contributed nothing towards the expenses. If each of these will promptly favour the executive of the Medical Reform Union, through me, with a contribution, we shall have enough to discharge present liabilities, and to provide a fund for securing the interests of the Profession in the passage of the desired Bill through Parliament. I am, &c. Arthur Oakes.

9, The Square, Birmingham, March 22.

P.S.—An account of the sums received, and of the progress of the movement, will shortly be published.

Bread and Milk Flour for Children.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Let me draw the attention of your readers upon a very valuable food for young children, chiefly in large cities, where feeding with wet nurses or with cow's milk is very difficult and expensive, and sometimes impossible. This product, owed to the sagacity of a very able chemist, Mr. Nestlé, at Vevey, has a great analogy in its composition with mother's milk, and is comparatively very cheap. It is obtained through the concentration *in vacuo*, at a very low temperature, of pure milk and the addition of bread (*zwieback*) treated at a high temperature, and the necessary quantity of sugar. It contains for 1000 parts—Azote 19·50 parts, salts 7 parts. If we add 3000 parts of water to 1000 parts of this "farine lactée," we obtain a milk containing, for 1000 parts, azote 4·87 parts, salts 3·70 parts (the mother's milk contains, after Barral, for the same quantity, azote 4·83 parts, salts 2 parts). In diminishing the quantity of water, you increase the nutritive power of the product. This new food for infants has been experienced in Paris, at first by Dr. Monod (see *France Médicale*, No. 41, 1869) and Dr. Morpin, in New York by Dr. T. E. Dunster with great success, and is highly recommended for Hospital practice.

I have tried it very often these last two years, and my observations entirely concur with those of the above-mentioned gentlemen. I found it always of great worth, superior to the other artificial feedings, as corn flour, Liebig's food, etc.; superior to good and fresh cow's milk, which can easily be got in our country—superior even, in many cases, to wet nursing, very easily prepared, and very cheap.

I perfectly agree with many of our Medical brethren here and abroad in strongly recommending the use of this "farine lactée," and think it will prove to be of great benefit for infants, chiefly in large towns and in Hospitals.

I should be very glad if some Practitioners could be induced to try this very useful invention, whose production is increasing every day in large proportion.

In infantile diarrhœa the concentrated mixture of Mr. Nestlé's bread-and-milk flour has proved very successful. We use it generally for such cases in the following way:—Four spoonfuls of water to one spoonful of flour. I am, &c.

Vevey, Switzerland, Feb. 23. C. Guisan, M.D.

P.S.—Messrs. Barral and Funk, 10, Basinghall-street, London, E.C., are the sole consignees for the sale of Mr. Nestlé's bread-and-milk flour.

The Treatment pursued in our County Asylums.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—There are some very false and dangerous impressions existing at present in the public mind relative to the treatment which patients receive in our large public asylums. In consequence of a few painful disclosures recently made, and, more especially, in consequence of certain inflammatory and intemperate articles and letters, there has been in some parts of the country a regular frenzy of popular excitement—in truth, a violent prejudice has been created against the institutions in question. On careful and conscientious examination, I think that this prejudice will appear entirely without foundation, and that our asylums will stand out in their true colours as amongst the principal monuments of our national civilisation and Christian philanthropy.

Why asylums are not perfect, apart from the consideration that they are of human origin; why different and juster ideas should be entertained by the general community regarding their present condition; how the people may be trained to know that, on the whole, our insane poor are treated with the utmost gentleness and forbearance—these are points which it will not require very many sentences or much forcible language to show.

1. Of course every effort ought to be used to make the system of asylum administration as perfect as possible. Let us admit that that part of it which consists in having a Medical Superintendent and Assistant-Surgeons is not capable of much improvement. There must also be attendants, however, and upon their conscientiousness, honesty, and watchful fidelity must depend the safety and well-being of the inmates. The public are justly and fiercely jealous of the degree of care bestowed upon those who cannot take care of themselves, but, under existing arrangements, the hands of superintendents are too much tied in selecting those all-important functionaries who have the immediate and constant personal charge of the insane. No fact is better known in asylums than the paramount importance of moral management. Under one attendant a patient will be, and will continue, noisy, excited, and violent; placed under the care of a person of superior tact and judgment, he will calm down into a tranquil and docile man, and perhaps rapidly get well. This fact, as well as the comparative uselessness of remedial agents in form of drugs, should be as well known in the outer world as it is in asylums. Recognised and properly acted upon, the superintendents would be allowed to have the services of well-paid and educated people in discharge of their arduous duties. The tact and good nature which can laugh off personal affronts and painful blows; the moral suasion and address which can quell incessant tendencies to fight and quarrel; the foresight which prevents a suicide, or the perpetration by one patient of some secret violence upon another; the equanimity and pleasantness of temper, which, without being ruffled, must cope every hour with habits the most degraded and filthy; these qualities, with others which need not be mentioned, might perhaps be invariably secured if salaries sufficiently tempting were at the disposal of the superintendent. In the meantime, he has not the power to offer them, and the material of which his attendants are composed is drawn from the same class as the patients themselves. Should any one imagine this last feature an advantage, then I beg to undeceive him. As a matter of experience, I know that the success and usefulness of an attendant on the pauper insane are in direct proportion to his degree of mental culture and moral purity. Even under present circumstances, it is surprising how qualities of excellence are developed in many attendants who had belonged to a class below that of artisans. While gratefully acknowledging this fact, however, I consider that the possession of such qualities should not be left to be a matter of contingency; otherwise we need not wonder if occasional disgrace should overtake the government of asylums. Probably, in spite of all that may be done—such is the character of human nature in the best attendants we could obtain, and of certain maniacs who will always be found in our asylums—troubles must now and then arise, and something occur to cause a sensation in the public mind. The means now indicated, however, and which have often been insisted upon, would conduce to an almost complete immunity from such events.

2. Even in their present state, asylums are institutions which will vie with any others in existence in point of purity of purpose, and as regards the general spirit pervading them. The public should have juster ideas on this point, and, as they have some mysterious doubts, they should go and see for themselves how their insane fellow-creatures are treated. The object of asylums is either to afford some means of cure for those suffering from recent insanity, and who may again become useful members of society, or to supply comfortable and permanent homes for such as are afflicted with chronic mental diseases, and who may never again expect to be set free. It can soon be learned that within their walls attendants and patients frequently form fast and enduring friendships, on account of sacrifices made on both sides such as are seldom to be met with in the outer world. When a pretentious novelist comes forward and, drawing upon his fancy, makes frothy attempts to blast the reputation of some of the fairest evidences of our national virtues, we find it difficult to pardon him even when making due allowance for his relentless faculty of imagination or the pitiful profundity of his ignorance. To me, who have long had a daily intercourse with a large community of insane, and who sadly admit what is imperfect in our present system, the subject has, nevertheless, a very pleasing and hopeful aspect. The gratitude of patients who go away recovered is expressed in terms the most affectionate and heartfelt, and the letters subsequently sent by them to their former attendants show what happy memories they ever continue to cherish of the kind treatment that was used to promote their restoration to reason. On this head I might amplify indefinitely, but I wish only to point out how erroneous and how ungenerous are the opinions circulated so freely by a section of writers. Surely these men would be a little more chary of making their unfounded statements if they were aware how much mischief and disquietude they create in people's minds, and how much pain and distress they give to those who are conscientiously engaged in discharging high and responsible duties. Insanity being the most melancholy form of human suffering, I think there is nothing so much calculated as a continual contact with it to draw out and foster the kindliest feelings of our nature, and such, according to my observation, is its usual influence.

3. The writer of fiction has called Asylums "dark places." Literally, it is indeed a pity that in some of the older Asylums the lighting is decidedly imperfect. In many of these, however, superintendents, with praiseworthy ingenuity, have, by skilful attention to tinting and decorating, materially succeeded in removing this objection. If the expression "dark places" is meant in a metaphorical sense, as is perhaps the natural construction when it is used by an imaginative writer, and if it is intended to hint at the assumed frequency in asylums of secret deeds that will not bear the light, then I want to give more than a mere dogmatic denial that the term is justly applied. When such a distressing and exceptional occurrence as a patient dying from pleurisy and broken ribs in consequence of maltreatment by attendants becomes known, the panic-stricken populace are ready to cry out, "They're found out this time; this is what's continually going on unknown to us." Now this is nothing more or less than a gratuitous libel upon asylum conduct and treatment. I have no hesitation in saying that were the public so intimately acquainted as they ought to be with the principles of treatment and the qualities of mind whose exercise forms the chief part of that treatment, their feelings could not be other than those of surprise, satisfaction, and thankfulness. Let some means be taken, then, to establish an increased acquaintance between the public and the inmates of our asylums. The reputation of these institutions being at stake, and their officers being well aware how undeserved are the aspersions cast upon them, it is the obvious duty of the people to get to know, since the knowledge is within their reach, that asylums are no longer gloomy dens of cruelties and horrors, but, on the contrary, scenes of cheerfulness and comfort, and of many a peaceful life. The dense and barbarous ignorance of an intelligent public as to what sort of creature an insane person is was, I believe, recently well illustrated at a trial on the Northern Circuit. The appearance of a lunatic witness, we are informed, was the signal for intense sensation. There was a rustling of silks and a holding of breaths, and a thrill of amazement such as

we might anticipate if the honest man had rather been a visitant from the un-seen world.

Without indicating, therefore, how it might be done, I think there is a crying need for greater familiarity of social intercourse between the public and the insane in our asylums. People are still, as a rule, horrified at the idea of looking into the wards, having a strange delusion that the sight of the patients is something too awful except to initiated eyes. They conceive of them as struggling piteously in strait-waistcoats, or tied down to their beds, or chained to the walls, or incarcerated in dungeons. As an instance of the tenacity with which these beliefs are clung to, I may just state that one day not long ago I could not prevail upon an intelligent gentleman, who had to visit me on matters of business, to take a turn with me into the galleries and see the patients. He shook his head knowingly, and actually laughed as if my asking him to look at such sights were a capital joke. On another occasion, the master of a workhouse, a well-informed man, made a special journey to see what kind of instruments of restraint we had in use, as doubtless they would be of the most approved description! Again, the mother of a patient, after seeing her son, who, during his stay in the asylum had become enormously stout, came in a confidential manner to the head attendant and begged to see the whips with which, she understood, it was customary to scourge the patients as a part of treatment! It is unnecessary to multiply instances, as it must be quite apparent that this kind of ignorance in the public mind is extremely dangerous, and urgently calls for removal. Some enlightenment on this subject would prevent the occurrence of a panic should the heated imagination of any literary gentleman irresistibly impel him to the use of his pen. Let our upper and middle classes be better instructed in the ways of lunatics by a frequent resort to the wards of asylums. The officers in charge would rejoice to give sufficient proof that kindness is ever practised there, and that any the slightest act of cruelty is visited with remorseless severity.

In conclusion, I will only add to what has been said that our poor patients should be made safe and comfortable in accordance with our ideas of true humanity, and without pernicious regard to financial considerations. And is it not a serious matter to be obliged to accept the services of keepers who, taken as they are from the ignorant and humbler classes, are pitched into positions of perilous responsibility requiring qualities of mind and heart which many of these men never can develope? Is it any wonder that they should sometimes get into trouble, perhaps disgrace, and—as has just happened, alas!—life-long ruin? I am, &c.

March 10. ALIENIST.

COMMUNICATIONS have been received from—

W. A. P.; Dr. Henry J. Bowditch; Dr. W. B. Carpenter; Dr. Cobbold; Dr. A. D. Davidson; Dr. N. Evans; Mr. Alfred Emson; Dr. F. P. Atkinson; Dr. G. B. Halford; Antim Tartarat.; Mr. David Read; Mr. R. M. Inman; Mr. Robert Oxley; Constant Subscriber; Nemo; Mr. J. P. Richards; Mr. Arthur Oakes; Mr. Aanott; Dr. J. Braxton Hicks; Mr. J. Chatto; Mr. Haynes Walton; Dr. G. Johnson; Dr. B. W. Richardson.

BOOKS RECEIVED—

Dunlop's Philosophy of the Bath—Journal of the Scottish Meteorological Society—Biographical Sketch of the late Frederick Peuny, Ph.D., F.R.S.E.—Snelling on the Relaxation of the Pelvic Symphyses during Pregnancy and Parturition—Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques, vol. xii.—Caplin's Philosophy of Gout and Rheumatism—Notes on Sanitary Reform, by a Sanitarian—Professor Flower's Introductory Lecture to the Course of Comparative Anatomy, delivered at the Royal College of Surgeons of England, Feb. 14, 1870.

NEWSPAPERS RECEIVED—

Hamilton Evening Times—Eastbourne Gazette—Nature—Sheffield Daily Telegraph.

APPOINTMENTS FOR THE WEEK.

March 26. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Lockyer, "The Sun."

28. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. Jabez Hogg, "On the Organic Germ Theory of Disease." Also a Communication by Dr. Cockle.

29. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Royal Institution, 3 p.m. Prof. Rolleston, "Nervous System."

30. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

31. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swincy Course).

Royal Institution, 3 p.m. Prof. Odling, "Chemistry."

April 1. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal Institution, 8 p.m. Prof. Roscoe, "Artificial Alizarine."

Western Medical and Surgical Society, 8 p.m. Dr. Martyn, "On the Management of Early Infancy."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 19, 1870.

BIRTHS.

Births of Boys, 1150; Girls, 1158; Total, 2308.
Average of 10 corresponding weeks, 1860-69, 2118·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	775	757	1532
Average of the ten years 1860-69	753·2	745·5	1498·7
Average corrected to increased population	...	...	1648
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	2	13	...	16	1	1	2	2
North ...	618210	...	3	23	...	10	1	1	4	...
Central ...	383321	...	2	6	...	5	.	2	1	1
East	571158	3	4	9	1	16	3	1	2	4
South	773175	...	9	30	3	18	3	3	4	4
Total	2803989	3	20	81	4	65	8	8	13	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·815 in.
Mean temperature	41·0
Highest point of thermometer	58·8
Lowest point of thermometer	23·1
Mean dew-point temperature	35·9
General direction of wind	Variable.
Whole amount of rain in the week	0·44

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 19, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Mar. 19.	Deaths Registered during the week ending Mar. 19.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2308	1532	58·8	23·1	41·0	5·00	0·44	1·12
Portsmouth ...	122084	32	72	69	61·4	26·1	42·1	5·62	0·39	0·99
Norwich	81087	27	55	38	54·0	25·0	39·1	3·95	0·44	1·12
Bristol	171382	90	122	76	55·9	22·4	41·3	5·17	0·43	1·10
Wolverhampton ...	72990	53	54	33	54·2	22·8	40·8	4·89	0·22	0·56
Birmingham ...	369604	117	269	150	55·6	25·0	41·1	5·22	0·25	0·64
Leicester	97427	75	85	37	55·7	23·2	41·5	5·28	0·18	0·45
Nottingham ...	88888	110	60	44	55·9	21·6	40·8	4·89	0·24	0·61
Liverpool	517567	250	355	272	55·4	28·3	42·8	6·01	0·25	0·64
Manchester ...	374993	207	282	232	53·5	22·0	41·9	5·50	0·92	2·34
Salford	121580	58	92	51	53·5	22·8	41·8	5·45	0·96	2·44
Bradford	143197	54	101	58	55·3	28·0	43·0	6·11	0·20	0·51
Leeds	259527	30	255	115	56·0	28·0	41·7	5·39	0·22	0·56
Sheffield	247378	27	203	118	54·8	25·2	42·1	5·62	0·25	0·64
Hull	130869	91	84	49	55·0	21·0	38·6	3·67	0·51	1·30
Sunderland ...	94257	52	112	48	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	91	57	54·0	25·0	41·8	5·45	0·18	0·45
Edinburgh	178970	100	138	84	50·7	22·0	40·2	4·55	0·20	0·51
Glasgow	468189	228	394	340	50·4	24·0	41·6	5·34	0·50	1·27
Dublin (City, etc.*)	321540	82	187	170	60·8	24·0	45·3	7·39	0·37	0·94
Total of 20 Towns in United Kingd'm	7209603	83	5319	3576	60·8	21·0	41·5	5·28	0·38	0·96
Week ending Mar. 19 Paris	1889842	242	...	1189	...	...	...	...	...	...
Week ending Mar. 12 Vienna	605200	162	...	378	...	...	37·2	2·88	...	...
Week ending Mar. 17 Berlin	702437	112	627	460	43·3	26·2	32·0	0·00	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·815 in. The barometrical reading increased from 29·45 in. on Wednesday, March 16, to 30·29 in. on Saturday, March 19.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

BY HER MAJESTY'S ROYAL LETTERS PATENT
AND BY SPECIAL APPOINTMENT TO HER MAJESTY
AND THE ROYAL FAMILY
THE EMPRESSES OF RUSSIA & FRANCE &c. &c.

JOHN WARD

5 & 6, LEICESTER-SQUARE, LONDON.

No. 12, Ward's Patent Albert

Lounging Chair, the most simple and luxurious extant, is fitted for the Drawing Room, Boudoir, Cabin, or Camp; is made in Wood, Iron, or Brass, and folds into a small compass for shipment. From 4½ Guineas.

No. 17, a Four-wheel Victoria Pleasure-ground Chair, mounted in a very light Iron-framed Carriage upon C and patent India-rubber Springs, is either drawn by Hand or Animal, and is the most elegant and easiest Chair made.

No. 16, a ditto, upon three wheels, mounted same as four wheels, on C and India-rubber Springs.

No. 9, a Bath Chair, with Leather Head, and Folding German Shutter.

No. 18, a Sofa Britska Spinal Carriage with the inside Tray made to take out and in, on which an invalid may be taken from her room to the carriage.

No. 8, Ward's Improved Operating Dentist Chair, suitable for a Child or Adult.

Nos. 10, 10, Sketch of Earl's

General Invalid Couch or Bed, made with or without a Convenience; it adjusts the back seat and legs to any given position by means of machinery, and is recommended by the Faculty as being the most complete Bed ever made for confirmed Invalids, or for Fractured Limbs.

No. 11 is Ward's Patent Reclining Chair, with Shifting Elbows for more easily getting on and off the Chair when the leg-rest is drawn out, as shown in the drawing.

No. 7 is an elegant Patent Recumbent Chair.

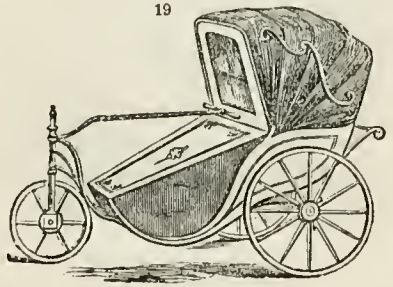
Nos. 13, 13 is a Couch-Chair or Bed invented by Dr. Hester, and may be placed in any position by the Invalid without the assistance of a second person.

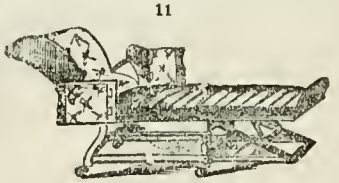
Nos. 2, 3, and 4, are all Self-Propelling Chairs, upon the best and most scientific principles; either may be used by a child eight years of age with perfect ease.

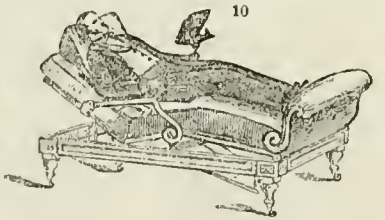
No. 24, Ward's Improved Child's Perambulator, with Patent Parasol. A variety always on hand.

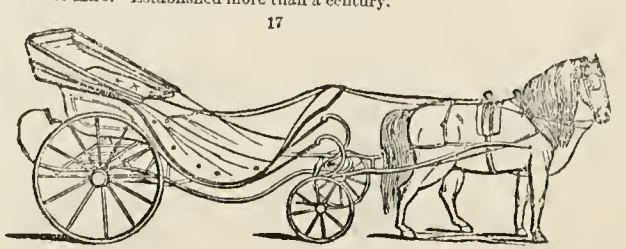
No. 14 is the simplest and best-constructed Chair for carrying invalids up and down stairs, the lower handles for level ground, the upper ones for ascending or descending a staircase: the sketch conveys the exact idea; it is also made portable for travelling. Several other kinds are always in stock, upon various principles.

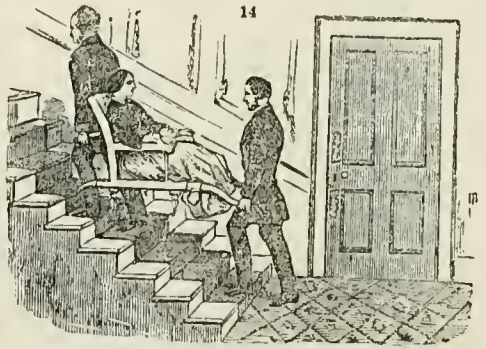
N.B.—The largest assortment in the World of Invalid Chairs, Carriages, Crutches, and Beds, always on hand, for Sale or Hire. Established more than a century.

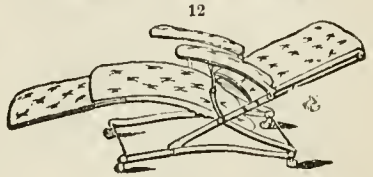


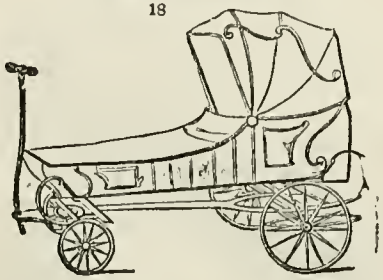


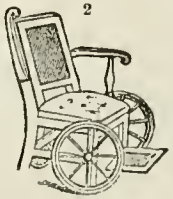


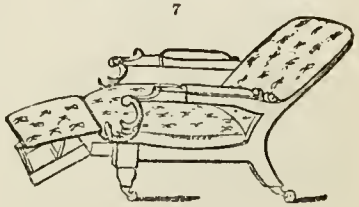


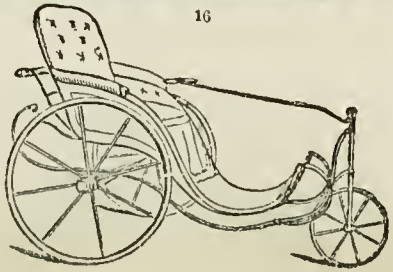


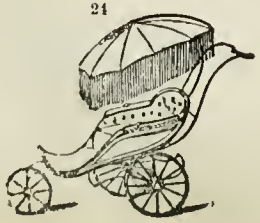


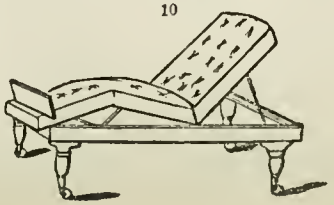


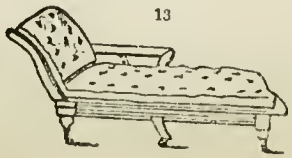


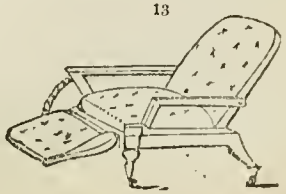












ORIGINAL LECTURES.

SIX LECTURES
ON
PRACTICAL HELMINTHOLOGY,
ILLUSTRATING
THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE
Medical College of the Middlesex Hospital

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

Lecture II.

Gentlemen,—At the close of my opening lecture you will remember that I was more particularly insisting upon the necessity of distinguishing three of the various tapeworms liable to infest the human body; but in addition to the facts already mentioned in that connexion, let me also remind you that the *heads* of these tapeworms are severally distinct, as are also the so-called "heads" of the measles or *cysticerci* whence they are developed. The head of the beef tapeworm is destitute of hooks, and has four large suckers, besides a central supplementary fifth (so called), whilst the head of the pork tapeworm is a trifle smaller, and furnished with a slightly prominent probosecis armed with a double row of hooks. The mutton tapeworm is also armed; at least, the "measle" is supplied with hooks, as was also the head of the tapeworm whence I procured those extreme types of segments already brought under your notice. Other minor characters, yet equally distinctive as between the beef and pork varieties, may be seen in the microscopic preparations on the table.

In the course of practice you may meet with disorders produced both by the larval and adult conditions of the tapeworm. It is true that the first-mentioned cases are extremely rare; nevertheless I am confident that they are not so uncommon as is usually supposed. The symptoms produced by larval tapeworms, or cysticerci, in the human body, are liable to be overlooked, especially when these parasites have taken up their residence within the brain. Probably not fewer than one hundred such instances have occurred within Medical experience; at all events, fifty such cases have been collected or placed on record by a single author (Griesinger). It has been shown by these cases that you may have a variety of cerebral symptoms, from simple giddiness and headache up to the most severe and alarming epileptiform seizures, solely brought about by the presence of one or more larval tapeworms in the human brain. It does not appear, indeed, that any of the symptoms are sufficiently characteristic to enable you to distinguish them from mental perturbations caused by other lesions or disorders; nevertheless, it is just possible, taking the history of the patient into consideration, that you might be able to diagnose such a case successfully. Undoubtedly, also, your suspicions would be very naturally roused if in any person suffering under cerebral disturbance you should have previously obtained evidence of the existence of cysticerci in other parts of the body—say, for example, in the eye or beneath the skin. As to the possibility of a cure being effected in the case of a cerebral *cysticereus*, I, for one (supposing a correct diagnosis had been arrived at), should not entirely despair; for, in this particular relation, my experimental investigations have taught me an important practical lesson. I have found and demonstrated that the larvæ of the beef tapeworm, if left to themselves, will perish and calcify within a period of about eight months. From actual observation I have ascertained that the same pathological process, tending in all cases to a natural cure, is accomplished in other forms of larval tapeworm life, whether they are encountered in the human body or elsewhere. In true hydatids the time requisite for a natural cure is necessarily much longer than obtains in the case of ordinary cysticerci; consequently it may be doubted if any cure of this sort has ever followed in the instances where these larger kinds of larvæ have gained access to the human brain. Knowing what cures are effected by the veterinarian in cases of "gid," I should not at all despair of such a result. In severe cases of cerebral cysticercus, shown to have been such by *post-mortem* appearances, the epileptic fits were commonly succeeded by torper and loss of consciousness, gradually terminating in death. In autopsies resulting from brain affections, should any cysticercal-like productions be found, be on your guard. In several cases recorded as hydatids the authors have really been dealing with examples of ordinary *cysticercus*, and in other cases the observers (like Frédault) have referred common cysticercal developments to distinct and hitherto undescribed species of entozoa. A little attention to the facts I have placed before you, coupled with an inspection of the specimens, should be sufficient to prevent the recurrence, on your part, of any similar error.

Leaving, for the present, the subject of hydatids, which not only concerns the Surgeon but has important bearings on questions of public health, let us now consider the symptoms liable to result from the presence of tapeworms in the intestinal canal. Occasionally, indeed, the "bearer" is fortunate enough to experience no marked inconvenience; but, as I have elsewhere stated, such instances of immunity are rather apparent than real.(a) The symptoms are *apparent*, "inasmuch as the parasite gradually, and to the patient, as it were, unknowingly, steals away a portion of his health. The trifling feelings of weariness and lassitude are usually set down to other causes; and it is only when these indications are succeeded by restlessness, nervous irritability, and headache, that proper attention is paid to the true source of the malady." Rather than take proper advice, many persons will endure the annoyances arising from the frequent passage of the segments *per vias naturales*. To refined and educated minds, however, the mere idea of harbouring such creatures as tapeworms is revolting in the extreme; consequently such patients display the greatest possible anxiety to be quickly rid of their "guests." Although the gravest symptoms are now and then encountered, it is, fortunately, not often that the disease proves dangerous to life. "In bad cases the headache is much increased, and often accompanied with giddiness; the sight and hearing may be affected; noises in the head, itchings at the nose and anus, obscure pains about the body and limbs, loss of appetite, and other dyspeptic symptoms show themselves in greater or less degree in different cases. One of the most common symptoms I have noticed is a tendency to faintness. This is occasionally so marked as to create alarm, and a person uninformed as to the true cause of the disorder might be led to treat this symptom as coming from a totally different source. In females the nervous phenomena display features more or less peculiar to the sex. The restlessness and anxiety are excessive, and at times accompanied with chorea and fits of hysteria. In the worst cases of both sexes the cerebral disturbance may show itself in convulsions and epileptiform seizures; and I regret to add that in not a few instances even mania itself has been entirely attributable to the presence of these entozoa in the intestinal canal." In the "bibliography" of my larger treatise you will find references to several of these sad cases; and the worst of it is (when the cases are of long standing), the nervous accompaniments may remain even after you have cured your patient. In the briefest possible terms let me give you an instance from my own experience:—

Case 2.—H. J., a lady, consulted me in regard to a tapeworm she had contracted eleven years previously. She had been most injudiciously treated abroad; amongst other things, taking constantly large draughts of tar-water. After a second interview, I satisfied myself not only that she had no tapeworm when she first came to me (Nov. 10, 1866), but that she and her guest had parted company fully five years previously. Notwithstanding my assurances, all efforts failed to convince the patient that a cure had been effected. She had been all along, and I believe still is, subject to the most distressing seizures, the sudden hysterical fits being accompanied with violent muscular contractions, rendering the body quite opisthotonic. These and other bad nervous symptoms were, I believe, originally due to the irritation set up by the tapeworm acting upon a morbidly sensitive constitution. It is one of those chronic cases in which our best efforts are necessarily baffled; but, had a different method of treatment been adopted from the very first, I am of opinion that this patient would have been permanently cured.

(a) See "Tapeworms and Threadworms: their Sources, Nature, and Treatment," 2nd edition, p. 22 et seq. Longmans and Co. 1867.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture II.

I.—DISEASES OF INFLAMMATION.

Inflammation of the Skin from Common Causes.

(*Continued from page 306.*)

I have next to deal with a Latin word which has come down to us without the compauionship of a Greek synonym—namely, *impetigo*, that is, impetu agens, a breaking out with impetuosity —and there is sufficient evidence to prove that by impetigo was meant a severe kind of ekzema. Willan employed a term—namely, ekzema impetiginodes—which at once makes us at home with impetigo, and identifies it with ekzema pustulosum. But just as, in the case of leichen, papules of ekzematous character may be developed which are sufficiently different from ekzema to be treated apart, so the superficial pustules of ekzema pustulosum sometimes show themselves apart from ekzema, and seem to merit consideration under a separate head.

Impetigo, therefore, I define to be—*an eruption of superficial pustules, sometimes minute, at other times three or four lines in diameter, developed on an inflamed base, and terminating in purulent exudation and the formation of thick yellow crusts.*

Impetigo is an eruption occurring on the skin of children, frequently of the face and hands, and sometimes on young persons of delicate constitution. The pustules are, in fact, purulent vesicles, and conport themselves after the manner of vesicles rather than of pustules, and their contents vary in density and colour, being sometimes sero-purulent, sometimes whitish or cream-coloured, sometimes yellow, and sometimes greenish. By the ancients they were termed *psydrakia* or cold blisters, from the slight degree of inflammation at their base. The pustules associated with scabies are examples of impetigo. And it happens very commonly in children of the lower class, that a pustule of impetigo suddenly takes on a vesicular character around its circumference and forms a compound eruption, beginning with pustular force, and then expanding by a passive exudation of serum: to this form of eruption I have given the name of impetigo phlyktainodes. It is often epidemic; it is apt to attack several children at the same time, and for these reasons Dr. Tilbury Fox has seen cause to denominate it "impetigo contagiosa."

Impetigo is sometimes met with in little groups or clusters of pustules, and at other times is dispersed over the body in scattered points; hence we distinguish an impetigo figurata and an impetigo sparsa. The impetigo figurata will sometimes occupy a rather considerable extent of surface of the face, sometimes surrounding the mouth and nose, sometimes the ears, and in a few instances covering the entire face. And its yellow crusts—sometimes bright as amber and sometimes like dried honey—have suggested the term *melitagra*, the honey seizure or honey disease.

I have now, Mr. President and gentlemen, passed in brief review the six diseases which I have grouped under the head of ekzematous affections. There is the typical polymorphic ekzema; then there are the dry, indurated, and squamous forms of ekzema—namely, psoriasis and pityriasis; the papulous forms, leichen and strophulus; and the pustulous form, impetigo. And I hope I have made the alliance between them, as well as their differences, sufficiently clear. Upon this presumption, I shall proceed to say a few words as to their etiology and treatment.

Ekzema, both in its moist and in its dry forms, is a disease of debility of the skin, for the most part proceeding from disorder of digestion, of assimilation, and nutrition, and sometimes from local causes. Therefore our treatment, like the etiology, must be equally twofold; it must be constitutional, and it must be local. Constitutionally we must regulate the functions of the alimentary canal and its associated organs by their appropriate remedies; and we must supply tone or vital force to the system by every means in our power. We may require the aid of a mild purgative pill to render the act of elimination by the bowels sufficiently active, and at the same time relieve nature of one of her labours, for in a depressed state of the vital power every function is attended with proportionate exhaustion. And, at the same time that we open a way for the proper evacuation of the contents of the alimentary canal, we may endeavour to improve assimilation and supply force by means of the mineral acids with bitters, by quinine, and by the citrate of quinine and iron; and, when all is accomplished that ordinary tonics will effect, and in an indolent state of the disease, we may have recourse to that most valuable of nerve-tonics—arsenic. The powers of medicine, it must be understood, must be proportioned to the force of the disease and to the constitution of the patient. In certain states of debility, cod-liver oil is an excellent remedy; so also, and in various forms, are iron, phosphoric acid, and, in fact, tonics of every class.

In the *local* treatment we have to adapt our means to the indications presented by the form of the eruption. In its erythematous form we may have recourse to a sedative powder to relieve heat and itching, or to a lotion of oxide of zinc, calamine, and lime water. In the papulous form a lotion is best suited, such as that of hydrocyanic acid with emulsion of bitter almonds, or one of carbolic acid or tar. In the vesicular, the ichorous, and the pustular forms, the best remedy is the benzoated ointment of oxide of zinc, either alone or in combination with carbolic acid, spirits of wine, or camphor; and the ointment is to be employed not merely as a sedative, but as a means of excluding the atmosphere from the inflamed skin. In the squamous form of the disease where the inflammatory process is still active, a similar sedative course of treatment must be pursued, but as soon as indolence of character becomes apparent, our treatment must be stimulant, and we must employ mercurial ointments and preparations of tar and soap. There is a short period in the course of an ekzema when the water-dressing may be of service—namely, when the heat and itching are so great as to prevent sleep, the moisture of the water-dressing will promote exudation, and exudation will relieve the tension and hardness of the skin induced by infiltration. In fact, the water-dressing converts a dry into a moist ekzema, and in the latter state the treatment must be that which is adapted for ekzema ichorosum. This is the principle of treatment of psoriasis: to promote exudation to the full relief of the distended and indurated tissues, and then to induce the healing of the skin by sedative measures. In that other dry and furfuraccous ekzema known as pityriasis, the nitric oxide of mercury ointment, diluted to one-third of the Pharmacopœial strength, is invaluable; while in ekzema attended with irritability or neuralgia, we have an admirable remedy in a lotion of the nitrate of silver in solution in nitrous ether.

Scabies, which, according to my interpretation, is an ekzema dependent on a local and a living cause, the minute animalcule denominated acarus scabici, requires the destruction of the acarus; and after the destruction of the acarus, if any irritation of the skin remain as a sequela, whether in the form of pruriginous pimples or real ekzema, the treatment adapted for the latter forms of eruption must be employed and persevered with until the whole of the irritation has ceased. Our problem, therefore, resolves itself into the simple one of the destruction of the life of the acarus, and to this end perfumes and strong odours of all kinds—oils and grease, stavesacre, chamomile, carbolic acid, and last and best of all, sulphur—are all conducive. It is important to know the habitat of the acarus in order to follow it to its home. In this country the chief habitat is the thick epidermis of the hands and fingers, the pudendum and neighbouring parts, the podex, the anterior border of the axilla, and, in infants, the feet as well as the hands. A little sulphur ointment well rubbed into the hands, particularly at the seat of the broken skin or of the burrows, will inevitably destroy the acari and their ova in a few hours, and promote cure in a few days or in a week. A similar friction may be used to any part where the peculiar itching of the acarus is felt; and this, with ablution and attention to clean linen, and the avoidance of clothing that has been recently used, is all that is needful for a cure. The only caution that is necessary is to avoid using the sulphur too bountifully or too long, and, as it is an irritant to the skin, to substitute for it in the case of children and infants the stavesacre ointment perfumed with chamomile or carbolic acid. Leichen presents itself for treatment, sometimes in a pruriginous and sometimes with an inflammatory character. With the latter aspect the means of relief are similar to those required for ekzema; and nothing will be found more to the purpose than the oxide of zinc ointment with carbolic acid. To relieve the itching we must have recourse to special antipruriginous remedies, such as lotions containing bicarbonate of ammonia, or hydrocyanic acid, or carbolic acid, or tar.

Strophulus, being a leichen of infants, requires the use of remedies adapted to the sensitive organism of the earliest

period of life; and the benzoated oxide of zinc ointment, alone or with spirits of wine or spirits of camphor, will accomplish all that can be desired.

Impetigo implies a pyogenic disposition of the constitution, and demands a similar treatment to that which is applicable in ekzema pustulosum. The benzoated ointment of oxide of zinc with carbolic acid is invaluable, and, as the subjects commonly affected by the disease are young persons, that portion of our Pharmacopœia which is devoted to nutritive tonic remedies is brought into requisition—for example, iron, with hydrochloric and phosphoric acid, and cod-liver oil.

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.

ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

PART V.

ON THE TREATMENT OF DISEASES OF THE KNEE-JOINT, MORE PARTICULARLY IN REFERENCE TO OPERATIVE INTERFERENCE.

In the preceding pages the different forms of recovery from knee-joint disease have been fully illustrated, and an attempt has been made to indicate by the clinical symptoms the various pathological conditions which are met with in practice, and which are included in the general term, disease of the knee-joint. If it may be so expressed, the natural history of knee-joint disease has been thus far illustrated, for the skill of the Surgeon has hitherto only been shown in guiding natural processes in the way of cure, in removing obstacles to recovery, in soothing pain, and in aiding natural powers. No active Surgical interference has hitherto been demanded in the treatment of those cases, for natural powers have proved themselves competent to effect a cure without such aid, without such interference. It would be well indeed if the Surgical art were only needed in cases such as these; if natural processes were always competent to effect a cure guided by Surgical skill; if Surgical treatment were always so good and so effective as to do away with the need of active Surgical interference or the Surgeon's knife. Such, however, is not the case, for it is too often true that either from some failure in the power of the patient, the local disease demands active treatment; or, from some failure in the practice of the Practitioner, Surgical interference is required—in one case, either to remove a disease wholly or in part that the natural powers are incompetent to conduct to a satisfactory cure; in the other, to remedy a deformity that has been allowed to occur from neglect, either on the part of the patient or the Practitioner who has had charge of the case; and again in some cases, to remove a disease which it is inexpedient to leave to natural processes to cure.

In the present chapter I propose to consider some of the means the Surgeon has at his command to meet the wants of the different forms of knee-joint affections, and to point out, as far as I can, the different conditions that require interference.

In the treatment of all cases of diseases of the knee-joint, or, indeed, of any joint, there is one question which naturally arises in the Surgeon's mind, and that is as to the competency of natural processes to effect a cure. Should this question be answered in the negative, either by the judgment of the Surgeon or the progress of the case, another equally important question has to be decided which has direct reference to excision of the joint or amputation of the limb, for I must assume for the present that neither of these operations would be entertained until either the circumstances of the case had fairly demonstrated that Nature was incompetent to conduct it to a successful issue, even though guided skilfully by art, or that some operation was demanded to save life.

All other measures than those named—excision and amputation—must be looked upon as subsidiary to the one great object of securing a natural cure; the use of splints, division of tendons, and incisions into joints tending towards this desirable end, and being of value only so far as they conduce to that one great object.

In examples of chronic or subacute synovitis no operation is needed. Such cases, as a rule, do well under Surgical treatment. Rest of the limb in a horizontal posture, counter-irritation by means of blisters, and the iodide of potassium internally, are generally amply sufficient to effect a cure; while pressure by well-applied strapping, after all signs of inflammation have gone and the products of inflammation alone remain, is of great value.

In traumatic cases ice applied locally is of inestimable use, and that, with complete immobility of the affected limb, is, in the majority of cases, all that is required. When the pain is severe, an opiate should be given; or, which is better, a subcutaneous injection of a quarter or half a grain of morphia should be used.

In acute suppurative synovitis of a joint following a wound, a free incision into the joint is probably the best practice. The remedy, it is true, is a severe one when applied to the knee, but it is applied to relieve a condition which is fraught with peril. It has been attended with good success, and may be practised.

Under other and more severe circumstances, immediate amputation may be called for, as in the following case:—

Case 43.—*Severe Laceration of Thigh into Knee-joint—Amputation six hours after the Accident—Pus in Joint—Highly Injected Synovial Membrane.*

David B., aged 6, was admitted into Guy's under my care on July 5, 1862, with a severe laceration of his left thigh and knee-joint from the passage of a wheel of a loaded omnibus over the part. Nothing but amputation could be entertained, and, six hours after the accident, the operation was performed. A good recovery followed.

On examining the knee-joint directly afterwards, the synovial membrane was seen to be intensely injected all over, down to the margins of the articular cartilages. Pus was also found in the joint—about half an ounce. This was examined microscopically. The rapid injection of the synovial membrane and formation of pus is of great interest.

Mr. Maunder, within the last year or so, has reintroduced a practice which had been formerly employed with some effect—that of ligaturing the femoral artery in cases of suppurative synovitis, whether the result of a wound or of some other cause. The case for which he suggested the practice made a good recovery. The acuteness of the local symptoms soon subsided after the operation, and all pain ceased. Suppuration likewise rapidly disappeared, and recovery took place, although with a stiff joint. This result was eminently satisfactory, and it is hardly fair not to attribute it in a measure to the treatment which was employed. Such a practice, however, should be only thought of when acute suppuration is threatening, and consequently the integrity of the joint is endangered. It might be practised before the necessity of opening the joint has appeared, and under such circumstances it seems capable of preventing it; for the sudden cutting off of the supply of blood to an inflamed part may fairly be expected to check inflammatory action, and to starve the disease, in the same way as it has been proved to do in elephas.

In acute synovitis the result of an abscess or a sequestrum making its way from the bone into the joint, or from the discharge of an abscess the product of a suppurating synovial pulpy disease, other treatment will be required; for such a complication is clearly, under these circumstances, only a result of another disease, and is not the disease itself—it is an effect and not a cause. The original cause of the synovitis must be treated if success is to follow any practice. This part will, however, receive attention as we progress.

In the pulpy synovial disease of the knee-joint uncomplicated with suppuration, the limb must be immovably fixed on a splint from the very first; fomentations should likewise be employed, and tonics given. Blisters in this affection are not apparently of much use; moxas and setons are painful applications, and have no definite value. I never use them.

When the pulpy membrane breaks down and suppuration appears, the abscess being outside the joint, it should always be opened; when it has discharged itself into the joint and suppuration of the joint follows, a free incision into the articulation is doubtless the best practice. The cases 6, 11, and 12, I have given in Part II. of this series, prove this fact.

When this treatment has failed or seems inapplicable, the question of amputation or excision will have to be entertained—that is, when it is clear a recovery with a movable or even a stiff joint is beyond hope, and when the general powers of the patient are clearly yielding to the severity of the local disease. The following case is one in point:—

Case 44.—*Disorganisation of Knee-joint from Pulpy Disease of the Synovial Membrane—Amputation—Subsequent Removal of Necrosed Extremity of Femur—Recovery.*

(Reported by Mr. E. M. OWENS.)

Samuel N., aged 8, came up to Mr. Bryant from Guildford

on the recommendation of Mr. Eager on April 11, 1865. He had been the subject of disease of the left knee-joint for three years, the affection having come on after a blow from a stone. Swelling of the joint was the earliest symptom, and pain soon followed. The swelling was attended with great heat of the artieulation, and at uncertain intervals these symptoms had been more or less severe. For about two months suppuration had taken place, several sinuses existing on the outer side of the joint.

On admission the boy's general health was very bad; the left knee was uniformly enlarged, all the points of bone being lost to view by the thickening of the synovial membrane and parts around the joint. Sinuses existed on the outer side of the artieulation which communieated directly with the joint. Any movement of the limb caused severe pain.

The limb was placed upon a splint at an obtuse angle, and water dressings were applied. Tonies and good food were also given. The boy's health, however, steadily became worse; consequently amputation was performed on Oetober 10, one long anterior flap being made.

The stump healed rapidly, with the exeeption of one sinus, and the child's health steadily improved. On Jan. 3, 1866, about three months after the amputation, a large piece of necrosed bone 3½ inches long, involving the whole thickness of the femur, was removed, and a rapid recovery followed, the boy leaving the Hospital well with a good stump on Jan. 31.

The disease of the knee was evidently the pulpy disease of the synovial membrane. The cartilages had disappeared round their margins, but on the centre they were healthy. The new inflammatory tissue had softened down in parts, and very little of a reparative process had gone on. The articular surfaces of the bones were exposed in part where the cartilages had disappeared, but the bones were all healthy, and where the cartilages existed they were closely connected with the bone. The synovial membrane with the new pulpy material was about one inch in thickness, and in parts had softened down.

When all extra heat in the part has passed away, and no other evidence is present of existing inflammatory action, the value of pressure is well seen. There are no means at the Surgeon's command which have so great an influence in hastening the absorption of inflammatory deposit as that produced by pressure, and in hastening the absorption of such a lowly organised product as that of the pulpy disease of the synovial membrane, the value of this practice is well exemplified. It should never be employed, however, as long as any extra heat exists in the part, or any flushing of the joint is felt. It is of value only in hastening the absorption of the products of past inflammatory action; it is of no use in checking existing inflammation in a joint.

All these points, however, have been fairly illustrated in the cases that have been previously quoted, and it remains for us now to consider under what circumstances an operation may be demanded in disease of the knee-joint.

(*To be continued.*)

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
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(*With a coloured Diagram.*)

IV.—MEASLES—RUBEOLA NOTHA—ERYSIPELAS—CEREBRO-SPINAL MENINGITIS.

Measles.

Complications, especially of the thoracic organs, so often accompany measles, that the range of temperature peculiar to this disease is not unfrequently interrupted in its course. Epidemics of this disease are apt to vary in special points of temperature, although not in general relations.

In uncomplicated cases we note a pyrexial period preceding the rash, then a fever of eruption including both ascending and stationary periods, and a very peculiar mode of subsidence. About two days before the eruption appears, and whilst the symptoms of coryza are beginning to show themselves, the first pyrexial period commences. In it the temperature rises rapidly in the course of about twelve hours to 101° or 102°, more rarely to 104°, and falls almost or quite to the normal point in another twelve hours. In fact, this attack of pyrexia only lasts about twenty-four hours altogether, and, as Wünderlich says, might be mistaken for an attack of ague, exeept that the highest point reached in it is generally below the acme of ague.

There is usually an interval of normal temperature for a day, or the best part of a day, before the eruption and the fever of eruption begin, and this, too, whilst the symptoms of coryza are persistent and increasing.

The fever of eruption occupies a period of from two to five days. In Case 22 defervescence commenced on the third day of the eruption, but it may have been hastened by the very considerable epistaxis which accompanied the disease. But much more commonly this time of fever lasts about three to four days. There are sometimes morning remissions to a slight degree, but these may be altogether absent. The temperature continues to rise until the eruption is fully out, and, as a rule, the maximum of temperature corresponds with the maximum of rash. In the cases in which the fever lasts for four days, the first two will show a comparatively moderate elevation of temperature, whilst in the latter two the mercury rises to a higher degree, and continues at 103° and more until defervescence begins.

The exceptions that occur to this general course, leaving complications out of the question, are, that the morning remissions may be in some cases considerable throughout this period, and that the maximum of temperature may precede by one or two days the maximum of eruption. When this is the case, the temperature will generally keep up at the maximum point, or only descend very little below it all the time of the increase of the rash.

The defervescence is by crisis. It may be accompanied by diarrhœa, as in Case 21, or by epistaxis; but it will take place in precisely the same way when not accompanied by any flux or loss of blood. The disease may be distinguished from scarlatina by the mode of defervescence, which is gradual in scarlatina, and always by crisis in measles. The fall may be 4° or 5° Fahr. in twelve hours, but more usually it is about 3° Fahr. with slight evening exacerbation, and the temperature recurs to the normal point on the next day or the day following.

The mode and period of defervescence will also serve to distinguish this disease from typhus, whilst the distinction by the eruption alone is not always absolutely easy. On or before the sixth day the temperature and pulse fall together in measles, whilst at the same period in typhus both are rising.

The variations of temperature due to complications depend wholly on the nature of the complication, and there is no fatal temperature belonging to the disease itself. The fatal event never seems to depend upon measles, but always on some intercurrent complication.

Rubeola Notha.

This disease, known under several names—roseola, rubeola, rubella, spurious measles, etc.—seems to be accompanied by a higher febrile condition in England than in Germany. It is known in Germany under the name rubeola; but unfortunately we sometimes use this term for measles, and therefore are obliged to coin a new name for this malady.

Wünderlich states that there is either no fever at all, or that it is very slight, except in individual cases; and he suggests that these exceptions may depend on complications or on the tendency to variations of temperature peculiar to little children. English experience, however, is different from this. In the last five years this disease has been prevalent in Clifton on three occasions; and the rule certainly is that on the first two days of the disease, whilst the eruption is coming out and advancing to its maximum, the temperature is rather high. Case 23 is an example of the malady, but the temperature in this case reached somewhat a higher point than is usual. More frequently the highest point reached will be about 103°, and the maximum of temperature pretty closely corresponds to the maximum of eruption. It is a peculiar point in this disease that, with so decided a pyrexial condition, children seldom feel ill when the eruption has once appeared. A temperature of 103° may coexist with a good appetite, and with an absence of thirst, of headache, or of any feeling of illness.

The temperature reaches the acme on the second evening, either without a morning remission or with one of very small degree, and on the third day defervescence begins.

It is not usual for defervescence to be so critically rapid as in true measles. The fall takes place from evening to morning, and is accompanied by slight evening exacerbation, and a period of about three days will generally elapse before the temperature reaches the normal point. This condition of defervescence, added to the shorter duration of the pyrexial period, the absence of coryza, and the far less tendency to

thoracic complication, will serve to distinguish this disease from true measles.

Erysipelas of the Face.

The temperature of a short case differs very little from that of measles, although the maximum point may be higher. The defervescence is very similar; but in the majority of cases the pyrexial period lasts longer, often from seven to fifteen days.

Case 24 is an example of the disease in a mild form. Timothy C., aged 27, admitted on the third day of the disease, was immediately put upon large doses of steel. The acme was reached on the fourth evening, and on the fifth day, an unusually early period, defervescence commenced. Although the fall was critical, the normal temperature was not reached until the sixth day, and the temperature remained at or below the normal point for five days, and then suddenly rose again to 102° coincidently with a renewed erysipelatous condition of the face.

Far more frequently the course of the disease is of longer duration. The temperature rises rapidly, and often reaches 104° or 105° on the first evening of the appearance of the inflammation of the skin. It may persist at this average height for a very variable number of days, with slight but decided morning remissions, and with the evening temperature sometimes falling below the point reached on the first or second day. More frequently it still rises as long as the affection of the skin goes on, and it may arrive at the height of 106° and even of 108°. In cases that follow a regular course the high evening exacerbations are maintained for from one to two weeks, and even more, thereby affording a point of diagnosis from measles.

Defervescence is usually exceedingly rapid, so much so that the normal temperature may be reached in the course of about twelve hours; but cases are not unfrequently met with in which the fall of temperature is less critical, and is accompanied by more or less evening exacerbation, which often seems to coincide with a slight tendency to a spread of the affection of the skin. Indeed, the critical defervescence, when it occurs in this form, answers to, and is synchronous with, the termination of the skin lesion; and any variation from this mode of subsidence corresponds to a condition of skin only partially advanced towards recovery.

It is by no means unusual to find that in cases in which the normal temperature has been reached, or nearly so, a fresh elevation occurs, corresponding to a fresh outbreak of the complaint. In these relapses, which may be met with more than once in the same case, the pyrexial period is generally of much shorter duration than in the original attack. The elevation of temperature, too, may serve as a warning of a fresh outbreak several hours before the skin shows any manifestation of it.

I have no personal experience of fatal erysipelas. Wünderlich says that in his cases death has been ushered in by a very high temperature, and that in some instances post-mortem elevations of temperature have been observed.

Trousseau demurs to erysipelas of the face being classed among the eruptive fevers. He says: "I do not deny that in some cases the fever precedes the inflammation, but this is a rare occurrence, the rule being that the local inflammation precedes the general febrile excitement. There is an inflammatory action anterior to any characteristic manifestation of erysipelas; and this action is quite sufficient to produce the general symptoms. Finally, the prodromic fever of erysipelas (if this name be allowed) is a symptomatic fever; it is a fever symptomatic of the inflammation propagated in the lymphatics communicating with the local lesion. This fever continues for one, two, or three days; the erysipelas then appears." It is probable that Trousseau is right in his pathological views about the commencement of the disease; but this does not interfere with the fact that during the progress of the disease the temperature and the inflammation of the skin are very closely connected, and both rise and fall together.

Certain cases of erysipelas of the face occur, such as may be met with after an injury, at the end of exhausting diseases, or in individuals who have been frequently attacked by it, in which the temperature follows by no means the typical course just mentioned. This is also rather the rule in erysipelas of other parts of the body. The difference is of all periods and in all respects. The ascent is generally less rapid and less intense; the stationary period manifests a lower acme and morning remissions of more considerable extent, and defervescence is much more gradual.

The pulse in this complaint corresponds to the temperature more closely than in most of the exanthemata.

Cerebro-spinal Meningitis.

In this disease we lose the general regularity of thermometric phenomena met with in the maladies previously mentioned. In the three cases tabulated with this paper, and given me by my friend Dr. Edward Collins, of Dublin, the variations of temperature are exceedingly striking. In Case 25, Ellen D., aged 16, admitted on the fourth day with a temperature exceeding 104°, the thermometer seemed to show a descending course from the sixth day to the thirty-fifth, when she left Medical observation, having lost the left eye, and having become totally deaf. But, during this course of thirty-one days, the temperature had, on several occasions, manifested considerable exacerbation for the space of twenty-four hours at a time. In Case 26, John D., aged 10, not admitted until the twelfth day, the disease throughout assumed an irregular remittent type, differing very much from the former case, and death ensued with a temperature of collapse 94⅔°; whilst, in Case 27, W. H., aged 22, death occurred at the end of the first week, with a temperature above the normal, but not higher than is usually seen in tuberculous meningitis. This case bears out Dr. Sanderson's observation that the temperature is elevated even in the early stages. The temperature was noticed by Dr. Sanderson as constantly elevated at all stages of the disease, seldom falling below 100° Fahr. The highest point was just at, or immediately after, the close of the symptoms of invasion—viz., 103° to 104°, or higher in children. Subsidence of pains and general improvement were always coincident with lower temperature, and *vice versâ*. This point was especially marked in Case 26, where the constantly occurring remissions coincident with temporary general comfort and relief of all distressing symptoms were very remarkable.

Niemeyer, who, with Dotzauer and Lindurm, holds strongly the local theory of the disease, states that, in his experience, the temperature on the first and second days was often but slightly raised. It was only a little while before death that it rose as high as 104° or more. It is impossible to speak definitely of an ascending, a stationary, and a descending period in a disease that not only varies exceedingly in duration (from a few hours to many weeks), but also in its tendency to remission and exacerbation. The only point that, with some exceptions, seems generally to have been observed, is that the acme is not reached until after the symptoms of invasion are over. An irregular defervescence may commence immediately, or may be delayed for several weeks, during which interval a middle period, that can scarcely be called stationary, is met with, with a tendency in the temperature to remit to the extent of four or five degrees, but to rise again to the maximum point, or very near it.

Wünderlich distinguishes three chief varieties of this disease—one rapidly fatal, and showing a very high temperature shortly after the commencement of the illness, which is maintained for several days, and is still further raised at the moment of death, even to 108°. Post-mortem elevations may also occur in this form. Secondly, a light form, with fever of short duration, though often of considerable intensity, and with very irregular course. Defervescence occurs more or less by crisis, but with some exacerbation. Thirdly, a more or less protracted variety, in which the height of temperature varies considerably. This irregularity is considered by Wünderlich to depend on successive complications of disease of the bronchi, the lungs, the intestines, the serous membranes, etc.

The distinguishing phenomena, therefore, as regards temperature, will be (first) its great irregularity; (secondly) its maximum point being in most cases below that of typhus, enteric fever, relapsing fever, and scarlatina; and (thirdly) its relation to the pulse.

Ziemssen says that the temperature is so irregular that few of the curves resemble each other, and Dr. Baumler has made a similar observation. The experience of the Philadelphia epidemic was that the temperature was lower than in any other typhoid condition; and in the Irish epidemic of 1867-8 it was comparatively low, and in one case mentioned by Dr. Stokes the highest temperature recorded was 98·8°.

Dr. Sanderson found that, with high temperature in this disease, the pulse assumed the character of less arterial tension, but there was no discernible relation between its frequency and the stages of the disease, though the pulse rate fluctuated from time to time.

Wünderlich observes that during the pyrexial periods of the disease the pulse is at or below the normal frequency, and only becomes quicker when the temperature has become normal, and similar observations were made in many cases in the Irish epidemic of 1867; but the opposite condition is often met with. Indeed, Dr. Collins found its frequency in almost every case

greater than natural, and he states that its frequency, its force, its volume, its regularity, and other qualities are subject to repeated and often inexplicable changes. In the three cases noted with this paper the frequency of the pulse bore a general relation to the height of the temperature, with occasional exceptions.

Death, which occurs most usually from apnœa, is accompanied by a high temperature in the majority of cases; but instances do occur in which the fatal event is ushered in by a temperature of collapse.

The irregularity of temperature alone will serve for the diagnosis of this disease; but with the additional symptoms of cerebral respiration, vomiting, the peculiar position in which the patient lies, the delirium, and in some epidemics the eruption, a mistake will seldom be made, except in those very rare instances in which the temperature somewhat simulates that of enteric fever. The general irregularity will help to distinguish it from typhus, of which disease Dr. Murchison considers cerebro-spinal meningitis only a form. The main difficulty is between this disease and some form of acute tuberculosis; but patients suffering from the latter malady do not often experience that relief from distressing symptoms during the remissions of temperature that is so remarkable in cerebro-spinal meningitis. It must be confessed, however, that, in rapidly fatal cases, neither the temperature nor any aggregation of symptoms will suffice to distinguish this disease from some examples of tuberculous meningitis.

CASES IN WHICH THE PHENOMENA OF CHOREA AND EPILEPSY WERE REMARKABLY INTERMINGLED,

IN UNION

WITH MENTAL DERANGEMENT OF A PECULIAR CHARACTER.

By JAMES RUSSELL, M.D., F.R.C.P.,
Physician to the Birmingham General Hospital.

THREE interesting cases have presented themselves to my notice in the Birmingham General Hospital in which certain forms of motor derangement, usually referred to the class of choreas and epilepsies respectively, have been curiously intermixed, and both have been united with peculiar modes of mental disturbance.

This union, in the same case, of symptoms which are ordinarily referred to distinct types, tends to throw light upon the different diseases with which they are usually connected, and upon the study of nervous disease in general. The uniformity which ordinarily prevails in the symptoms of a common attack of chorea and in those of the so-called essential epilepsy has naturally led to the result of viewing these groups of symptoms in the light of special diseases, and of regarding them too much in an isolated relation; whilst, on the other hand, a larger view of the different circumstances under which they sometimes present themselves, and a closer attention to the various combinations under which they occur, both among themselves and in union with other symptoms of nervous disease, would rather lead one to regard them as indicating a certain condition of nerve-tissue which may probably be due to a variety of causes, than as being allied with some fixed organic change constituting a specific form of disease.

Thus Dr. Radcliffe: "How far the occurrence of chorea implies a tendency to other disorders of the nervous system, especially to epilepsy, is a question which has not yet been fully entertained, and I cannot supply an answer from actual statistics. But this I may say—that I have frequently met with epileptic patients who were choreic at one period of their life, and that the impression left upon my mind from what I have seen is that the chances of chorea being followed sooner or later by some other disorder of the nervous system are too much made light of." (Reynolds's "System of Medicine," ii. 125.) So, again, Dr. Broadbent in a paper on chorea (*Brit. Med. Jour.* 1869): "Chorea is symptomatic only of the seat of the disease, and arises out of the function of the part affected;" and Dr. Hughlings-Jackson holds the same language as regards chorea and epilepsy (*Medical Times and Gazette*, April, 1866, and elsewhere).

Dr. Hughlings-Jackson has also drawn special attention to the importance of studying, in their relation to each other, the common forms of nervous derangements which are familiar to us as occurring in various diseases, and has commented on the value which is possessed in this connexion by cases such as those I have now to describe. "I would in this region (the motor) study all disorders in the movements and actions of muscles from those of health to total paralysis, not omitting any cramps, jerks, or spasms, however partial these might be in range or in degree. Many reasons could be given for a comparison and contrast of certain cases of chorea, epilepsy, and paralysis. One reason is that these diseases have in their very clinical history affinities which cannot be disregarded." (*Brit. Med. Jour.* ii. 1866, p. 329.) And again: "Unilateral epilepsy seems to replace, and sometimes, I think, to displace, chorea, and both run occasionally into actual hemiplegia." The same writer has given at different times several important exemplifications of the advantages derivable from this method of studying nervous disease, by developing the probable links of connexion which may subsist between the different forms. Thus, as he observes, the commonly recognised nervous symptoms, which occur under circumstances favouring plugging of the vessels, are uniocular amaurosis, hemiplegia, loss of speech, chorea, convulsions, mania.

He has further drawn a parallel between hemiplegia and unilateral epilepsy, both when existing separately in different cases and when co-existing in the same case, the paralysis following the convulsion; and he has pointed to a link of connexion as displayed in the muscular region affected in each instance, and in the muscles involved, and also in the condition of brain, whether embolism or arterial spasm, from which they may severally arise. (*Medical Times and Gazette*, ii. 1864, p. 66.)

Nor have his observations been confined to disorders of motion; he has extended them to the phenomena of language, as displayed in loss of speech from various causes, and also in the involuntary ejaculations of chorea and the quasi-mental acts sometimes performed in that disease without the intervention of the patient's will, as compared with the emotional language not infrequently observed in right hemiplegia when intellectual language has been extinguished. (*Ibid.* i. 1865, p. 89.) Once more, he has connected aberration of vision and of smell with other nervous symptoms in certain epileptic seizures, to illustrate the probable connexion of different parts of the brain by community of nutrition through identity of arterial supply. (*Ibid.* ii. 1864, p. 166.)

One further remark is suggested by the case to be immediately narrated. By watching the earliest manifestations of morbid nervous acts, we may sometimes be able to bring them into connexion with perfectly healthy function, and may thereby trace an uninterrupted transition from the actions of health to those of disease. Thus sleep passes insensibly into certain forms of coma; dreaming and talking in sleep is related to some types of delirium; and sleep walking, occasionally met with in epileptics, connects itself with the automatic actions sometimes witnessed in an epileptic fit.

Of the three cases which have formed the occasion of these remarks, in one bilateral chorea was associated with paroxysms in which sleep and sleep-talking passed into perfect obliteration of consciousness, with disordered mental and motor acts, the latter partly choreic, partly epileptic. In another attacks of epileptic pain and of epileptic convulsions replaced one another, and both were intermixed with a state of altered consciousness, and finally with attacks of distinct choreic movements, partial and general; whilst in the third unilateral chorea was followed by partial paralysis, and then by epileptic fits of gradually increasing severity, with which fresh choreic movements became intermixed, together with renewed paralytic tendency and mental impairment. It has to be added that all three occurred under circumstances which were calculated to favour the coagulation of fibrine in the vessels.

I proceed to narrate on the present occasion the first of the three cases:—

Case 1.—A. T., aged 13, had a mitral bruit; at a later period of the case she had periostitis of one tibia. Her complexion was of a dead white colour; the bridge of her nose was rather flat, but neither in the make of her teeth nor in the history of the family could any evidence of the presence of syphilis be discovered. Dr. Welch found by the ophthalmoscope merely a myopic crescent. She had her first attack of chorea (right unilateral) in March, 1868. It was ascribed to excitement, but occupied a month in its access. She was readmitted with a second attack in September, 1869. When admitted the movements were slight, and were chiefly confined to both legs and to the trunk.

During her former illness nocturnal attacks of precisely the same kind with those observed on the present occasion constituted very prominent symptoms. I am indebted to our House-Physician, Dr. Welch, and our House-Pupil, Mr. Elkington, for an account of the attacks. I only witnessed one. They occurred with considerable though uncertain frequency, some-

times for two or three nights in succession. It was observed that on one night, when the attacks were absent, she talked in her sleep, and I learned that when suffering from these attacks she always talked in sleep.

The attacks uniformly commenced soon after she fell asleep, when she seemed to pass into a state of complete second personality; she was perfectly unconscious of everything around her, and on awaking never had the least knowledge of what had occurred. Her pupils were dilated, her corneæ quite insensible to contact; nothing sufficed to awake her except severe flipping with a wet towel, and then she would sometimes ask for water and fall asleep naturally, more frequently, however, would relapse into her former condition. On one occasion Dr. Welch was twice compelled to have recourse to severe douching with cold water till she cried for mercy; each time she fell back again, and was only quieted at last by inhaling chloroform. Whilst in this condition she sometimes sang and talked, sometimes repeated poetry for half an hour together, sometimes was violent.

Considerable motor derangement was also present. On the single occasion on which I saw her the entire body and the limbs were affected with rapidly recurring clonic spasms, and the same phenomenon was described by Dr. Welch. On other occasions violent hysterical tossing took the place of the spasms; she clutched at every object near, threw her arms and trunk violently about, and drew her body and limbs together, then suddenly extended them so as to make her trunk quite rigid. After one of her attacks, on leaving the Hospital, she was described as having had a fit of "the dance" for an hour.

When the attacks ceased she fell naturally asleep. I should add that on one occasion Dr. Welch averted a threatened paroxysm by walking her about perseveringly. When not under the influence of the seizures, her memory is good; the sole change observed has been irritability of temper. She has now passed nine weeks in freedom from the nocturnal disorder, having suffered from it continuously for four months.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CEREBRAL HÆMORRHAGE IN CHILDREN—CARDIAC DISEASE — EMBOLISM OF CEREBRAL VESSELS.

(Under the care of Dr. JOHNSON.)

THE following cases present many points of interest. In the first case there was a history of rheumatic fever, followed by the formation of vegetations upon the mitral valve. Some fibrine seems to have been detached and plugged up some of the cerebral vessels. As a result of this obstruction to the circulation, white softening of part of the brain occurred, and then hæmorrhage from some vessels, which thus lost their support. The epileptiform convulsions which occurred a few days before death were most likely due to capillary obstruction caused by the detached particles of fibrin; for it has been shown by experiment that when minute bodies, such as snuff, etc., are injected into the carotid artery, they pass on into the cerebral capillaries, and the animal is at once seized with convulsions. The right kidney of this child was found dilated into many cysts, so that only a thin shell of kidney substance surrounded the whole. A uric acid calculus blocked up the commencement of the ureter, and so the cystic condition was caused. It is remarkable that at no time had she ever complained of symptoms which could have led this to be suspected.

In the second case, the boy had never had any previous illness; but here also were vegetations on both the aortic and mitral valves. In the middle lobe of the left side of the cerebrum a large clot was met with, and this was surrounded by softened brain for about half an inch.

Case 1.—E. H., aged 14, was admitted into the Twining Ward on December 4, 1869. She had suffered from many slight attacks of rheumatic fever, and for the last two years had been "short of breath." She often had a headache, and about a year ago was insensible for a short time. For the past year there had been a trace of albumen in the urine, and at times her feet used to swell.

On admission, she seemed a delicate child and of a pale complexion. She complained of palpitation of the heart and shortness of breath, with pain on the left side. These symptoms had more or less affected her for two months previously. She was able to walk about, and ate and slept very well. There was no œdema of feet. The præcordial dulness was increased and the impulse diffused. The apex seemed to beat most distinctly in the fifth intercostal space on the left side. A loud systolic bruit could be heard at the apex, but it was audible also over the whole of the chest. The second sound was sharp and loud. The urine contained a trace of albumen. In a few days she felt much better. She had no pain, and could breathe easily. At no time were any abnormal sounds heard over the lungs. She was ordered citrate of iron and quinine gr. v., three times a day, and was placed on an ordinary meat diet.

On December 21 she had an epileptiform fit, which was followed by headache and sickness. She slept badly, and for several days afterwards complained of pain in the head and back of the neck. There was no paralysis of face or body. The right pupil was rather more contracted than the left. There was no strabismus.

26th.—Had several attacks of vertigo, which last for a very short time, and are followed by sickness.

On the 28th, and again on the 30th, she had several similar attacks of pain in the head.

On the 31st she died.

A post-mortem examination was made twenty-nine hours after death. Head: On opening the calvarium and removing the dura mater, some blood was found under the arachnoid over the right frontal lobe as far back as the fissure of Rolando, and a little blood was also effused on either side of the pons Varolii. On slicing the hemispheres, a considerable amount of white softening was found in the left lateral hemisphere outside the corpus striatum. Blood was here effused, and it then had passed into the ventricles, which were filled with it. The right side of the brain and the medulla and pons seemed healthy. The vessels at the base of the brain were healthy, and no plug could be seen in the cerebral arteries. Brain: Weight 48 oz. Thorax: No adhesions or fluid in either pleura. Lungs healthy: Right lung 11 oz., left lung 9 oz. Heart: Weight $7\frac{1}{4}$ oz. The pericardium was normal, and the pulmonary veins not distended; the heart was large, and the apex displaced outwards in a line with the nipple. On the mitral valve and on the chordæ tendineæ were several stumpy vegetations; they were friable and could be readily detached; the other valves were healthy. The calibre of the aorta was much smaller than that of the pulmonary artery, probably because it was less filled than usual in consequence of the mitral regurgitation. The left auricle was larger than usual. Abdomen: Liver congested and extending lower than usual, weight 40 oz. The left kidney weighed $4\frac{1}{2}$ oz., and was congested; the cortex was thicker than usual, and the cones full of blood and dark. A uric acid calculus was found blocking up the ureter of the right kidney; it was about $\frac{3}{4}$ inch in diameter and nearly circular, very dark in colour and granular on the surface; lining the much-dilated pelvis were numerous grains of uric acid. The cones were flattened out, and a thin layer of cortical substance formed the wall of the cyst. The bladder was healthy and contained no calculus. Spleen: Weight 7 oz., rather congested. There was no ascites nor any general œdema. The uterus was extremely small, and hardly more developed than in a very young child; the ovaries were natural.

Case 2.—H. C., aged 12 years, was admitted into the Craven Ward on August 2, 1869. He had always had good health, and had never suffered from any previous illness. On July 24 he complained of pain in the left side of his head, but had no convulsions. On August 1 he ate a large quantity of fruit, and in the night his mother was alarmed by hearing him scream out. He was soon afterwards brought to the Hospital in a state of complete insensibility. On admission he was a strumous-looking lad, and his fingers were much clubbed. He lay on his back, breathing in a stertorous manner. His left eye was much suffused, and the pupil larger than the right one; there was also a slight convergent squint, but this he was said to have had for a long time. There was no paralysis either of the side or face, nor had he any fits, but occasionally he moved his limb in a restless manner. All over the chest were heard mucous râles and sibili; the heart's action was quick and irregular, but no bruit could be heard. There was no rise of temperature nor any *tache cérébrale*. An aperient was given and also an enema of castor oil. By these means a large quantity of undigested food was brought away. After this he seemed a little better, and could swallow a little milk. In a few days the temperature began to rise, and continued to

do so during the rest of his illness. It ranged from 99° F. to 103° F., and at times the daily variations were great, there being as much as two to three degrees between the morning and evening observations.

August 5.—His face was pale, and the pupils nearly equal, but they acted sluggishly to light. The lung sounds were now quite normal, and he seemed to be rather more conscious, and could take his food better. The pulse was irregular and rapid, and the heart's action stronger than usual. He was placed on beef-tea and milk diet. There were no convulsions nor twitchings of the limbs, nor did he vomit at all until towards the end of his illness.

10th.—He seemed more sensible, and could take his food better. He knew when his meal time came, but could not ask for anything. At first he passed his motions unconsciously, but now he had control over his rectum and bladder. His face was now noticed to be slightly paralysed on the right side, and the right arm and leg were motionless. This was more marked afterwards, but at no time was the facial palsy complete. It was difficult to make out whether sensation was impaired, as he was in such a stupid condition. It was observed also that he never used any other word than "water." Whenever he wanted anything or recognised anybody, he always said "water." Not being able to write, it was impossible to make out how far his handwriting was altered.

No marked change occurred until the end of the month, when his temperature rose higher, and he was occasionally delirious. His tongue, which before was moist, was now brown and dry, and his lips and teeth covered with sordes. He was never convulsed, but his left arm and leg were at times drawn up. The last day or two of his life he lay perfectly unconscious, in a state of low muttering delirium.

A post-mortem examination was made twelve hours after death. The body was much emaciated, and of a sallow tint. On opening the skull, the dura mater was found normal. There was some soft recent lymph over the anterior part of the frontal lobes on either side of the falx cerebri. A little fluid was found at the base. All over the base there was recent lymph glueing the parts together, and most abundant along the course of the nerves and large vessels. No grey tubercular deposits were met with anywhere. The ventricles were much distended with fluid, and their lining membrane thickened and softened. There was some soft lymph over each choroid plexus. On the left side in the middle lobe was a clot of firm coagulated blood as large as a plum, and nearly circular; internally it was bounded by the optic thalamus, which was partly destroyed by the surrounding softening; externally it extended to within half an inch of the circumference; in front it had partially destroyed the frontal convolution. Around the clot in every direction, for about half an inch, the brain tissue was much softened. There was no atheroma nor plugging of the arteries at the base, but they could not be dissected easily because of the adhesions. No aneurism was found, nor were the venous sinuses plugged. Both lungs were congested, and the right base was in a state of red hepatisation; it was red and granular on section, and sank in water. Attached to the aortic and mitral valves were large recent vegetations; some also were attached to the chordæ tendineæ, and had a loose free extremity, from which a portion could be easily detached. There were no clots in the heart, and no disease existed in the large vessels. In the left kidney was a puckered cicatrix; in other respects the kidneys were healthy. All the other organs in the body were quite healthy.

THE ROYAL FREE HOSPITAL.

OPERATION FOR REMOVAL OF LARGE TUMOUR WITH DEEP ATTACHMENTS FROM PAROTID REGION.—CASES IN THE WARDS.

(Under the care of Mr. JOHN D. HILL.)

We were present on Friday, January 14, to see Mr. Hill operate on a man with a large tumour in the parotid region. The case was one of considerable interest, and we shall hope to lay it before our readers in detail on a subsequent occasion, briefly noting here its chief points only. The man was aged 48, in fair general health, but for twenty-five years there had been a slowly increasing swelling in the left parotid region. Of late the growth had become more rapid, and when he saw him, a large firm tumour the size of a fist projected from behind the left angle of the jaw. The left eye was slightly inverted, and the left tonsil pushed over to the right of the middle line, whilst the finger in the mouth felt a firm projection of the left wall of the pharynx. The voice was laryngeal, the floor of the auditory passage raised, and the tumour could be scarcely moved in any direction. The skin was quite free, however, and there was no lymphatic implication. One point of difficulty was offered by the external carotid, which, pushed in front of the mass and towards the middle line, pulsated strongly, and gave one the impression also of diffused and lateral expansion, apparently more than could be accounted for by mere flattening out of the vessel by the growth beneath. Several Hospital Surgeons had expressed themselves as opposed to any operative interference, including, we believe, Mr. Hill's colleagues. The man wishing something to be done, however, signed a formal request for an operation, taking all risk upon himself; and Mr. Hill consented to attempt the extirpation.

Chloroform was administered, but very indifferently borne by the patient, and Mr. Hill made a long vertical incision over the tumour. Careful dissection through the expanded fasciæ and muscles, brought him down to a thinly encapsuled firm lobulated mass, which, when cut into, presented a pale, not very succulent, sarcomatous-looking structure, clearly not infiltrating surrounding parts, but dipping very deeply and firmly attached to subjacent bony prominences, so that it could not be shelled out, as so many of these parotid tumours may be. Mr. Hill removed the bulk of the mass cleanly enough after much patient dissection, and then the curious feature in the case presented itself. Springing from the main bulk of the tumour were several spur-like prolongations, each apparently made up of similar tissues to the body of the growth, generally about the size of swan-quills, and with smaller short projecting branches proceeding from them not larger than crow-quills. These singular offshoots of the tumour plunged deeply amongst the important structures about the triangles of the neck, and were firmly fixed to the hyoid bone, the transverse process of the first cervical vertebra, and the mastoid process, and were only removed by dint of exceedingly careful dissection. The whole operation lasted about an hour, but, as far as could be seen, all the growth was removed, although necessarily piecemeal, and as there was comparatively little blood lost, the result so far was satisfactory. We have since learned, however, that the man died on the second day with œdema glottidis.

Mr. Hill was good enough to allow us to take away portions of the growth for examination. The whole tumour, if it had been removed entire, would have presented much the appearance of a good-sized potato with unusually large and succulent roots springing from it. A rapid microscopic survey of the structure showed the bulk to consist of fibroid tissue, here in the form of small awl-shaped and round cells, there in an open meshed web, or in the parallel wavy lines of pure fibrous tissue, and imbedded in this stroma were some scanty bits of glandular tissue with well-marked acini. The outspringing portions seemed to be made up of much the same structure, but without any glandular growth; and in both parts of the tumour signs of chronic inflammatory changes were evident. The naked-eye appearance of the offshoots was that of pure adipose tissue, but there was no trace of fat visible in them under the microscope.

We saw in the wards some cases under Mr. Hill's care of unusual interest, which will be reported at a later period. Thus, there is a good case of Wood's operation for the radical cure of hernia in a young man, in which, so far—10th day—everything is making satisfactory progress. In the next bed is a case of excision of the knee in a lad, in which the operation has been required twice. After the first excision, although every care was taken to secure good apposition and perfect rest, the union was tendinous, and left a flail-like limb. Mr. Hill, therefore, cut down again and removed the ends of the bones, arranging the limb on a splint, insuring absolute rest, and this time the result seems likely to be good.

In another ward is a young woman who met with severe injuries in a fall from a vehicle, in which, besides many bruises and some broken ribs, the knee-joint was torn open, probably by coming in contact with the iron step, and the end of the femur fissured. Mr. Hill at once excised the joint, fashioning the incision from the wound, and the case is now doing very well. One other interesting piece of surgery in the same ward is a case of a large aneurism by anastomosis occupying the greater part of the right side of the scalp of a young woman. When she presented herself at the Hospital, some time since, there was a large and strongly pulsating tumour over the ear, with dilated and tortuous arteries feeding it from below, in front and behind. It was suggested either to ligature the whole mass, or to tie the common carotid. Mr. Hill preferred, however, to go to work slowly, taking up the various feeding vessels one by one, commencing with the temporal just in front

of the meatus auditorius. This was tied, and several other vessels have since been obliterated by pins passed beneath them. There has been some suppuration excited at two or three of these points, but no constitutional disturbance, and the swelling, now hardly perceptible, has no impulse remaining, or at least none as the girl lies quiet in bed.

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Medical Times and Gazette.

SATURDAY, APRIL 2, 1870.

THE LATE MEETING AT THE ROYAL COLLEGE OF SURGEONS.

Never did the promoters of a meeting convened for a party purpose suffer a more humiliating defeat than did those who organised the gathering at the Royal College of Surgeons on Thursday week. Great efforts had been made to insure a success. Gentlemen from all parts of the country had been privately requested to attend, and the programme was kept so profound a secret that even the President of the College did not know the nature of the resolutions that were to be read and discussed. The object of this secresy was sufficiently plain. It was to prevent the general body of the Profession from knowing what was about to be done, in the hope that a resolution which the great majority of the Fellows and Members of the College would regard as dangerous not merely to the College of Surgeons, but to the best interests of the Profession, would be carried by a surprise. The skill of the manœuvre was evinced by the fact that the first resolution presented to the meeting was one of such a character that there could be no opposition to it. It was carried unanimously. The second resolution, however, had a very different tendency. Its object was to annihilate the power of the colleges and corporate bodies by taking out of their hands all participation in the examinations which are to admit candidates into the Medical Profession. Notwithstanding that the mover of this resolution was Mr. Nunneley, of Leeds, and that it was seconded by Mr. Brudenell Carter, it was received with unmistakable disfavour and denounced in vigorous, but not too vigorous language. Complaints were made, and justly so, against the mode in which the resolutions had been smuggled into the meeting, and against the "hole and corner" manner in which they had been framed and sent, marked "private and confidential," to presumed friends of the motion. Anything more irritating to the members of a liberal profession it would be impossible to conceive, and it reflects little credit on the tactics of the party which, for want of a shorter word, we will call the revolutionary. But the bulk of the meeting were determinately opposed to the motion, and would have rejected it by an overwhelming majority had they not wished to discuss the subject at leisure and give time for the calling of another and larger meeting. To the framers of the resolutions this conclusion must have been as unsatisfactory as it was unforeseen. It seems evident that anything like fair discussion had never been contemplated by them. An adjournment, however, of the meeting was eventually carried, and, for the present, this scheme of annihilation will rest. After the disastrous defeat of the revolutionists, it is not likely that they will be anxious for another meeting, but we trust, in the interests of the Profession, that meeting will be held. It does not consort with an Englishman's love of fair play for resolutions to be concocted in secret, and kept secret until the very moment he is called to decide on their merits. We, "the people of England," may do very well to get up some little petition on some little grievance, but the "Tooley-street" gentlemen must not be entrusted with the drawing-up of resolutions affecting the most important interests of society.

Suppose, in the case before us, the meeting at the College had been a very meagre one instead of one of the largest gatherings that ever assembled in the theatre. A small but noisy party might have succeeded in carrying the offensive resolution, and it would have gone forth to the public as the opinion of the Fellows and Members of the Royal College of Surgeons!

Now, we do not believe that one Fellow or Member in twenty, if they were canvassed, would vote for the second resolution submitted to the late meeting. Hence it is of the greatest importance that the next meeting should be a large one, and that the utmost publicity should be given to the time at which it is to be held. It is time that the busy little knot of persons who are constantly urging on the destruction of the College should be made acquainted with the fact that they do not represent the Members and Fellows at large; that the Profession of Medicine is, thanks to the maligned corporations, too highly educated a Profession to be eager for change merely because it is change; and that however anxious, and rightly anxious, that Profession be for reform, it is no less determined to conserve all of good in its time-honoured institutions, and, above all things, its own independence and freedom from Government interference.

OUR OUT-PATIENT SYSTEM.

The gravity of the situation as regards our system of gratuitous relief to out-patients at Hospitals and Dispensaries could not, we think, be enforced in a more striking manner than by the number and position of those who attended the meeting held to discuss the subject in the rooms of the Royal Medical and Chirurgical Society. A full report of the proceedings at this meeting is published elsewhere in our columns, from which it will be seen that almost all united in blaming the system as it now exists, as the origin of "unnumbered woes" inflicted on both the Profession and the public.

At the root of the whole matter lies this:—Two sets of people now receive advice and assistance who ought not; they are those who can afford to pay and do not, and those who cannot afford to pay either for food or medicine, and who ought to apply to the parish. Between these two classes—actual paupers and those who can well afford to pay for both advice and medicine—there is a third, fit subjects for Medical relief. They are those who, struggling to do the best they can, are liable to be overtaken with sickness which may land them in beggary. To these it is right and proper that a helping hand should be extended in their time of trouble to save them from the evil fate which would otherwise overtake them. The question is, whether the Medical relief afforded to these should be absolutely gratuitous, or whether they should be expected to pay what they can for it—in other words, whether our out-patient departments and dispensaries should be *free* or

provident. Practically, we suspect this means whether our Hospital out-patient departments are to remain, as they now are, liable to abuses, or are to be swept away entirely, for the provident system applied to them has been found to work exceedingly badly. Of late years these departments have increased enormously in our various metropolitan Hospitals, and in the meantime it may be as well to limit our observations to those departments, leaving the subject of dispensaries for future consideration.

It is curious to note, in the discussion to which we have referred, the ignorance prevalent among men as to the mode in which out-patient departments are worked in our various Hospitals. It was almost universally assumed that the whole of the cases assigned to any one Physician or Surgeon were not seen by him, but, partly at least, by some subordinate working under him. This system certainly does exist, and where it does exist it is blameworthy, but it is not universal. There are Hospitals where every case coming under the care of any man is seen by him, and by him alone. It is, therefore, unfair to characterise this as part and parcel of the out-patient system. Where it exists, it is the fault of men themselves, and in their hands lies the remedy. They ought to receive no more patients than they can attend to personally.

Perhaps our out-patient departments are more liable to abuse than are dispensaries, for the reason that they are more numerously attended, as well, perhaps, that the men attached to them are better known by name than are the others; for this reason they are more sought after. Undoubtedly persons come as out-patients who are in a position of life which would lead us to anticipate that they could well afford to pay both for advice and medicine. Sometimes this is quite true, sometimes only apparently so. For the former class there is no excuse; in the case of the latter many things have to be taken into consideration. But it must not be forgotten that Medical men have themselves encouraged the attendance of the former class for their own peculiar benefit. This, however, much more in special than in general Hospitals. If, indeed, the whole matter be closely investigated, we shall find that selfishness is at the bottom of a great part of the mischief, and as we can hardly expect to get rid of that quality we can scarce dare hope for a remedy against our present evils. The great object the majority of men have in becoming attached to a Hospital is to make a practice, and this object they pursue undeviatingly. Accordingly the patients who best suit their purposes are those who, when too ill to come to the Hospital, will send for the Hospital Physician or Surgeon to attend on them. Such a state of matters we *know* to exist. Then, again, in this class of patients one member of the family may have plenty of time on their hands, and can afford to wait for two or three hours at the Hospital before being seen. Another may be too busy or too ill to wait long; then the Hospital Practitioner will be either visited or sent for. Then, again, there is another consideration as far as our Hospital schools are concerned. The men attached to these have a reputation to make by writing or by teaching; either way, a *good case* is of value to them, and, as a rule, they will not stop to inquire whether the patient is exactly fitted for Hospital relief, if the case be one likely to prove of value. Trading on this principle, there are a certain number of people who actually live in our Hospitals, when dismissed from one applying for admission at another. In a well-managed Hospital the out-patient department ought to afford the greater portion of the teaching material in the wards, appropriate cases being drafted from the one to the other, and hereby a loophole is afforded whereby persons, both above and below the proper status for Hospital relief, may become a burden on the charity for the benefit of the school. This, however, does not constitute the most crying evil. It is on the general Practitioners that our present system tells most heavily; patients having found their way to a Hospital where there are no six-months' bills are apt to find their way back again. But neither are these gentlemen wholly innocent; if the Hospital Physician and Surgeon have, unwittingly no doubt, been helping to injure the general Practitioner, the latter has been aiding and abetting in his own destruction. It is no uncommon thing for a Practitioner to bring or send a patient to the Hospital for Medical or Surgical advice, the Physician or Surgeon receiving no fee. He can hardly be surprised if the patient, the next time he is taken ill, thinks it good to get rid of the Practitioner's bill also, and goes to the Hospital on his own account.

In short, Physicians, Surgeons, and general Practitioners, in their narrow policy, have been doing their best to kill the goose that lays the golden eggs, and it is only the present general stagnation of trade which is affecting our Profession as well as everybody else—which is driving people who could formerly well afford to pay large fees to our Hospitals for relief—that has brought matters to a crisis.

What then is to be done? We cannot sweep away out-patient departments. In the first place, it would be useless, for the next day the evil would rise up in a more rampant form than ever, and men must be taught their profession. The provident scheme which some look upon as a panacea, when applied to out-patient departments, has not answered. There is this radical defect in it: it implies a thorough inquiry into the social status and condition of all allowed to participate in its benefits. Any one who knows aught of our out-patient system in London knows that to be impossible. We are powerless to alter the system, which some contend we ought to do. We can only make the best of what is not, after all, radically bad. We must do what we can to restrict our Medical relief to those qualified for its reception.

As matters now stand, every general Hospital in London is practically free. The only necessary qualification for one applying for relief is to be ill, and this, upon the whole, is right; for it would be terrible to think of one really suffering being turned away from the doors of our Medical charities without some attempt at relieving his distress. But there is a limit to this, and at certain Hospitals the judicious rule prevails that patients coming casually are entitled to advice and medicine that time, but on coming again they must be provided with a subscriber's order. Such an order does not necessarily imply the highest degree of fitness, but it is something of a restriction, and to that amount it does good. At the Hospital for Sick Children additional restrictions have been introduced. Each patient has to be certified as fit by two separate individuals previous to being seen the second time; but, as Mr. Thomas Smith tells us, they are already finding out how to evade this law. Upon the whole, the plan is a good one, but, to be effectual, it must be carried out properly, and for this purpose the machinery is defective. If in each case inquiries could be made similar to those instituted by the societies which have been so successful in repressing mendicity, a great advance would be made. Were it possible in this great city of ours to institute polichnics such as exist on the Continent, many abuses would be obviated; but in such an unmanageable wilderness of brick and mortar, we fear the system would not answer, and that we must struggle on against our difficulties as best we can.

There is one other matter worthy of general attention. It is customary at certain institutions for the officer sitting to sign sick certificates enabling the applicant to obtain relief from his club. Against this system we most earnestly protest. It constitutes one of the greatest inducements for lazy fellows who have not much the matter with them to come and spend their time in our out-patient rooms. It besides deprives the general Practitioner of a fee which legitimately is his; and there is this further to be noted, that, the certificate once signed, the patient is seldom seen again. He came to the Hospital for a sick certificate, not for medicine, and he has got what he wanted.

NATIONAL RETURNS OF SICKNESS.

A GREAT point has been gained by the agitation which sanitarians have been carrying on for some years in favour of the collection and publication of statistics of sickness, as distinguished from statistics of mortality from disease. There is, on all sides, now a practical unanimity upon the question of expediency. There is no doubt in the mind of anybody that this will be one of the recommendations which the Sanitary Commission will make when their report is issued. It would indeed be a pity if so fair a prospect were destined to be blighted, or its fulfilment deferred, by any want of unanimity as to the details of so important a measure. Yet, at the present time, there are at least two different schemes proposed and advocated with some zeal. One of these has been put forward by Dr. Richardson, and has the support of the Medical Society of London, of the Association of Poor-law Medical Officers, and of the St. Andrews Graduates' Association. It is also said that it has the support of the Metropolitan Association of Medical Officers of Health, but upon this we are not quite clear. They have given no decision upon the relative value of the two schemes. Dr. Richardson's plan is the most extensive and elaborate, and involves the return to a central office of a number of facts relating to each individual case of sickness coming under the notice of each Poor-law Medical officer, and, where it can be obtained, of each officer of a charitable institution giving Medical relief. No doubt such elaborate statistics would be unique and of incalculable value to science; they would clear up many points upon which at the present time much difference of opinion prevails, or in respect of which we are now in the blindest ignorance. The analysis of these facts would, on his plan, be a labour imposed upon the central metropolitan office. There is, however, in the opinion of Mr. James Lewis, who, as an active, well-known, and very intelligent member of the Registrar-General's staff, speaks with authority, this insuperable objection—namely, that it is impracticable, or rather, we should say, inconsistent with the proposal to publish at short intervals the results of the statistical analysis. Mr. Lewis, in a paper read before the Social Science Association on the 21st inst., upholds this view by arguments which appear to us conclusive. His experience of such work has convinced him that no force at the central office coming within the limits of probable attainment could effect what is proposed. There is one object to be gained which stands higher in importance than even the scientific one; and this is the *immediate* diffusion of such information about sickness as may be at once available by officers and boards of health intrusted with the arrest of disease. No plan ought to be entertained for an hour which is not compatible with this, and which does not avail to put one part of the country or one district on its guard against disease advancing towards it from another district. Hence, although Mr. Lewis is less ambitious, we confess to a preference for his plan, which, while it has been proved to be practicable, meets the most important requirements of the case. He takes, as his example of returns, those now prepared and published by the Manchester and Salford Sanitary Association, by Dr. Ballard for the parish of Islington, and by Dr. Philipson for Newcastle, in which the cases of certain specific forms of disease are enumerated, together with the total cases of sickness occurring within very limited periods of time, such as weekly or monthly. He believes that such an analysis might be prepared and published weekly by a very moderate and comparatively inexpensive addition to the staff of the General Register Office; and the return might be extended, as circumstances may show to be practicable and expedient, to other details, such as those which Dr. Richardson suggests. If we cannot get a whole loaf, surely we ought not to despise a slice out of one. This is a scheme the practicability of which is apparent, and has been proved in the instances referred to, and also by the fact that a return of this nature was published weekly for a short time by the Medical officers of health in London, embracing the entire metropolis. It only fell through from the withdrawal of a Government contribution towards the printing expenses. Mr. Lewis says:—

"What I propose is that, directly the workhouse or district Medical officer has ascertained from his relief-book the number of new cases of disease occurring within the prescribed interval, and has recorded that information for transmission to the central office, the sheets of his book containing the details of each case for the week or other interval should be then at the disposal of the Medical officer of health of his district. . . . The principle I advocate is the retention of the *details* for local use, and the transmission of *summaries* only for use at the central office. But then I would call upon the district Medical officer of health to publish an annual report in which all the topographical, geological, meteorological, and other particulars that Dr. Richardson or any other scientific investigator of the etiology of disease might wish for, should be given. I think such annual reports should be made upon a uniform plan properly laid down by competent authority."

A very brief time only can elapse, in the present state of public opinion, before Medical officers of health will exist in every district in England. Three points of importance would be gained by Mr. Lewis's scheme—local requirements would be satisfactorily met, science would get its due, and there would be a prompt despatch of returns to the central office and a rapid diffusion of important information throughout the country. And nearly all this could be set agoing at once.

THE WEEK.

TOPICS OF THE DAY.

WE have on several occasions had pleasure in expressing our sincere respect for the motives which have actuated Sir John Gray in his efforts in the cause of Medical reform. We could not but be heartily glad that an independent member of Parliament should turn his attention to the subject, and, after making himself acquainted with the points where reform seemed necessary, should embody his opinions in a Bill which has been read a first time in the House of Commons. The Bill itself, however, we found on examination contained so many objectionable provisions, and so many silly and impossible ones, that, whilst giving its author all credit for his good intentions towards a Profession of which he was once a member, we could only hope that his bantling would be at once and quietly laid to rest amongst the massacred innocents of the session. The debate of Wednesday leaves no doubt that such will be its fate. We only regret that Sir John Gray, in moving the second reading of the Bill, should have damaged the cause which Medical reformers have at heart by indulging in exaggerated statements and highly coloured pictures of the present state of Medical education and examination which are certainly—as far as Medical education and examination in England are concerned—not supported by facts. The standard of Medical and Surgical examinations in England is not a low one, and it is yearly becoming higher. The principle of practical and clinical examinations has been accepted by, we believe, every examining board in this division of the kingdom, and it is everywhere rapidly being carried into practice. No better proof of the improvement which has taken place in the preparation of students can be offered than the statistics of the examining boards of the public services, which show a very large decrease in the number of rejected candidates. If the statements made by the Dublin Surgeons whom Sir John Gray quoted be true, it certainly is testimony damaging to the examinations in that city, with which these gentlemen may be presumed to be best acquainted. From our knowledge of examinations in England, we are certain that "a Dublin Surgeon of rising eminence" either overrates vastly his own powers as a teacher or the powers of students of average ability. Of course, the statements made by Sir John Gray were allowed to pass uncorrected in a non-Medical assembly like the House of Commons;

but we have no hesitation in saying that they are very far from representing the true state of Medical training in this country, and that they damage instead of benefiting the cause of real reform.

If we may judge from a letter which we published last week, the Executive of the Medical Reform Union experiences a considerable difficulty in obtaining from the 9700 gentlemen who signed the memorial presented by Messrs. Bell Fletcher and Gamgee to the Home Secretary, a sufficient sum of money to cover the expenses of procuring their signatures. It would certainly seem that the nine thousand and seven hundred gentlemen who signed the memorial were not very warmly interested in its contents, or that they are not anxious to identify themselves with the acts of the Executive of the Association who, as in the circular on which we recently commented, have thought it advisable to urge on what they think to be the cause of Medical reform by bringing unwarrantable charges against the existing Medical institutions of the country. We are sorry to see in a pamphlet(a) on Medical reform by Mr. Sampson Gamgee, the Vice-President of the Medical Reform Union, the same tone of hostility to the Medical corporations maintained. That gentleman, indeed, allows "that further inquiry and discussion are desirable," and inquires "whether the respective corporations can be made use of in the cause of progress." He suggests that a large meeting of the Profession in London should be convened to discuss the whole subject. But, as we have said, his pamphlet is marked by a spirit of unreasoning hostility to institutions which, whatever their faults, have alone raised the Profession to its present status, and which are still the only bodies which in any adequate way represent the Profession in the eyes of the public. We quite agree with Mr. Gamgee in thinking that the time has come when those who possess the diplomas of these institutions should have a voice in their management. We are also glad to see that he recognises the possibility that representation of the Profession in the Medical Council through the licensing bodies may be more desirable than direct representation. To our minds, as we have repeatedly stated, the only plain and direct course to the settlement of the whole question is the formation of conjoint examining boards in each division of the Kingdom. By this plan a large and needed reform will be completed, whilst all that is valuable in the time-honoured institutions of the Profession will be retained and utilised. Looking at the English scheme for such a board to which we have so frequently had to refer, it is an utter misrepresentation to say that the main part of the fees of the candidates will go to support the corporations. Fully half will be paid to the examiners in modest salaries which will barely remunerate their time and labour, and a large portion of the remainder will be directly spent on the Profession in the maintenance of the Hunterian Museum and the library of the College of Surgeons, Professional institutions of which if advanced Medical reformers do not appreciate the value, we think it will be generally allowed that a different reformation from the one they contemplate is urgently needed.

The promise of Mr. Forster that the Lord President's Bill will be introduced into the House of Lords at an early date gives hope that the Bill may yet be got through both Houses after Easter. It is understood that the committees of the Royal Colleges of Physicians and Surgeons have communicated with the Universities on the subject of the claim of the Society of Apothecaries to some share of the examinations in Medicine. We stated our opinions on this subject last week, and we maintain the justice of our conclusion. It must be clearly understood that it is not the Apothecaries' Society which is offering an impediment to the completion of the arrangement. The College of Physicians, by making the claim to monopolise the examinations in Medicine, is seeking to deprive the Apothecaries' Society of a right which it has exercised to the benefit of the public and Profession for fifty-five years, to place the examination of the general Practitioner in the most important branch of Medical science in the hands of the Consulting Physician alone, to override two Acts of Parliament, and to place in an inferior and damaged position the possessors of the licence to practise Medicine of the Apothecaries' Society. We hope that the Senates of the four British universities, and especially the Senate of the University of London, which has established a high claim to be heard on Medical matters, will, if called upon to express an opinion on the subject in dispute, give the question a calm and unprejudiced consideration. If the matter is to be decided on the common principles of justice and equity—to say nothing of liberality and consideration of services rendered to the cause of Medical education—the Apothecaries' Society need not fear the result.

(a) Medical Reform: The Present Crisis. By Sampson Gamgee, F.R.S. Edin. London: John Churchill and Sons.

The Senate of the University of London were engaged on Wednesday in selecting, from a list of 112 candidates, a gentleman to fill the somewhat valuable office of Assistant-Registrar to the University. The choice of the Senate fell on Dr. T. A. Hirst, F.R.S., Professor of Mathematics in the University of London. We believe that a committee of the Senate had selected another gentleman from the long list of candidates, but the Senate declined to ratify their choice.

Since we last noticed the case of Dr. Williams *v.* the Duke and Duchess of Somerset, the town has been surprised by an announcement in the *Times* from Messrs. Beachcroft and Thompson, the Duke's solicitors, that they had neither seen nor approved the letter to which their names were appended which appeared in the *Times* of Wednesday, March 23, and on which we commented last week. It could, indeed, scarcely be credited that the respectable firm of attorneys who conducted the Duke and Duchess's cause were the authors of the letter in question, as it denied that the Duchess was the writer of a note published in Dr. Williams's pamphlet, which, however, her legal advisers admitted to have been from her. The case, however, as it at present stands, needs explanation. We suppose that the letter in the *Times* was not a silly hoax, but that it must have emanated from the ducal family. If so, it opens a new view of the relations between the nobility and their legal advisers. Ordinary clients certainly do not venture to append their lawyers' signatures to documents intended for publication without their knowledge and leave. Some explanation, either at the hands of the Duke or of Messrs. Beachcroft and Thompson, is necessary to remove the very unpleasant impression left by their repudiation of the letter. Our readers will thoroughly appreciate and respect the high tone of Professional honour and independence pervading the letter from Dr. Williams which we publish in another column.

The Metropolitan Branch of the British Association is shortly to be convened for the purpose of discussing Medical reform. An attempt is to be made to resuscitate the committee of the Branch, which more than a year back was empowered to investigate and report on the present Hospital and Dispensary system, but which, in the absence of any sign of life, was generally believed to have been stillborn.

A serious outbreak of scarlatina has taken place at Marlborough College. The healthy boys have been sent home.

Dr. Philip John Hensley has been appointed Assistant-Physician to St. Bartholomew's Hospital.

Mr. Henry Arnott is a candidate for the Assistant-Surgeoncy to the Great Northern Hospital.

At King's College Sir William Fergusson has resigned the Professorship of Systematic Surgery, but it is generally understood he will be appointed to a chair of Clinical Surgery. Mr. Partridge has resigned his post of Surgeon to King's College Hospital, creating a vacancy, which it is understood Mr.

John Wood will be elected to fill. It is said that Mr. Wood will succeed Sir William Fergusson in the chair of Systematic Surgery. Mr. Royes Bell will probably have the vacant Assistant-Surgeoney. The Demonstratorship of Anatomy to be vacated by Mr. Wood will, we believe, be divided between two of the anatomical staff.

THE MIDDLESEX HOSPITAL CLUB.

THE annual meeting of this club took place in Willis's Rooms on Wednesday, Oscar Clayton, Esq., in the chair. There was a large attendance of old students of the Medical College and of the staff. After the usual loyal toasts had been given from the chair, it was stated that the club possessed a handsome surplus which promised well for its future. The Chairman, in proposing the toast of "The Army, Navy, and Volunteers," stated as a remarkable fact, that the Victoria Cross had been bestowed in greater proportion on Medical officers than on combatants. The resignation of the secretaryship by Mr. De Morgan was received with expressions of great regret. Mr. De Morgan, Mr. Taylor, Dr. Murchison, and Dr. Greenhow were appointed the committee for the ensuing year, and Mr. Nunn Secretary.

RETURNS OF CUPPING IN THE ARMY.

ACCORDING to a return just presented to Parliament from all regiments and corps now quartered in Great Britain of the men cupped or cross-cupped in those regiments and corps during the years 1867, 1868, and the first four months of 1869, and the reason for the operation in each individual case, it appears there were—

	Cupped.	Cross-cupped.
For general diseases, subdivision A. .	3	1
Do., do., do. B.	94	115
Diseases of the nervous system . .	106	219
„ „ eye	36	21
„ „ ear	11	11
„ „ circulatory system .	114	91
„ „ absorbent system .	—	1
„ „ respiratory system .	171	96
„ „ digestive system. .	36	29
„ „ urinary system . .	24	13
„ „ generative system .	2	—
„ „ organs of locomotion.	26	13
Poisons	1	1
Accidental injuries	9	4
	633	615

Being a total of 1248. The strength of the army at home in 1867 was 73,420; in 1868, 78,261, and during the four months of 1869, estimated in the same proportion, may be taken to have been about 25,000; so that, in round numbers, the total strength for the twenty-eight months referred to was 177,000, among whom the total number of cases of cupping gives an annual ratio of ·70 per cent., a proportion which, taken in connexion with the small expenditure for leeches in military Hospitals, can hardly be said to prove the existence of the practice of indiscriminate cupping in the army, and still less to establish the truth of the shocking imputation of the operation being habitually performed for the purpose of branding soldiers previous to their discharge from the service.

FROM ABROAD.—THE VACCINATION PANIC AT PARIS—THE LAW ON MALPRAXIS—MEDICAL TESTIMONY AND EXPERTS.

M. JULES GUÉRIN's reiterated denunciations, at the Académie de Médecine, of the neglect of the Jennerian virus and the pursuit of the heifer virus, as if it had incontestably established its superiority, have at last borne fruit. Persons led away at first by M. Depaul's credulous reception of every tale that could be raked together concerning syphilitic infection by vaccine virus, are now beginning to see the consequences of the panic that was generated. An epidemic of variola of great malignity has for some time prevailed in Paris and other towns in France, and while the Jennerian virus is no longer obtainable owing to the neglect that has prevailed in keeping up the supply, its boasted substitute, which was represented as able to meet every emergency, has, in the hands of its very champions, utterly failed. Vaccination after vaccination has been performed without any effects, under circumstances in which human virus, if it could have been obtained, would have been certain to succeed. The failures of M. Lanoix at the Beaujon we noticed last week, and M. Constantin Paul, at the same Hospital, failed in twelve out of thirteen vaccinations! It is stated also that of the revaccinations performed on soldiers last year the successful cases were only 16 per cent., as compared with 32 per cent. obtained by human virus. The reaction which has set in Professional feeling against the heifer virus may lead at last to its utility being unjustly depreciated, and no doubt some of its insuccess is due to its hurried and unsuitable employment during the present panic; but, at all events, a lesson will have been learned as to the folly of hastily receiving denunciations against so well-proved an agent as the Jennerian virus, and the still more hasty acting upon these before their reality had been investigated. The mortality from variola at Paris, by the last returns, has somewhat declined, the deaths being only 81 for the week ending March 26 in place of 112 for the week ending the 19th.

In the *Boston Medical Journal* for February 3 we find an interesting account of a trial for malpraxis, in which a Surgeon was made responsible for the issue of a case which was treated by another Surgeon who "rented a privilege in his office," whatever that may mean, he having himself only seen the case in consultation. However, as the jury decided that there had been no ill-treatment at all, our object in noticing the case is to advert to the very clear exposition of the law of malpraxis laid down by the judge who tried the case, and a portion of which our readers may like to see quoted, applicable as it is to our own position.

"A person who publicly seeks employment and offers to act for a compensation in any trade or profession requiring preparation and skill is bound, when employed by another, so to act as to furnish not only ordinary care and diligence, but also ordinary and reasonable skill in his art and business. The rule in this respect is precisely the same in the case of a Physician or Surgeon as in the case of a lawyer, a carpenter, jeweller, etc. The act of publicly offering to render service as a Surgeon, for a compensation, for any person who may choose to employ him as such, is a warranty on the part of the person so offering that he has the proper and necessary skill, and that he will exercise that skill with the proper degree of diligence and attention. To accept employment in such a case is equivalent to giving an express assurance in words that he has the proper skill, and will exercise it faithfully.

"The Surgeon is by no means to be understood as giving a warranty that the patient shall get well, or as promising an absolute cure, unless he expressly and in terms so stipulates. Neither is he to be understood as professing extraordinary and unusual skill, or as claiming uncommon personal endowments or acquisitions. All that the law requires of him is ordinary skill in the particular business which he undertakes, and ordinary and reasonable care and attention in the use of that skill. The term 'ordinary skill and care' is to be understood as meaning such as come up to the usual Professional standard of the country and the period. Bearing these suggestions in mind, the jury are to make up their minds upon the alleged malpractice. The fact that the operation did not prove successful is by no means decisive of the question. What did the Surgeon in this case do that he ought not to have done, and what did he leave undone that he ought to have done? In other words, what was the specific mistake, if there was a mistake? What was the specific oversight or omission of which he was guilty? It being testified that, although the leg had been bandaged and kept in splints, in what some witnesses described as apparently a proper manner, and for the usual period, the bone had nevertheless failed to unite, the question for the jury to decide would be—'Had the failure to unite been proved, to their reasonable satisfaction, to have been caused by any unskilfulness, carelessness, or mismanagement on the part of the attending Surgeon, or was it, on the other hand, one of those cases which sometimes, though only rarely, do happen, in which the bones fail to unite, although the treatment of the case has been exactly according to the general understanding of

proper practice?' If the evidence offered left the jury in a state of uncertainty on the subject, so that they cannot say that the malpractice is made out reasonably by a preponderance of proof, it would be their duty to find for the defendant."

The number of the same journal for February 17 contains an admirable report on the subject of "Medical Testimony and Experts," made by a conjoint committee of the Suffolk Medical Society and the American Academy. The clashing and contradictions of Medical evidence excite as much dissatisfaction on the other side of the Atlantic as with ourselves, and the committee is desirous of favouring the efforts made to obtain some legislative changes in the mode of investigating both civil and criminal cases, although entertaining "grave doubts whether any law can meet all the contingencies of the case." After exhibiting the necessary defects and partisanship of the present system of each side choosing its own experts, and advocating that power should be conferred on the Court of nominating and liberally remunerating unbiassed persons of eminence, the committee make the following comments on Medical testimony:—

"1. A Medical witness would do well to remember that no one has a *right*, as the law now stands, to ask an *opinion* of him; that if asked for such opinion he may refuse to give it; and that, in order to throw doubt on his testimony, the opposing counsel will at times endeavour to entrap him into the expression of an opinion, and afterwards by subsequent questions to lead him to absurd conclusions, whereby his testimony, though strictly accurate, may be made to appear wrong in the eyes of the jury. 2. In the statement of facts your committee believe that it would be well to be as brief as is consistent with clearness. Moreover, the witness should, as far as possible, avoid all technical language. For example, a witness, when about to instruct a jury, will lose credit for clearness of statement, and may darken the minds of the whole court, by telling of the *scapula* instead of the shoulder-blade, or using *clavicle* for collar-bone, *sternum* for breast-bone, etc. 3. If he be not sure that he is really an expert in the matter in hand, he should beware of going upon the stand at all. If he does so, he deserves, and probably will get, a severe castigation from counsel, and he has no right to ask for sympathy from his Professional associates. He cannot blame lawyers for even apparent rudeness in their attempts to prove him before the jury to be the ignoramus he really is. 4. A Medical man should beware of allowing himself to be called into court, save as an independent witness, to give evidence upon the truth, the whole truth, and nothing but the truth. Your committee know of no act of villany greater than that which a scientific man commits when he voluntarily takes the witness stand, and then fails to act upon this noble rule. . . . Your committee believes that a really truthful expert will be fully alive to the honourable and important position that he will hold. He will come prepared not merely to tell the whole truth, but to see none of it is hidden through his evidence. He will be careful to prevent, if possible, any question being put to him which, by answering categorically, may hide a part of the truth; and if he perceives that counsel have that aim in view, he will answer with sufficient detail to reveal the truth in its wholeness. He will endeavour that no false interpretation shall be put by counsel presented by himself or others. And if opportunity be afforded him he will explain all facts in such a way as to make the truth appear in the fullest light. 5. The conceit and desire of self-glorification of some experts prodnce evil results. They deliver themselves more like professors from their chairs of instruction, and sometimes talk with less precision than is required in courts of law. Such exhibitions are apt to afford ample opportunity for subsequent criticism on the part of counsel. 6. Some, while on the stand, seem to forget the great difference there is between the statement of a fact, or of a series of facts, and the inferences that may be made from these facts. The facts should be given; the inferences may be left to the wisdom of the court or a jury to make. If a witness make them, he does so at the risk of severe criticism. 7. Some really scientific men are so prejudiced that the simple fact that another with whom they may have had some previous antagonism has expressed an opinion will induce in their minds a tendency to a belief precisely the reverse of that given by the opponent. Nothing can more effectually prevent one from arriving at exact truth than this mental quality, if brought to the witness stand."

PARLIAMENTARY.—MEDICAL ACTS AMENDMENT BILL.

On Wednesday, March 30, in the House of Commons,

Sir J. Gray rose to move the second reading of his Medical Acts Amendment Bill. He said its principal object was to amend the Act of 1858, the preamble of which stated that it was "to enable persons requiring Medical aid to distinguish between qualified and unqualified Medical Practitioners." That Act had grievously failed in its purpose, owing to the existing system of licensing Medical Practitioners. There were at present nineteen licensing bodies, each empowered to grant Medical degrees, exclusive of the degree conferred by the Archbishop of Canterbury, which made the twentieth. The result was that, armed with a bit of parchment, given rather in consideration of so many pounds sterling than of any real qualification in the possessor of it, a man utterly ignorant of his Profession might obtain leave to practise. Now, the object of the Bill was to insure ample qualifications on the part of all Practitioners; and it proposed a reconstruction of the Medical Council, giving a repesentation in it to the Profession at large, instead of a mere representation of the licensing bodies. At present the complaint made both in England and in Ireland was that if a man could not pass the examination at one college he went to another where the examination was easier, and that the licensing bodies competed which should grant the largest number of licenees, and therefore get the largest amount of fees. Memorials had been presented to the Home Secretary and the Medical Council signed by 9600 Medical Practitioners, some of great eminence, complaining of the want of representation of the Profession at large upon the Council, that there was no proper system of admission and licensing, and that the public suffered much through the admission of unqualified persons. It was proposed that, instead of allowing a man to be registered on the presentation of his licence and the payment of £5, he should be practically examined at the bedside, in the dead-room, and in the laboratory; and the memorials he had referred to declared that proof ought to be given, on a high standard of examination, that the applicant for the licence really possessed a competent scientific and practical knowledge of Medicine and Surgery. No one of the nineteen licensing bodies had the same curriculum; no two of them had the same system of examination; and they did not all require the same amount of attendance at Hospital, where alone the symptoms of disease and the mode of curing disease could be learnt. With few exceptions, none of them resorted to the practical test of bringing the candidate to the bedside and asking him to specify and explain the disease. A letter had recently been written by the noble Earl the President of the Council, in which he stated that no new legislation on this subject could be permanent or satisfactory unless it promised to effect a considerable improvement in the existing system and provided adequate and uniform security for the examination of candidates. He admitted that, under the pressure of public opinion, some of the licensing bodies had lately substituted an improved and really practical examination for that which they before required. But, even now, a Dublin Surgeon of rising eminence wrote to him:—"I would undertake to pass any candidate of average ability through any of the colleges which did not require a bedside examination in the space of, at most, six months, even assuming complete ignorance at the commencement, and that the candidate never had the slightest opportunity of learning anything connected with the Profession before." Having asked the President of the College of Surgeons in Dublin whether this could be true, the reply was:—A man who never entered a Hospital or dissecting-room, who never held a lancet or a scalpel in his hand, could get a degree from any of the colleges provided there was no bedside examination." A young man might have gone through his whole Hospital course, and yet never have dressed a wound or done any practical work whatever. At present no candidate for a Medical commission in the army would be received unless he could produce the two diplomas of Medicine and Surgery, and was subjected to a satisfactory test at the bedside. And even of these candidates with their double diploma, in the course of five or six years no fewer than 165 had been rejected for utter incompetence. Some of these gentlemen, when tested, proposed a dose for a man that would kill ten men, and others a dose for a child that would kill a horse. But so careful were the army authorities, that, notwithstanding the bedside test and the two diplomas, they required that the successful candidates should undergo six months of the most careful tutelary instruction before being allowed to practise on her Majesty's soldiers. According to the admission of all the licensing bodies, there

was now no sufficient test either of practical instruction or practical knowledge. The Royal College of Surgeons, Edinburgh, proposed to remedy this defect by obliging the student to spend three months as a dresser; but what would be said of a mason or shoemaker who had spent only three months in learning his trade? Now, one of the provisions of the Bill required that every student should be tested at the bedside, not only in the dispensary, where ordinary cases were received, but also in the Hospital, where the cases were of a more serious character, and unless he satisfied the examiner he should not be allowed to pass. Another object of the Bill was that the public might have the advantage which would arise from a State examination. At present negotiations were going on between the various licensing bodies, which were striving to have this State examination an ornamental adjunct rather than a reality. But if Parliament was going to deal with the Profession it should reorganise it thoroughly. The Profession itself, under the existing pressure, was anxious to organise itself, and to diminish the number of licensing bodies to something like five or six, or it might be three; but, whatever arrangements might be decided on, he hoped this one idea would pervade the whole, that whatever mode of access to the Profession might be open to one man should be open to all, and that no second door should be open to any. If they made three, four, or five licensing bodies, all they would do would be to reduce the present absurd number of nineteen. Let their great object be to secure that whoever was certified to the public under the seal of the State should be thoroughly proficient, and that there should be one examination for all, whether they might be students of London, Edinburgh, or Dublin. He begged to move the second reading of the Bill.

Mr. Graves, in seconding the motion, observed that the time was come when a great change was called for in the Medical Profession, and if any one required to satisfy his mind on that point, a reference to the remarkable petition emanating from 10,000 Medical men, and recently presented to the Home Secretary, would be sufficient. He wished to ask what became of the failures before the Army Medical Board to which his hon. friend had referred. Were men who were held to be unfit to deal with the lives of Her Majesty's soldiers allowed to go and practise on the civil portion of the community? As far as he understood, what was needed was that no one should be allowed to practise in the Profession of Medicine who was not found to be perfectly competent to discharge all its duties. The object of the Bill was to utilise the existing corporations. The competition had hitherto been downward; this Bill aimed at making it an upward competition. All the licentiates, when offering themselves for examination to the Central Board, would be required to produce a certificate from some one of the existing corporations, and honour or discredit would redound to those bodies just as their pupils were found to be well instructed or otherwise. If the same healthy rivalry could be brought about between these corporations as existed among our public schools, a valuable boon would be conferred on the Profession and on the public. Another object which it was desirable to attain was the opening to public competition of all the civil appointments of this country. Hitherto those appointments had been given by public patronage or personal influence. This Bill aimed at securing them for merit and capacity, and on this subject he could speak from personal experience. In Liverpool there was an important and increasingly useful Medical school, and many of the young men who had passed a distinguished career in it had applied to him to give them assistance in placing their foot on the first rung of the ladder of life. To young men of this kind the throwing open of the Medical appointments of the country would be an incentive of the highest kind. The hon. gentleman concluded by apologising for having taken up a subject outside those with which he was particularly conversant.

Mr. Brady moved the adjournment of the debate.

Mr. W. E. Forster hoped his hon. friend would consent to the adjournment. His noble friend Lord De Grey intended to take an early opportunity of bringing into the other House a bill having for its object to amend the Medical Acts, and under these circumstances the House would feel that it would not be fair for him to anticipate Lord De Grey's statement. (Hear, hear.)

Sir J. Gray acceded to the proposition, and expressed his readiness to withdraw his own Bill if the measure of the Government should be at all framed in a comprehensive spirit.

The motion for adjournment was agreed to.

MEETING ON THE SUBJECT OF OUT-PATIENT PRACTICE IN HOSPITALS AND DISPENSARIES.

Sir W. Fergusson, Bart., in the Chair.

Thursday, March 24, 1870.

A meeting for the consideration of the above subject was held in the rooms of the Royal Medical and Chirurgical Society on the evening of Thursday, March 24. The meeting was numerously and influentially attended.

The Chairman said they were all aware of the cause of the present meeting. Certain things required their consideration both for the sake of the Profession and for that of the public. Like most men, he had heard the matter extensively discussed, and he was glad to see so many present who were actively engaged in Hospital work. They would now have an opportunity of comparing notes. He thought they ought to consider the public as well as the Profession. There was an enormous amount of money given away yearly, and they ought to do as much as possible with it, and see that charity was not misdirected. He suggested brevity in the speeches.

Mr. Holmes Coote said he would endorse the statement that they ought to consider the two sides—public and Professional—of the question. In a letter to the *Times*, he had shown that half the population in London were in the habit of receiving Medical relief. This might not be quite correct; still, there were very many. He thought the Profession was to blame for not having grappled with the question before this, for the system was now extending even to villages. The only man forgotten was the Medical man in any scheme of charity. He could tell what was the effect of a Hospital on the Medical men in its vicinity—it swept them away. At Bartholomew's they used annually 900 gallons of cod-liver-oil, between 1200 and 1300 ounces of quinine, and 3 cwt. of ammonia. It was really food, or a substitute, which was mostly given away. Each officer ought, he thought, to be paid. Special Hospitals constituted an enormous abuse. At one he had brought to him a child which was described as being that of a soldier, but who turned out to be a *general officer*. General Hospitals ought to be free, but not abused. He thought the system of governors' letters good, as that implied some inquiry. He moved a resolution to the effect that our present out-patient system constituted a great and increasing abuse.

Mr. T. Holmes, in seconding the resolution, said there were certain aspects of the question which should not be passed over, besides the mere fact that many receive relief who ought not. A short time ago Mr. Hardy's Bill for the institution of parochial dispensaries had been passed; this ought to a great extent to abolish out-patient Hospital practice. He thought the first thing to be insisted on was that this Bill be put in operation, when a deduction would certainly be made from our out-patient departments. There were not, he contended, 1,000,000 sick people in London or anything like it, and any statistics on this point were altogether illusory. He contended that the relief afforded was really nominal; the time and attention given to each patient was insufficient. He had himself been ashamed of his own practice. What would we or the patients think if we saw them at the rate of 30 an hour at home? Was it worth while for a patient to wait four hours for the chance of seeing a man a minute and a half? It was incumbent on them to see that every patient was reasonably attended to, to see the patients themselves, and to see that the cases were proper cases. There ought to be a preliminary examination of patients. It was also a question whether the dispensing of drugs should not be given up and a system like the French *externats* introduced, where the patient received a prescription merely. At all events the numbers of out-patients must be diminished.

Mr. Henry Lee said there were still certain points to be considered. People thought that as many patients should be seen as possible; and we actually made patients. Just as under the old poor-law system every agricultural labourer was subsidised out of the poor-fund, we did the same, whereby we destroy the self-respect of our patients, injure our Professional brethren and even our own reputation. Indiscriminate private relief was quite as bad, and he cited a case in his own experience showing this. Fancy going to a barrister and asking his opinion as you had no confidence in your solicitor. The present system was pauperising people.

Mr. Liddle said everybody was acquainted with what had been said to-night. For his own part he thought all out-patient departments might be swept away, except for Surgical casualties. At the London Hospital people sent their servants to take and keep places for them till they found it convenient to come, and Hospitals catered to this. To show the incorrect character of Hospital returns, it was only necessary to point out that at some, after a month's attendance, each patient was counted over again. In his district there was a population of 76,000, and out of these 20,000 sick paupers. At the Hospital the staff could not inquire as to the position of patients; their time would not admit of it. Still they would do well to refuse medicine except they were certain of its being required.

Dr. Fuller said they were all agreed in one thing—they could not entirely do away with the system. No doubt there were many abuses, but one method had been tried with good effect at the Children's Hospital, whereby each patient was required to get a certificate that the case was a proper one. It was the ordinary practice to have the patient seen by another, but each man ought to see his own. He had himself refused assistance at St. George's Hospital. This was one primary reform. There must always be a large class requiring assistance, and it would be the duty of the committee to see that the charity was not imposed on. He mentioned the case of a dress-maker in good business who sent her children to the Hospital; still these cases could be met.

Mr. Curgenven said that last year there had been a meeting on this subject, and several suggestions had been made; one was to appoint a registrar to take and examine into each case. Patients could now walk in as they pleased.

Mr. Gant said that eighteen months ago he had tabulated the circumstances of the first twenty patients who came before him. These cases were venereal, in young unmarried men, with good wages. He had represented the matter to the committee, and the number was now reduced. The great majority of cases at the Royal Free were venereal. He thought if subscribers, especially ladies, knew how their money went, they would be more chary of their subscriptions.

Dr. Routh said, no doubt special Hospitals were abused, but they could never sweep away out-patient departments. In this respect they were powerless, but they could guard against imposition. There were men with an income of £800 a year sending their wives and daughters to his Hospital. If they did not receive benefit, he thought patients would not come back as they did. He had instructed the porter to ask certain questions—viz., the rent paid, whether they kept a servant, etc. If the rent was above £30, they were not seen till inquiry was made; the consequence was, such patients came to consult him privately. Such procedure might lead to deception, but probably they did not come intending to deceive.

Dr. Glover had taken pains to ascertain the social condition of certain of the patients at the dispensary to which he was attached. At the present time he was struck with the number of persons out of work; his difficulty was how they lived—he thought mostly by the exertions of the wife. He took twenty or thirty, and only one case was an improper one. Sometimes the family was unhealthy, and this, in the family of a working-man, was a serious matter. Many more men were on sick funds in the country than in London. He thought that tolerably high wages did not imply that the cases were improper ones.

Mr. Young thought that if provident dispensaries were taken up good would be done; in the one with which he was connected the alteration had been made and been found beneficial. We ought to help those willing to help themselves. He thought the letter system would not answer, and narrated a case in point which gave rise to much amusement.

Mr. Thomas Smith said that Dr. Fuller had alluded to the system in use at the Children's Hospital; it had done a good deal, but the better class of patients were beginning to find that governors' letters required no signature, and were preparing themselves accordingly by qualifying. He could not agree with Mr. Holmes as to the time required to see Surgical out-patients. A minute and a half was quite enough for a certain number. He then detailed his scheme for going through work.

Dr. O'Connor confirmed Mr. Smith. When he joined the Royal Free he found many great abuses, but these were now mostly remedied. The majority of the patients would be unable to pay an ordinary Surgeon, although they might contribute to a provident dispensary. He cited the case of a lady, the wife of a cashier in one of our railways, who had applied for relief. Great caution was necessary in deciding who was fit. Wages, he thought, was not the only criterion. He made a rule never to sign club certificates. Noble governors' letters were apt to be abused, as they were given signed to their servants and distributed at random.

Mr. Warwick thought Hospitals were for the treatment and relief of the poor. Governors' servants were treated, and they should not be. In some Hospitals a certain sum had to be paid weekly for such patients. Medical men had nothing to do with ascertaining the fitness of cases. Governors ought to do that. Every Medical officer should be on the committee of management of his institution.

Dr. A. P. Stewart said the resolution had been affirmed scores of times; it was so palpable that no one would dispute it. There had been two long debates on this very subject last year, and a committee had been appointed, but it did not go on. They ought to point out the remedy. He had sat waiting for the proposed amendment; they were surely ready for that now. The public were being awakened to the difficulty. People were too apt to set up systems, and, finding them absurd, to set about devising checks. They forgot that the system was in fault, not the checks. We must set up a new system. Now, patients came the first time and apologised, the second time they had no shame, and the third time they were brazen and ready to complain, if not properly attended to, with the sturdy air of a masterful beggar. As long as the present system lasted they must look for abuses. Responsibility might be shifted, but checks and counterchecks would fail. It was part and parcel of the great system of relief which was playing the mischief with England. The free dispensary was the first step downwards, the provident dispensary the first up. He proposed, as an amendment, that the difficulty of the situation can only be met by a system of provident dispensaries.

Dr. Stallard thought they should neither adopt nor reject the amendment. An expression of opinion alone was wanted now. Everything was to be referred to a committee. It was undesirable to commit ourselves in the meantime. He begged to endorse Mr. Holmes's statements. It was impossible to see more than twenty patients an hour, even with venereal cases, but the principle was wrong. Men ought not to be taxed so as to be compelled to see so many. Many did not go for medicine, but merely from a bad habit.

Dr. Drysdale seconded Dr. Stewart's motion. He would make every dispensary a provident one, as the Marylebone was now, and would appoint a Royal Commission to inquire into the state of our large Hospitals.

Dr. Yeo thought one point had not attracted attention—that was the value of the out-patient department to a school of Medicine—and narrated the system adopted at Guy's Hospital. The great thing was the selection of cases.

Dr. Oppert advocated the institution of parochial Hospitals.

Mr. Spencer Wells said Dr. Stewart's motion ought to come as an addition to, not as an amendment on, the first. If the pauper patients were cut off and those who could go to a provident dispensary did so, there would be little to complain of. Provident dispensaries had been started at Northampton and Rugeley; at the one upwards of £1200, at the other £370 was divided among the officers. He would add Dr. Stewart's motion as a rider.

Dr. Heywood Smith thought it should come from the Committee.

Dr. Anstie thought so also. It was not a question to be settled in a large meeting.

Mr. Partridge thought there was no difference of opinion except as to the best mode of attaining the wished-for result. There could be no single remedy, so that the question had better be discussed in Committee.

Dr. Fitzpatrick said the Committee should go to work like a Parliamentary one, and be empowered to take evidence and to report. The provident system had been rejected at the dispensary with which he was connected.

Mr. Cleveland thought the domestic servants of governors objectionable patients. Still many men favoured their attendance as leading to an introduction into the family.

Dr. Clapton was sorry Mr. Whitfield was not there, as he had gone deeply into the subject. He had drawn up a scheme, and a very wide one.

It was suggested that to Dr. Stewart's motion might be added, "and an improved administration of Poor-law Medical relief."

Dr. Pollock objected to the provident system, that it would not be satisfactory to the Profession. The out-patient system was popular among patients on account of the good men they could consult. The proposed scheme would only meet a certain class. To the decayed respectable class the system would be objectionable.

Dr. Dudfield suggested that the words "in great measure" be substituted for "only;" and in this shape the motion was carried.

Mr. Hancock moved, and Dr. FitzPatrick seconded, the formation of a committee.

A long list of names was read and suggested for this committee.

Mr. Birkett said he thought there was very little abuse of the out-patient system at Guy's. They would never be able to instruct their students without such a department.

Mr. Croft said the same of St. Thomas's.

Drs. Stallard and Heywood Smith were appointed conveners of the committee.

After a vote of thanks to the chair proposed by Dr. Stallard, the meeting separated.

REVIEWS.

Syphilis; its Nature and Diffusion popularly considered. By James George Beaney, F.R.C.S., Late Honorary and Consulting Surgeon to the Melbourne Hospital, etc. Melbourne: George Robertson. Pp. 303.

Of all subjects in the world, syphilis is the least fitted for popular discussion. The mere suspicion, to say nothing of the suggestion, of such a taint, is enough to give rise to intense domestic discomfort, such as we have known to occur on the appearance of some harmless rash on a child's skin, the mother's mind being under the influence of some of those nasty pamphlets so industriously circulated among us. For this reason we must regret the publication of Mr. Beaney's book. We are utterly at a loss to know where or when it can do good. Mr. Beaney's ostensible aim is to prove to the public that Professional men know at least quite as much about syphilis as quacks do. We are not of course familiar with the popular estimate of our Profession in Victoria, but in England we should say *cela va sans dire*. But how does Mr. Beaney propose to let the public know that Professional information is quite abreast of that possessed by quacks? Certainly not by giving his readers the most clear and colourless scientific descriptions, and by avoiding that sensational style of writing which serves to hide the ignorance while it catches the victims of the empiric. In proof of the truth of our criticism, take the following extract from the preface:—"To the Physician and Surgeon in extensive practice the Protean forms of syphilis are a source of hourly interest. In a large proportion of cases that come under their treatment the practised eye detects the mark of the destroyer in one or more symptoms. Its presence is discovered either internally or externally, where less skilled observers had not recognised it, and where even the patient himself had not the most remote suspicion of its existence. So frequently is it concealed behind diseases otherwise classified that it often requires great experience and practised observation to discern it. There is scarcely an organ or tissue in the body which does not suffer from the corroding influences of this terrible malady."

To members of our Profession this needs no comment. Here we have the suggestion of the evil to those who have not the most remote suspicion of the existence of the taint, and we have also the hint that only "great experience and practised observation" are able to detect this fatal malady. The inference which the class of readers to whom the book is addressed must draw seems tolerably clear.

We do not care to expatiate further upon the characteristics of this book. It is sufficient to say that it contains some very ugly representations of bad cases of constitutional disease copied from Cullerier and Ricord. It says nothing about treatment, although it is only fair to note the author clearly states that the nature of the specific treatment is well known to Medical men. Mr. Beaney's treatment, however, to judge from the cases which his work contains, seems to have been uniformly and almost miraculously successful.

Nowhere in the book have we been able to detect any reference to the different varieties of initiatory lesions; in other words, to the fact that all sores are not chancres, or that the great majority give rise to no secondary or tertiary symptoms whatever.

Finally, we would note that the names of a good many of the authorities quoted are wrongly spelled.

Training Institution for Nurses.—Dr. G. F. Muntz, of Umberslade, has forwarded to Dr. Fleming the sum of £200 in aid of the funds of the Training Institution for Nurses.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

SMALL-POX IN PARIS.

Paris, February 21.

A very happy change is just now being operated in all the Paris Hospitals in regard to the isolation of small-pox patients. That which probably strikes the stranger most upon his first visit to the Medical wards of a French Hospital is the promiscuous mixture of patients; whether they are affected with pneumonia, typhoid fever, measles, small-pox, scarlatina, erysipelas, or what not, all lie side-by-side. It is really wonderful to think that our Paris Hospital administration should have been thus long in trying to remedy so grave an evil. It would be difficult to calculate the number of patients who have entered our Hospitals with some innocent disease, so to speak, and who during their sojourn in the wards have become affected with small-pox, because the bed next to them was occupied by a small-pox patient. To think that such a state of things would be allowed to exist in an intelligent community is certainly astonishing, to say the least of it.

Within the last month or so each Hospital has had set apart two separate wards for small-pox patients—one for males, the other for females. This is a good work, though, I fear, still insufficient, inasmuch as the wards communicate with others by a door, which, being opened every now and then, forms but an imperfect isolation. As most of our Hospitals are built upon the pavilion plan, a whole wing should be devoted to this purpose; but, better still, a city like Paris, where variola is endemic, should have a Small-pox Hospital away from the centre of the town, somewhere in or near the suburbs. To say that such a building does not already exist will doubtless astonish those of the Profession who have never paid us a visit. It proves that Paris, the boasted "head of civilisation," has yet a lesson to learn from some of her sister cities in Europe.

Paying a visit the other day, in company with an English army Surgeon, to the Beaujon Hospital, and finding a scarlatina patient lying in the midst of other sick, my friend could not refrain from expressing his great surprise at such carelessness to the Medical officer in charge, who, however, very pleasantly answered, "The fault is not ours: we have no voice in the matter."

We have had quite a little epidemy of variola, with a goodly number of confluent fatal cases. The matter, upon reaching the public journals, and being duly discussed, caused a great panic in all classes of society. The number of people who have left the capital during the last month is calculated at near 20,000; those who did not leave from fear of revolution running away from fear of small-pox. At any rate, vaccination and revaccination became the order of the day: the number of heifers was insufficient to supply the demand. Dr. Lanoix, who is the specialist of this branch, has made a fortune, *dit-on*, this year. So great was the throng in front of his office at one time that policemen had to keep order, I am told, and force the people to form *queue*, as they do in front of our theatres here before the ticket office is open. Dr. Lanoix's calf has been as valuable to him as was the ass in the fairy book which children read about—nothing but ducats, ducats! His charge is 20 francs for vaccination at his office, 40 francs at the residence, and still more if the patient's fright or his purse could stand it.

Trousseau, some twenty years ago, when Paris was struck with a similar panic, and vaccine matter becoming scarce, had the courage, or was cruel enough, to vaccinate the persons entering his wards at the Hôtel-Dieu with small-pox virus. The consequence was not, as might have been supposed, an immediate production of genuine small-pox, but the vaccinated pustules ran their normal course until the eleventh or twelfth day, when small-pox broke out all over the body, giving rise afresh to the usual constitutional symptoms of that terrible affection. Many of these poor patients died from confluent forms of the disease. This kind of vaccination was practised upon about forty persons—enough, I should think, to satisfy that illustrious Professor of the validity of his experiments.

Speaking of small-pox, I have seen within the last two months, in Professor Gubler's wards at the Beaujon Hospital, two cases—one a woman, the other a man—where small-pox followed vaccination from the cow-pox—that is to say, on the twelfth day after vaccination, and when all had gone on well,

papules appeared upon different parts of the body until regular genuine variola broke out. Such cases are rare, I should imagine; they are the first which I have ever been able to observe from beginning to end, and where all doubt is impossible.

BIRMINGHAM.

March 21.

From what has recently occurred, it would appear that the Poor-law Board has taken objection to the appointments of the District Medical officers, so far as their number and remuneration are concerned. If what is rumoured be correct, the Poor-law Board will not ratify the appointments which have been made until certain evidence has been laid before them both from the guardians and the Medical officers. As regards the Medical officers, I think I am in a position to state that they are not dissatisfied with the amount of work they have to perform by the reduction of the Medical staff from eight to five, and that they are quite able and willing to do it; the sore point with them is that the remuneration is not adequate, and they feel that to have extra labour without proportionate pay is a great injustice to them; this remedied, their chief cause of complaint would be removed. At the election of the five Medical officers which took place on March 9, a series of "out-of-the-way" questions were put to each of the candidates, relating to his willingness to undertake the duties of the office, and contentedness with the amount of stipend. This procedure was regarded as unnecessary and vexatious—unnecessary, because, if the officers had not felt disposed to do the work, they would not have applied for the appointments; and, vexatious, inasmuch as Medical men, although parish Doctors, are not to be dealt with exactly as schoolboys. But boards of guardians will, I presume, to the end of the chapter, assert and exercise the rights which legitimately belong to them.

Josiah Mason, the founder and endower of an orphanage, near Birmingham, which he has enriched with nearly £300,000, has made an offer for the purchase of Queen's College, with the intention of converting it into an establishment for the highest class of technical education; should the Council of the College agree to his terms, this will be another illustration of the munificent generosity of our wealthy townsmen.

The Contagious Diseases Act has been lately warmly discussed here by both sexes; and, so far as feeling is concerned in the question, the ladies appear to have had the best of the debate.

The renovated Lying-in Hospital, now the Children's Hospital, is ready for the reception of its juvenile inmates. It is situated in the healthiest part of the town, is commodious, well ventilated, and admirably arranged for its necessities. Its Medical staff comprises some of the most eminent men in the Profession here. Above all things it has the full confidence of the public. This alone will insure for it that prosperity which it merits.

Nothing now is heard about what was at one time called the great "Club question." How and by what means it has received its *quietus* I know not; but this I do know, that the "league" is nearly, if not completely, broken up, and that the old rate of club remuneration is being generally accepted.

The Training Institution for Nurses which has been lately established in this town is a decided success. At present there are connected with the institution four trained nurses and fifteen probationers; the latter receive instruction at the General and Queen's Hospitals. From the annual report it appears that the active operation of the institution began in May last, when the committee secured the services of Mrs. Tindall, a lady nurse who had been trained in the wards of King's College and Charing-cross Hospitals, and who had since established a training institution at Exeter. This lady brought with her to Birmingham four efficient nurses, who were of great value in the instruction of the probationers. The institution opened with twelve beds, but the applications were so numerous that it was soon found desirable to increase the number of beds, as far as the size of the "home" would allow. It appears that the demand for nurses in private families has been so great as fully to prove the need of this undertaking. The applications have been complied with as far as the resources of the institution would permit, three nurses only being at present employed in this way. It is evident that in future this will become a permanent and important source of revenue. The committee congratulate the governors of this institution on its having obtained, so shortly after its establishment, a large staff of probationers, of whom several will have served their year of probation by the summer, and the whole will be available as trained nurses before the next annual meeting. The report, on the whole, is highly satisfactory.

Fever of a typhoid character has been very prevalent during the past few weeks, but the mortality from it has not been great. Several cases of relapsing fever have also been met with, but I have not heard of any deaths from it. The health of the town has been, however, of the average standard.

It is a pleasure to report that a fund is being raised for the purpose of presenting a suitable testimonial to Dr. Evans, the senior Physician of the General Hospital, and upwards of thirty years the leading consulting Practitioner in Birmingham, for his long and valued services to that charity. The response to the appeal for subscriptions has been most hearty, nearly £1000 having been already collected, and before the subscription list is closed it is expected that this sum will be doubled. Dr. Evans richly merits this mark of respect from his brethren in the Profession and our townsmen. His urbanity, kindness of disposition, respect for the feelings of his *confrères*—especially the younger ones—combined with his profound knowledge of his Profession, have made him a general favourite, and have acquired for him the enviable title of the "model Physician." Dr. Evans has not, I understand, contributed largely to Medical literature, his time having been so fully occupied by the demands of a very extensive consulting practice; but what he has done orally is best known to those who have had the advantage of meeting him in consultation. It may with truth be said of Dr. Evans that, instead of making enemies, he has had the peculiar and happy knack of making friends.

GENERAL CORRESPONDENCE.

DR. WILLIAMS AND THE DUCHESS OF SOMERSET.

Letter from Dr. C. J. B. Williams.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall feel greatly obliged if you will permit me, through your columns, to offer my sincere thanks to the very many members of the Profession, in town and country, who have favoured me with letters on the subject of the late action for libel which I deemed it my duty to bring against the Duke and Duchess of Somerset.

My kind correspondents, who are too numerous to be answered individually, have much gratified me by their unanimous expression of approbation of my conduct, and by their general agreement with my views in relation to the case of the late Earl St. Maur. A very large proportion also give me the credit not only of having vindicated my own character from the groundless and unjustifiable charges made against me in the libel, but also of having upheld the character of our Profession by bringing before a legal tribunal this grave outrage on its sacredness and honour.

And assuredly, although in the patient exercise of our humane calling we may be required to make due allowance for ignorance and for infirmities of temper during hours of grief and bewildering affliction, yet for a Practitioner who has conscientiously done his duty in a very difficult and critical case, and has acted to the best of his abilities and judgment, to be made an object of ungrounded reproach and atrocious calumny, is a gross breach of justice and of good feeling, which, if allowed to pass unrebuked, would tend to sap all that confidence and those kindly relations which ought to subsist between a Medical man and his patients and their friends.

Happily such cases are very rare. None such has ever occurred to me before during the forty years of my active practice. And they will ever be rare if our Profession remains true to itself; if, rising far above that despicable servility that cringes and bows down before rank or riches, and submits to be insulted and trampled on by arrogance and caprice—rising, I say, far above such derogatory subserviency, it will take its proper stand on its own aristocracy of science and Christian beneficence; true to the nobility of its nature and of its aims; true to the interests of its own fraternity, all its members supporting each other and uniting for their common good:—thus firmly standing and self-supporting, our noble Profession may thus well bid defiance to all unjust and unbecoming attacks, which will only recoil on their originators with the disgrace which they deserve.

Not a few of my correspondents express regret that the trial did not go through its whole course, even to the award of fitting damages by the verdict of the jury. The possibility of

claiming damages was set aside by the acceptance of the full retractation and apology made in court; but I feel, in common with all my correspondents and other friends, that it would have been much better if the trial had not been stopped until the evidence of myself and other witnesses had been heard, so as fully to refute the charges in the libel, which was very insufficiently done in the opening speech of my leading counsel. I have consequently been obliged to publish my narrative as a full contradiction' to the libel, now so widely disseminated by the Solicitor-General having read it through in Court.

I have further to express my hope that the sincerity of the retractation will not be vitiated by any renewal of false charges,(a) which might compel me, however unwilling, to again seek the protection of the law. With heartfelt thanks to all my Professional friends, and to you, Sir, for your able support, I am, &c.

March 28. C. J. B. Williams.

THE MEETING AT THE ROYAL COLLEGE OF SURGEONS.

Letter from Mr. Cæsar Hawkins.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the *Medical Times and Gazette* of this day, one of the speakers at the Royal College of Surgeons is reported to have said, "The other day nearly ten thousand members of the British Medical Association went to the Medical Council, and asked for the establishment of one examining board; and what treatment did they receive? Mr. Cæsar Hawkins, the representative of this College, or rather of the Council of the College, said, 'What is the Reform Association? who knows anything about it?'"

This short paragraph is full of mistakes and unfair insinuation against the Medical Council and myself in relation to the Profession. On the occasion alluded to, neither the British Medical Association, nor the Reform Association (if there be such a body), nor any other association whatever, came or sought to come to the Medical Council. In July last a deputation of four gentlemen presented to the Medical Council a memorial, numerously signed, not from any association, but from "the undersigned members of the Medical Profession;" and on the 24th ult. the same four gentlemen asked to be again admitted to present a further communication as "the President and other officers of the Medical Reform Union," of which Union we heard nothing last year.

As I knew that the signatures of these memorials were not those of any society, but had been obtained by circulars sent to myself and other persons (for the expense of which subscriptions are now sought), it seemed to me a very natural and pertinent inquiry, implying no disrespect to any individual, that we should know what relation this Medical Reform Union bore to the 9000 or 10,000 Practitioners by whom the memorials had been signed. To the admission of Dr. Bell Fletcher and his colleagues no member of the Council made the smallest objection. I am, &c. Cæsar H. Hawkins.

26, Grosvenor-street, March 26.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 8, 1870.

Dr. Burrows, F.R.S., President, in the chair.

A paper by Dr. Robert Lee was read, entitled

AN INQUIRY INTO THE NATURE, ORIGIN, AND TREATMENT OF HYSTERIC DISEASE.

In the first part of this paper, the author gave an elaborate review of the history of hysteric diseases from the earliest ages to the present time. The opinions and methods of treatment adopted by Aretæus, Galen, Celsus, Sydenham, Hoffman, Cullen, and the most eminent writers of the present century, were given in detail. Respecting hysteria in the male sex, the author stated that he had never seen a genuine example; but in the female sex, a great number—a greater number than it was possible for him to state. An accurate report of upwards of two hundred of these cases accompanied the communication. If these histories were examined, the author stated the following conclusions might be drawn. In none did the disease occur before the age of puberty, and in few after the middle period of life. In few of the cases recorded were the functions of the ovaries and uterus in a perfectly healthy state. In the greater number there was amenorrhœa, dysmenorrhœa, menorrhagia, leucorrhœa, or a morbid state of increased or diminished sensibility in the uterine organs, without any organic disease. The author added that, in the greater number, there was incurable sterility; and he stated that he had been led to conclude from the symptoms observed in these cases that hysteria originates in the ovary, on which menstruation depends, in which conception takes place, and to the influence of which are to be attributed the development of the female pelvis and mammæ, and all the peculiarities of the female constitution. The result of the author's dissections of the renal ganglia and nerves, and those of the ovary, now in the museum of the university at Cambridge, were given; and from them an explanation was given of the cause of the discharge of a great quantity of clear urine after the hysteric paroxysms. Other seats of hysteria were then described, with a letter on the subject from Mr. Joseph Swan. The paper concluded with a summary of the different remedies employed in the two hundred cases; the two last of these methods of treatment were clitoridectomy and cutting away the coccyx.

Dr. Schulhof said that, in a large number of hysterical patients whom he had examined, in nine out of ten he had found the spine not perfectly straight. There was not visible deformity; but the displacement was sufficient, he thought, to produce pressure on the ganglia.

Mr. Barwell could not agree with Dr. Schulhof's view, seeing that in very many cases of well-marked spinal deformity, where (especially in angular curvature) pressure on the nerves would be expected, hysteria was absent.

Dr. Buzzard had, from his observations at the Hospital for the Paralysed and Epileptic, been led to divide hysteria into several classes. One class was represented by young women, who, without disorder of the uterine functions, were paralysed in one or more limbs. In these cases, he thought the disorder of mental origin; it was best treated by acting on the imagination or attention. Next, there were the cases presenting the well-known hysterical symptoms. And, finally, there were the hysterical fits or seizures, which it was difficult to distinguish from epileptic attacks. The idea of hysteria in Dr. Lee's paper was too limited; it did not take in hysterical convulsions. He doubted whether it was quite correct to refer all cases of apparent paralysis to hysteria; another term ought, perhaps, to be adopted for these.

Mr. Hovell said that the term hysteria was too loosely applied, and ought to be restricted to disorders arising from uterine irritation. He would suggest the term "emotional susceptibility" for many of those conditions which were described as hysteria; and this would coincide with the opinion of the late Sir B. Brodie. Hysteria was, he thought, referable rather to mental or moral shock than to uterine irritation; and this would account for its occasional occurrence in men. The shock probably acted on the sympathetic nerve; and hence arose the palpitation and flushing of the face; and the paralysis (or more properly paresis) would be accounted for by the disturbance of the nutritive function through the vaso-motor nerves.

Dr. Wynn Williams said that the term hysteria seemed to be made to include all diseases that people could make nothing of. Ovarian mischief would no doubt cause hysterical symptoms in some cases; but, in many, these depended on uterine displacement, with which, indeed, the ovaries often sympathised. The replacement of the uterus would remove the symptoms.

Dr. Barclay did not think that hysteria was so often connected with uterine affections. There was no form of uterine or of ovarian disease that might not exist without hysteria. He was surprised that Dr. Lee should regard the ovaries as the origin of hysteria; he had seen cases in the male which he should regard as hysterical. He believed that hysteria depended on a peculiar mental and nervous organisation, dependent on sex in the same way as were the modifications in the osseous

(a) An attempt of this kind appeared in the *Times* of last Wednesday, in the form of a letter, apparently from Messrs. Beachcroft and Thompson, solicitors to the Duke of Somerset, impugning, on the authority of the Duchess, the accuracy of some of my statements, and denying the authenticity of one of the letters from her Grace inserted in my narrative. This denial was readily refuted by a letter on the following day from myself, quoting the formal admission by the same solicitors of this very letter as being in the handwriting of the Duchess. On Friday appears a statement from Messrs. Beachcroft and Thompson altogether disowning the letter of Wednesday, which, although purporting to bear their signature, had not been either seen or approved by them! It is to be hoped that this exposure may serve as a warning against any such attempts in future.

and other structures. The hysterical symptoms connected with the uterus could not, he thought, be formed into a class separate from those arising from derangements of other organs.

Mr. Holmes was not sure that Dr. Lee laid down absolutely that hysteria depended on the ovaries. He appeared to refer in his paper to hysteria arising from other sources, such as irritation of the nerves at the neck of the uterus.

Dr. Barnes agreed with Dr. Lee as to the connexion of the ovaries with hysteria. The term hysteria was applied when the uterus was supposed to be everything — when it was said that "Mulier est propter uterum." Within the last thirty or forty years, it had become recognised that the ovary was the source of the physiological changes in the female. No doubt it had the power of evoking nervous phenomena. The first attacks of hysteria came on with menstruation, and in many instances it attended the menstrual epochs. Disturbed ovarian function attended many cases of uterine disease. If the physiological flow of blood to the sexual organs could not be relieved through the uterus, nervous symptoms would set in. Treatment directed merely to the nervous system might fail; the connexion between the uterus and ovaries should be remembered, and the uterine disorder treated, if one were found to be present.

THE PATHOLOGICAL SOCIETY.

Thursday, March 3, 1870.

Richard Quain, M.D., President, in the Chair.

A report was read on Mr. Marsh's specimen of Cystic Tumour. It was stated to be composed of three lobes, and that fatty degeneration was going on.

Mr. Arnott reported on Mr. De Morgan's specimen of Sarcoma. It consisted mostly of cells, spindle-shaped and myeloid, contained within certain fibrous bands. There were also calcareous deposits and bony spicules. Mr. Nunn's specimen was mostly spindle-celled, with larger cells between, and contained no bony matter.

Mr. Gay exhibited a specimen of Gangrene of the Femoral Vein consequent on obliteration of the saphena from a man aged 45. He had suffered from epithelial cancer of the scrotum and enlarged femoral glands. In the glands on the right side an abscess ultimately formed, but here also a gland was cancerous and had to be excised. The saphenous vein was then cut through. Much bleeding followed, but it was arrested; it returned again and again; the last time it was arterial, and a tourniquet had to be applied. Death followed, when it was found that both the femoral artery and vein had sloughed, and that the saphena was plugged.

Mr. Croft asked the amount and kind of pressure used to stop the bleeding.

Mr. Hulke inquired as to the coagulation of the blood in the veins which part seemed to have been earliest formed. He had seen instances where coagulation and sloughing had followed the use of perchloride of iron.

Mr. Gay said pressure on the bleeding vessel had been combined with the use of perchloride of iron.

Dr. Webber showed a specimen of Tuberculosis of the Arachnoid and Lungs apparently consequent on caseous glands.

Dr. Dickinson said it was very common to find suppurating glands in children, yet they were rarely followed by such serious consequences.

Dr. Webber pointed out that caseous glands were not suppurating ones.

Dr. Powell said people were often carried off by miliary tubercle supervening on something else, yet the meninges were seldom affected.

Dr. Webber said if a child suffered from catarrhal pneumonia which did not clear up, tuberculosis might follow, and might be described as consequent on the former.

Dr. Lawson Dowe exhibited a living specimen illustrative of the disease described by Duchenne as Paralysis with Muscular Hypertrophy. The boy was 11 years old, and the malady had been coming on gradually. When he fell down he could not rise, and he had lost the power of walking, yet his health was good. During the last year he had been half-starved, and was worse in consequence. There was great loss of power in the arms, which he could only raise by swinging. He could move his fingers and his feet. The gastrocnemius and the dorsal muscles were most hypertrophied. The boy had a dull heavy look and a sallow pasty complexion. He sang and whistled. His senses were good. The affected muscles did not respond to electricity.

Mr. William Adams said this was undoubtedly a true case of the disease described by Duchenne, and such as was exhibited by him to the Society. The pathology of the disease was quite obscure. He hoped something might be made of this case. At first the calves of the legs looked handsome, and mothers were proud of them, but they soon proved useless. He had had the care of a young gentleman thus affected, who had just died. His spinal cord was undergoing examination.

An inquiry from Dr. Dickinson elicited the fact that the induced, not the continuous, current, had been used in testing the muscles. All the patients were males.

Mr. Cæsar Jackson exhibited a Knee-joint affected with disease of eighteen years' standing. He intended to excise the joint, but on opening it found it did not look well, so amputated above the knee. In the inner half of the joint, acute disease, apparently necrosis, was going on.—Referred to Messrs. De Morgan, Sidney Jones, and W. Adams.

Dr. Robinson showed a double aortic aneurism with ossification of the walls of the vessel, removed from a man of fourteen years' service in the Coldstream Guards. There was a diastolic bruit, the pulse was small, and there was numbness of the left arm. Two days after admission into Hospital faintness came on, and he died suddenly. Two sacculated pouches just above the valves were found. The outer coat alone remained.

Dr. Payne exhibited a specimen of peculiar Fibrous Structures on the wall of the left ventricle of the Heart. In this specimen there are seen on the inner surface of the left ventricle, on the ventricular septum, about a quarter of an inch under the aortic valves, certain peculiar fibrous structures. One of them was a narrow membranous flap, just one inch long, placed somewhat obliquely and slightly concave downwards; it was adherent by its whole length to the wall, and its surface was quite continuous with the endocardium. In fact, it precisely resembled a narrow and inefficient valve misplaced. The middle of this was situated precisely under the attachment of two semilunar valves of the aorta. Near this, but to the right, situated immediately below the attachment of two semilunar valves, were two other structures, also fibrous, but of a rather different shape. They were of a kind of horseshoe shape, with the concavity turned upwards. They were also membranous, and had an imperfectly valvular structure, but the flat side could not be completely detached from the wall. They were situated vertically one above the other, and below the point of attachment of two valves, as said. The lower was three-eighths of an inch long, the upper one a quarter of an inch. The lower was only slightly curved; the upper almost formed a semicircle, but the valvular structure of both was very evident. As these structures were placed accurately opposite to the intervals of the aortic valves, and in an imperfect way below them, it is impossible not to see the analogy which they show to a second series of valves formed on the wall of the ventricle, and leads to the natural supposition that they may represent abortive valves, which reached a certain stage of development and then became stationary. In any case it seems certain that they must represent some peculiarity of development, and are not connected with any disease. It should be mentioned that the heart was greatly hypertrophied and the aorta enormously dilated, the semilunar valves being also incompetent. Taken from the body of William P., aged 43, who died of aortic disease in St. Mary's Hospital, under the care of Dr. Sieveking.

Dr. Dickinson was able, from an examination of the specimen when recent, to confirm the fact that these structures precisely resembled valves.

Dr. Church asked if there were any vegetations on the valves, as their friction sometimes produced a kind of corn of the heart.

Dr. Payne said there was nothing of the kind.

Dr. Dickinson said that in the recent specimen which he had seen the appearance was remarkably like the aortic valves.—Referred to Drs. Peacock and Bristowe.

Dr. Dunkworth exhibited some sarcinæ which had been vomited three years ago, and which had been kept without any preservative fluid, yet they presented hardly any change beyond a kind of granular appearance, and the different packs were lost.

Andersonian University, Glasgow.—It has been arranged that Dr. Clark, assistant to the late Dr. Penny, who continued the winter course of lectures on chemistry after that gentleman's death, shall deliver the summer course also, pending permanent arrangements, consequent upon the proposal of Mr. Young, the President, to endow a chair of technical chemistry.

NEW INVENTIONS.

THE A.B.C. DESPATCH BOX.

To the Medical Practitioner especially it is a matter of great moment that his papers and letters and numerous important memoranda pertaining to his profession should be methodised and readily at hand; yet, owing to the numerous pressing demands upon him and the uncertainty of an uninterrupted hour, he too often abandons in despair the hopeless task of educing order out of the chaos of his unsorted papers. Messrs. Jenner and Knewstub, of St. James's-street, with the view of obviating these difficulties, have brought out and patented what they term "the A.B.C. Despatch Box," the plan of which appears to us to be at once simple and ingenious, and calculated greatly to facilitate orderly arrangement. The interior is fitted with twenty-four alphabetical divisions, moving in grooves or on wires, so arranged as to contract or expand according to the requirements of each particular letter, and the whole is so constructed that it can be fitted into any despatch box or lifted out and used separately as a stand for papers. With the aid of the A.B.C. Despatch Box, letters, notes, extracts, rough memoranda, each in its alphabetical compartment, are instantly disposed of and always at hand for immediate reference. We who have experienced the value of well-arranged papers heartily commend this invention to literary and professional men. The A.B.C. Despatch Box, we believe, can be had as low as half a guinea, cheapness, of course, being a great consideration in an article intended for wide and general use. It should be in the possession of every Medical Practitioner.

NEW BOOKS, WITH SHORT CRITIQUES.

The Medical Temperance Journal, No. III., April, 1870,

*** Contains several articles of interest. Amongst these are "Nutrition and Stimulation," "Hereditary Effects of Intemperance," "Stimulants in Old Age," etc.

Necessity for the Removal of Knightsbridge Baraacks. By J. Elsworth.

*** An ably written pamphlet, conveying, in a few pages, convincing statements of the evils resulting from the barracks in their present site, and advocating their removal.

MEDICAL NEWS.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, March 24, 1870 :—

Allnutt, William, Portsea.
Bayliffe, Alworth Merewether, Chippenham.
Collins, Henry William, Wrington, Bristol.
Mayo, Alfred Charles, Coleford, Gloucestershire.
Newstead, James, Bubwith, Howden, Yorkshire.
Robinson, Tom, Saxby, Lincolnshire.
Russell, William, Wincanton.

As an Assistant in Compounding and Dispensing Medicines :

Lloyd, Edward, Aberyell, North Wales.

The following gentlemen also on the same day passed their First Professional Examination :—

Archer, George Ernest, St. Bartholomew's Hospital.
Ingham, Thomas, King's College Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Simon, F., M.R.C.S.—Resident Accoucheur to St. Thomas's Hospital.

NAVAL AND MILITARY APPOINTMENTS.

Dr. John Ternan, Staff Surgeon, to the *Clio;* Dr. William Carmichael, Surgeon, to the *Royal Adelaide;* Robert J. M'Morris, Surgeon, to the *Implacable;* Dr. Thomas Seecombe, Staff Surgeon, to the *Clio;* Henry D. Stanistreet, Assistant-Surgeon, to the *St. Vincent*, additional, for service in the *Martin;* and Dr. Wm. Inman, Assistant-Surgeon, to the *Fisgard*.

Medical Department.—Staff Surgeon-Major Melbourne Broke Gallwey to be Deputy Inspector-General of Hospitals, *vice* Alexander Gibb, M.D., who retires upon half-pay; Staff Assistant-Surgeon Heary Kelsall to be Staff-Surgeon, *vice* Staff Surgeon-Major Melbourne Broke Gallwey, promoted; Surgeon-Major John Rambant, M.D., from Royal Canadian Rifle Regiment, to be Staff Surgeon-Major; Surgeon William Snell, from the 99th Foot, to be Staff Surgeon, *vice* F. G. L. Gunn, who exchanges; Assistant-Surgeon Shoedde Robertson, M.D., from Royal Canadian Rifle Regiment, to be Staff Assistant-Surgeon.

99th Foot.—Staff Surgeon Francis Leveson Gower Gunn to be Surgeon, *vice* W. Snell, who exchanges.

BIRTHS.

Bent.—On March 29, at Bridgewater, the wife of F. V. Bent, M.D., of a son.

Britton.—On March 27, at 64, Acacia-road, N.W., the wife of W. S. Britton, M.R.C.S., of a son.

Lloyd.—On March 23, at 42, Finsbury-circus, the wife of T. Franklin Lloyd, M.R.C.S.E., of a son.

Stockwell.—On March 22, at Bruton-house, Alexandra-road Abbey, London, N.W., the wife of Frederick Stockwell, M.D., of a son.

Utermarck.—On March 23, at Tamworth, the wife of George Utermarck, Surgeon, of a son.

MARRIAGES.

Fishbourne—Radcliff.—On January 18, at Wickliff Church, Learmouth, Victoria, Australia, John Y. Fishbourne, M.D., to Marian Isabella, youngest daughter of the Rev. Richard Radcliff, Rector of Skyrne, County of Meath.

Stubbs—Smith.—On March 23, at Wallasey Parish Church, George Laurie Stubbs, son of the late J. H. E. Stubbs, M.D., to Emily Warren, younger daughter of W. W. Smith, Esq., of Bletchingley, Surrey.

DEATHS.

Brainsford, Anne, the wife of Charles Brainsford, M.D., at Haverhill, Suffolk, on March 25.

Evans, Alfred, younger son of Thomas Evans, M.D., Mynd House, Gloucester, at the Parade, Monmouth, on March 22, aged 38.

Harris, Hetman Charles, F.R.C.S.E., of 240, City-road, London, at Lingfield-villa, Surbiton, after a long illness, on March 26.

Nelson, Duckworth John, F.R.C.S., at 9, Marlborough-hill, St. John's-wood, on March 21, after an illness of fifteen days, in the 24th year of his age.

Slater, Alverra Lofthouse, M.D., at the Ovens District Hospital, Beechworth, Victoria, on January 10, aged 48.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Birmingham General Dispensary.—Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before April 16.

Bridgwater Union.—Medical Officer for the Huntspill District. Candidates must be duly qualified and registered. Applications and testimonials to P. Reed, Esq., Clerk, Bridgwater, on or before April 5. Election on the 11th.

Brighton and Hove Dispensary.—Resident House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to "the Chairman of the Committee of Management," on or before April 4. Election on May 3.

Great Northern Hospital.—Junior Surgeon; must be F.R.C.S. Applications and testimonials to the Secretary, 46, Great Coram-street, W.C., on or before April 6.

Kensington Dispensary.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before April 16.

Newcastle-upon-Tyne Infirmary.—Senior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before April 6. Election on the 14th.

Newport Infirmary.—Resident Medical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary at the Infirmary, Newport, Monmouth, on or before April 4.

Poplar Union.—Medical Officer for the parish of Bow. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board. Applications and testimonials to Mr. James Ripley Collins, at the Board-room, on or before April 7. Attendance at the election on April 8, at 11 a.m., will be required.

Poplar Union.—Public Vaccinator for the parish of Bow. Candidates must be duly qualified in accordance with the provisions of the Vaccination Act, 1867. Applications and testimonials to Mr. James Ripley Collins on or before April 7. Election on April 8, at 11 a.m., when attendance will be required.

Royal Pimlico Dispensary.—Honorary Physician: must be a resident of Pimlico. Applications and testimonials to the Honorary Secretary, at the Dispensary, 104, Buckingham-palace-road, on or before April 4.

Royal South Hants Infirmary, Southampton.—House-Surgeon; must be M.R.C.S. and L.S.A. Applications and testimonials to the Secretary on or before April 2. Election on the 11th.

St. Mary's Hospital and Dispensary for Women and Children, Manchester.—Medical Officer to attend patients at their own homes. Candidates must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, J. Barber, Esq., 41, John Dalton-street, on or before April 2.

Samaritan Free Hospital for Women and Children, Lower Seymour-street, Portman-square.—Physician for out-patients; must be M.D., registered, and not practising pharmacy. Applications and testimonials to the Secretary on or before April 7.

Stamford, Rutland, and General Infirmary.—House-Surgeon, Apothecary, and Secretary; must be M.R.C.S. and L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before April 12. Election on the 19th.

Worcester County and City Lunatic Asylum.—Assistant Medical Officer; must be duly qualified and registered. Applications and testimonials to Dr. Sherlock on or before April 7. Election on the 11th.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Bellingham Union.—Mr. William Rogers has resigned the Third District; area 46,209; population 1052; salary £20 per annum.

Torrington Union.—Mr. G. A. Sutcliffe has resigned the Shebbear District; area 10,834; population 1893; salary £25 13s. per annum.

Wigton Union.—The Bowness District is vacant; area 18,720; population 2937; salary £16 per annum.

APPOINTMENTS.

Brackley Union.—Edward F. Gaitskell, L.R.C.P., M.R.C.S.E., L.S.A., to the Fourth District.

East Ward Union.—Charles C. Mayne, M.B. Dub., M.C. Dub., to the Brough District.

Glendale Union.—Henry R. Fawcus, M.D. St. And., M.R.C.S.E., L.S.A., to the Lowick District.

Highworth and Swindon Union.—John C. Maclean, M.B. Edin., M.C. Edin., to the Second District. James Fernie, M.R.C.S.E., L.S.A., to the Fourth District.

Liverpool Parish.—Colles L. Anderson, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., L.A.H. Dub., to the First District.

Longtown Union.—Peter Divorty, M.B. Aber., L.R.C.S. Edin., to the High District.

Midhurst Union.—Thomas D. Atkins, M.R.C.S.E., L.R.C.P. Edin., to the Milland District.

ROYAL COLLEGE OF SURGEONS.—At the extraordinary meeting of the Council last week the divisions on Mr. Simon's motion, seconded by Mr. Erichsen, were as follows:—For the motion 3—viz., Messrs. Hewett, Simon, and Erichsen. Against it 17—viz., Messrs. South, Hilton, Quain, Solly, Sir Wm. Fergusson, Thomas Paget, Lane, Busk, Hancock, Curling, Clark, James Paget, Smith, Birkett, Humphry, Holden, and Gay. Mr. Quain's motion, seconded by Sir Wm. Fergusson, was carried *nem. con.* Mr. Curling's motion, seconded by Mr. Hancock, was also carried *nem. con.* The President reported that the period of five years for which Messrs. Skey, Tomes, and Cartwright were elected members of the Board of Examiners in Dental Surgery had just expired, and thereupon declared these vacancies in the board, stating that three members would be elected at the next meeting of the Council. The President further reported that he had received letters from Messrs. Skey and Tomes stating that it was not their desire to be again put in nomination for the office of Examiners in Dental Surgery.

COLLEGIATE MEETING.—It is to be hoped that any future meetings of the Fellows and Members of the Royal College of Surgeons will be much better organised than the one which became such a miserable failure last week. When the requisition signed by gentlemen was presented to the President, urging the Council to fix a day for the public discussion of an important subject, it was at once conceded. It then became the duty of those calling the meeting not only to be prepared themselves with certain resolutions, but to allow others to judge of their value or otherwise by previous publication. This would only have been fair to gentlemen who attended from remote distances and at great personal inconvenience; instead of which, as the President observed, the secret was only known to a few, who came up with resolutions cut and dried for their purpose, only to meet with a well-deserved collapse. The following analysis of the 223 Fellows and Members who attended will perhaps be interesting to our readers:—Of the 93 Fellows 75 resided in London, 8 within six miles of London, and the remaining 10 in the provinces. Of the 130 Members of the College who attended the meeting, 106 resided in London, 9 within six miles of London, and 15 in the provinces.

MEDICAL PRIZES.—Considerable surprise has frequently been expressed at the smallness of the number of competitors for the Collegial Triennial and Jacksonian Prizes, offered by the Royal College of Surgeons for competition amongst its Members. A prize has often been carried off by the only essayist, and still more frequently the want of merit has prevented any award, and lastly, several practical subjects have failed to engage a writer. On looking over the College report on prizes, we find that no award has been made for the Jacksonian Prize for thirty-eight periods, either on account of no essays having been received, or of the few sent in not possessing sufficient worth to merit recommendation. The same observations apply to the Collegial Triennial Prize, which has only been awarded six times, and omitted on nine occasions, for the same reasons which apply to the former. The College of Surgeons is not the only institution failing to attract competitors for its prizes; for we find that more than half of the prizes offered by the French Imperial Academy of Medicine for original Medical essays on stated subjects have not been awarded, owing to want of merit in the candidates. The next Collegial Triennial Prize will be due at Christmas of the present year; the subject of the essay is "The Anatomy and Physiology of the Organs of Taste and Smell in the Mammalia." The prize consists of the John Hunter medal, executed in gold to the value of fifty guineas, or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of £50. The subject of the Jacksonian Prize, also to be awarded at the same time as the Collegial, is "Hæmorrhagic Diathesis and Spontaneous and Accidental Hæmorrhage." The pecuniary value of this prize is about £10. Both are open to competition amongst the Fellows and Members of the College.

THE ROYAL SOCIETY.—In accordance with the statutes of this institution the names of the candidates for election into the Society have just been published. There are only fifteen vacancies and fifty-three candidates, including twenty-one members of our Profession—viz., taking them in alphabetical order, B. E. Brodhurst, F.R.C.S.; F. T. Buckland, M.R.C.S.; G. W. Callender, F.R.C.S.; F. Le Gros Clark, F.R.C.S.; Alexander Fleming, M.D.; E. H. Greenhow, M.D.; E. T. Higgins, M.R.C.S.; James Jago, M.D.; George Johnson, M.D.; M. K. King, M.D.; M. T. Masters, M.D.; Thomas Nunneley, F.R.C.S.; E. L. Ormerod, M.D.; W. O. Priestley, M.D.; C. B. Radcliffe, M.D.; W. H. Ransom, M.D.; John Shortt, M.D.; G. C. Wallich, M.D.; A. T. H. Waters, M.D.; Samuel Wilks, M.D.; and John Wood, F.R.C.S.

PATHOLOGICAL SOCIETY.—At the meeting next Tuesday the following specimens will be exhibited:—Mr. Holmes: Tumour of jaw; diffuse periostitis of tibia. Mr. Wilberforce Smith: Cancer of rib, of bones at hip-joint, and of crus cerebri. Mr. Wagstaffe: Horn growing from the leg; dislocation of spine. Mr. Squire: Fibrinous polypi from the nares. Mr. Couper: Congenital absence of rectum. Dr. Dick: Spots on the skin resembling cadaveric ecchymoses. Dr. Tuckwell: Effects of obstructions of the hepatic duct. Dr. M. Mackenzie: Growth removed from epiglottis. Dr. Kelly: Malformed heart; mitral disease. Dr. Beigel: The genital organs of a member of the religious sect called Sceptsis. Dr. Cayley: Scarlatinal dropsy without albuminuria. Mr. Balmanno Squire: Ichthyosis; prurigo. Dr. Fagge: Abscess of liver; cancer of kidney; varix of pulmonary vein.

THE POLLUTIONS OF PENRHYN.—In a report on this subject, Dr. Thorne says the present drainage works are not only insufficient, but structurally incapable of properly carrying away the sewage. Several of the main drains, all of which empty themselves into the estuary of the river, are rudely constructed of loose stones, and many of the street gully-holes are blocked up.

CHARING-CROSS HOSPITAL.—From the annual report for 1869, just issued, it appears that during the year there were admitted for relief 1144 in-patients and 16,803 out-patients, making a total of 17,947, including 3528 cases of accident and emergency. Of these, 3518 were admitted with letters of recommendation, and 14,429 without recommendation. The daily average number of in-patients in Hospital during the year was 105; in 1868, 105¼. The total amount received in the year was £6879 19s. 11d. The average cost per bed has been somewhat reduced. The institution is well managed, and with strict economy.

MR. THOMAS HICKES, M.R.C.S. Eng., has been presented with a silver tea and coffee service, a silver salver, a purse containing thirteen sovereigns (overplus), and a list of the subscribers handsomely written and framed. On the salver was engraved—"Presented to Thomas Hickes, Esq., Surgeon, by the inhabitants of Gloucester, as a token of their appreciation of his benevolence to the poor during a long series of years. March 17th, 1870." The list was headed—"Subscribers to a testimonial presented to Thomas Hickes, Esq., of the City of Gloucester, Surgeon, as a token of the high esteem in which he is held by his fellow-citizens for his benevolent and charitable services rendered to the poor for thirty years past. 'He that hath pity on the poor, lendeth unto the Lord.'"

ABSENCE OF SMALL-POX IN LEICESTER.—VACCINATION.—Dr. Wyatt Crane, in his annual report for 1869, says:—"Annexed is a table of the mortality in every month of the year, of the principal diseases and orders. On inspection of the table, it will be seen that there has not been a single death from small-pox during the year. To those who recollect the ravages that it caused, and the alarm that its existence produced, this fact will appear a legitimate subject of congratulation; and I would ask those who decry vaccination to what other possible cause than it they can attribute the cessation of the disease among us. Of the reality of the blessing there cannot be a doubt. And on what grounds are we advised to

discontinue a practice the results of which have been so strikingly advantageous? This is not the place to discuss the question, but I feel bound to express my opinion, from all I have myself observed and read on the subject, that the fears of the objectors are entirely groundless, and that the arguments which they bring forward to support their views are entirely groundless and fallacious with reference to this country. Let us then continue perseveringly a system which experience has proved to be so beneficial, and not be deterred by fears which are entirely visionary; for if the population were not continuously protected, we should be incessantly exposed to a renewal of the disease from persons contracting it in other towns, and from its developing itself here. I have heard from the Surgeons in attendance of two or three such cases occurring during the year, but every precaution being taken, by isolation and vaccination, or revaccination when necessary, the disease did not spread."

NOTES, QUERIES, AND REPLIES.

Be that questioneth much shall learn much.—*Bacon.*

Dr. Allbutt.—The paper shall stand over as desired.

Dr. Campbell, Ness Bank, Lyttelton, N.Z.—Your communication, with enclosure, has come to hand.

Professor Halford's Treatment of Snake-bites. — The *Australian Medical Journal* for January, 1870, contains a tabular statement of sixteen cases of Australian snake-bite treated by the injection of liquor ammoniæ. In every case except one, and that a doubtful one, the recovery was complete. Several of the patients are said to have been comatose and rapidly sinking. Now, we have before noticed the opposite results which have attended Professor Fayrer's experiments made by injecting ammonia into the vessels of animals bitten by Indian snakes, especially by the cobra. The results of these experiments, detailed in recent numbers of the *Edinburgh Medical and Surgical Journal*, seem to prove that ammonia is utterly useless against cobra venom. This seems to suggest that snake poisons are not all one and the same thing, and the clue given by these experiments, in the hands of their accomplished authors, may probably lead yet to some very interesting and important discoveries.

Massachusetts.—The first annual report of the State Board of Health has just been issued. It is a model in its way. It has two excellent reports on the subjects of slaughtering and on the sale of poisons, while by circular the board has given the widest possible information as to sanitary powers and penalties already prescribed by statute, and has inaugurated a weekly public report, from twenty cities and towns containing about half the population of the State, of the number of deaths which have proceeded from preventible, including epidemic, diseases, with a specification of the causes. A paper by the Secretary, Dr. George Derby, on the prevention of disease, completes the report, and, like what precedes, is excellent.

British Association for the Protection of General Practitioners.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I cordially indorse the sentiments expressed in the programme of the British Association for the Protection of General Practitioners. To rectify the evils under which we know the Profession to labour, we require—

1. The unanimity which characterises the legal profession. Look at the example they set us.

2. We want the protection and support due to us by the Medical corporations, formed more or less by men who get seats on councils by partisanship, ambition, or subserviency (with or without Professional talent, as the case may be). Few of them care to head deputations to Home Secretaries, Army or Navy or Poor-law Boards. Thus the legitimate influence that ought to bear upon Government Boards is lost to the Profession, which contents itself by writing whining letters to the Medical journals.

3. The club system is a gigantic evil—the mechanic earning 30s. or 40s. per week, and a single man, as also the tradesman, paying alike the same subscription (3s. or 4s. per year) that is paid by the farm-labourer at 12s. per week.

4. The abuse of Hospitals—the clerk of the great manufacturer (who pays three guineas per annum) having a pile of out-patients' letters to give to any applicant, however unfit an object he may be.

5. Special Hospitals and Dispensaries, got up by young men with great ambition, no money, and often little or no Professional experience, who, by advertising their name and address, hope to reach the drawing-room through the kitchen.

6. Medical men keeping drug shops, selling patent medicines, &c., and thus leading the working classes to look upon the opinion of chemists as quite or nearly equal to that of the Doctor.

37, Belgrave-road, S.W., March 19. I am, &c. T. G. Teaay.

P.S.—The working man, by paying 6d. per month for himself, the same for his wife and each child, could obtain incomparably better attendance at home, when unable to visit his Doctor, than can be got by any Dispensary or Hospital system, especially if the patient reside within a mile of the Doctor. The mechanic by a well-organised system can escape the privilege of the chemist's prescription for "rheumatics" in a case of acute pleuritis or acute pneumonia, or the aromatic cordial for acute peritonitis, intussusception or strangulated hernia under the diagnosis of "colic."

R. B. N.—Cases are recorded by Montgomery, Barnes, and Hewitt.

Ant.—In Lettigrew's "Lives."

Logos.—Dr. Armstrong lectured at Grainger's School; Dr. Clutterbuck at the Aldersgate-street School.

A Patient.—The mode of advertising is calculated to mislead. Our correspondent should put the question he has sent us to his Medical attendant.

Somerset.—The letter was in exceedingly bad taste. Whatever difference of opinion existed, the proper place to discuss it would have been in the consulting room, and not in the columns of a newspaper.

B.—The solitary opinion had no weight with the jury.

Nemo.—Statistics were published which went to prove that the two diseases were about equally fatal.

Rebus.—It may be a riddle; at all events, it is difficult, if not almost impossible, to arrive at the meaning of the author.

In Court.—The works are of average quality, but they certainly do not take the "lead," or "lead opinion."

Inquirer.—The subject will be discussed at the proper time. The Fellowship was thrown open to the Licentiates, under certain restrictions, after a long and severe course of agitation. Dr. Holland was the secretary of the Committee of Licentiates.

Studens.—Yes; the Hospitals were united until about thirty-five years since, when separate schools of Medicine were formed at Guy's and St. Thomas's. There was considerable discussion and quarrelling at the time as to the respective rights of the students, and several Guy's men were tried at Guildford for "riot."

Retiring Pensions to Poor-law Medical Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Much as I admire the impartial treatment which all classes of our Profession receive at your hands, as one of the hard-working and least honoured of its members, I must be allowed to protest against one of your auguments in favour of Dr. Brady's proposed Bill for giving a retiring pension to Poor-law Medical Officers. It is that you would wish by its means to procure "a higher class of Practitioners" to take charge of the poor. To this I object that the Medical officer is very seldom found to be incompetent; on the contrary, in country towns he is nearly always the most successful Practitioner in the place, who pays his assistant out of the parish fees. And I can assert with confidence that in the district around me it would be impossible to meet with men of a higher stamp than those who now fill the office. Such men as these do not deserve a retiring pension, for the simple reason that they ought to have given place to their younger and less fortunate brethren years ago. Surely at this time, when you assert that the bulk of Medical men in our own country are better qualified to exercise their profession than those of any continental nation, they might be trusted with the care of the lowest members of society. Young men, just engaging in practice and anxious to secure patients, would do ample justice to the poor, even from motives of prudence only; and in order to help each one thus toiling for practice, instead of giving any man a life-tenure of office (as some propose) he should not be allowed to hold it for more than three or five years in succession. Before the expiry of that time his diligence would not have flagged, and the men who were hoping to follow him would strive to approve themselves worthy of the trust. By this means a young man just entering upon the duties of his profession would find patients to keep him in practice and to educate him for still higher posts—to wit, Hospital appointments. It is perfectly certain that the difference of men's success in life is less that of merit than of opportunity. I would therefore give the opportunity to every young man by opening up to him both Hospital and parish appointments, and to use them as initiatory fields of practice. The same system of re-election should be adopted for both; only in the case of the latter it might be necessary to demand some special qualification for operative surgery. At a time when clinical instruction for students is insisted upon so much, it is not out of place to ask that facilities for exercising the same kind of practice should be afforded them when they have obtained a diploma. If my remarks should lead to more considerate treatment of the juniors by the seniors of our Profession, it would give great satisfaction to

Yours, &c. Nemo.

A London Member.—Due notice will be given when Professor Birkett is about to commence his lectures at the College.

St. George's-road, Southwark.—We are unable to afford you the desired information as to the qualifications of the "Surgeon-Major," as in neither of the printed circulars issued by him does he favour the public with his initials.

H. M., Manchester.—You will find copies of the primary and pass examination questions in the Calendar of the College.

F.R.S. and F.R.C.S.—The candidate mentioned by you for admission into the Royal Society is incorrectly described as being a Fellow of the College; he is a Member.

Dens Sapientiæ.—The Dental Board of the College has ceased to be remunerative. The retiring members decline being re-elected.

Dr. R.—The monthly dinner of the Medical Club will take place on Wednesday, April 6, when Sir Charles McGrigor, Bart., will take the chair.

Odontologist, Brighton.—Mr. G. A. Ibbetson, F.R.C.S., late President of the Odontological Society, is the author of a paper on the fossil teeth of fishes in the palæozoic and lower members of the mesozoic rocks in vol. v. of the *Transactions* of the Odontological Society.

Dr. O'F., Devonport.—We are unable to give you any information respecting the Carmichael Prize. The advertisements have not appeared lately. Provision is made for handing over the trust to the Medical Benevolent Fund, should such a "hitch" as mentioned by you occur.

St. Peter's Hospital.—An advertisement appeared in the last number of a Medical contemporary stating that a well-known Surgeon would appear every Wednesday evening at 7 o'clock at the above Hospital to demonstrate the value and use of various bougies, including the *bougie comique*. A correspondent suggests that perhaps *bougie conique* is intended.

COMMUNICATIONS have been received from—

Mr. G. Reid; Mr. Wilfred Hine; Mr. Jacob Bigelow; Mr. Thos. Bryant; Dr. T. Clifford Allbutt; Dr. W. S. Playfair; Dr. Day; Dr. Edward B. Gaay; Dr. James Russell; Dr. H. MacCormac; Dr. Ballard; Dr. T. Spencer Cobbold; Mr. J. Chatto; Dr. Edward Long Fox; Dr. C. J. B. Williams; Dr. Edwards Crisp; Dr. Sherlock; Mr. F. N. Clerk; Mr. M. F. Simon; Dr. J. J. Thayer; Mr. R. Freeman; Dr. G. Johnston; Dr. F. A. de Hartsen; Dr. Osborn; Mr. Cæsar Hawkins; Messrs. G. W. Fox and Co.; Dr. Abrath; Mr. Balmanno Squire; Mr. F. A. Ford; Dr. Gervis; Mr. James Paget; Dr. Sturges.

BOOKS RECEIVED—

Medical Temperance Journal, No. 3—Report of St. Mary's Hospital for Women and Children, Manchester—The Knightsbridge Barracks and the Necessity for their Removal, by John Elsworth—Dr. Crane's Report on the Sanitary Condition of Leicester—Journal of the Scottish Meteorological Society, January—Australian Medical Gazette—Mapother on the Body and its Health—The Million—Boston Medical and Surgical Journal—Report of the Committee of Visitors of the Cambridgeshire Panper Lunatic Asylum—State of the Norfolk and Norwich Hospital—Transactions of the Odontological Society—Abcès de la Rate, par Dr. Gluge, Bruxelles—Sampson Gamgee on Medical Reform—Report of the Glasgow Royal Infirmary—Report of the Devon Lunatic Asylum—Report of the Glamorgan County Lunatic Asylum—Essai sur les Maladies du Cœur chez les Enfants, par Dr. H. René Blache—Dr. Baylis on the Sanitary Condition of Birkenhead—Stanford's Geological Map of London—Report of the Hankow Medical Mission Hospital—Dr. W. Warren Greene on the Reduction of Dislocations—Bulletin Général de Thérapeutique — Practitioner, No. 22—British Journal of Dental Science, No. 166—Hardwicke's Science Gossip, No. 64.

NEWSPAPERS RECEIVED—

New York Medical Gazette—Nature—L'Union Médicale—Gazette des Hôpitaux—Aris's Birmingham Gazette—Birmingham Daily Post—Western Morning News—Philadelphia Medical and Surgical Reporter—The Medical Press and Circular—The Farmer—The Parochial Critic—New York Medical Gazette—Greenwich and Deptford Chronicle—Melbourne Age.

APPOINTMENTS FOR THE WEEK.

April 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Lockyer, "The Sun."

4. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Dr. Lichtenberg and Mr. de Méric will bring two patients upon whom Pirogoff's amputation has been performed. Mr. J. W. Barnes, "On a Case of extensive Disease of Kidney and Impaction of Ureter by Calculi." Mr. Weeden Cooke, "On Hydrate of Chloral in Cancer."

Royal Institution, 2 p.m. General Monthly Meeting.

5. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. Meeting.

Royal Institution, 3 p.m. Prof. Rolleston, "Nervous System."

6. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society, 7½ p.m.: Council Meeting. 8 p.m.: Dr. Routh, "On Fundal Endo-Metritis." And other Papers by Dr. Brunton, Dr. Wynn Williams, and Dr. Mendenhall.

Society of Arts, 8 p.m. Meeting.

7. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Mr. T. Carr Jackson, "On Lithotomy."

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

Royal Institution, 3 p.m. Prof. Odling, "Chemistry."

8. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Mr. Barwell, "A Case of Local Paralysis treated by Hypodermic Injection of Strychnia." Mr. Holthouse, "A Case of Inguino-crural Hernia." And other Papers.

Royal Institution, 8 p.m. Prof. Huxley, "Pedigree of the Horse."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 26, 1870.

BIRTHS.

Births of Boys, 1151; Girls, 1076; Total, 2227.
Average of 10 corresponding weeks, 1860-69, 2077·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	771	707	1478
Average of the ten years 1860-69	760·8	741·1	1501·9
Average corrected to increased population	...	...	1652
Deaths of people above 90	...	1	1

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	3	8	...	6	1	2	3	1
North ...	618210	2	2	14	2	14	2	5	2	3
Central ...	383321	...	2	4	1	8	4	1	...	...
East	571158	...	3	11	1	9	...	2	2	...
South	773175	3	9	19	1	16	3	6	3	5
Total	2803989	5	19	56	5	53	10	16	10	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·847 in.
Mean temperature	38·1
Highest point of thermometer	53·6
Lowest point of thermometer	28·1
Mean dew-point temperature	33·4
General direction of wind	W.S.W., N.N.W., & N.E
Whole amount of rain in the week	0·37

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 26, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending Mar. 26.	Deaths Registered during the week ending Mar. 26.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2227	1478	53·6	28·1	38·1	3·39	0·37	0·94
Portsmouth ...	122084	32	199	50	58·4	25·8	38·9	3·83	0·05	0·13
Norwich	81087	27	50	27	53·0	27·0	37·3	2·95	0·65	1·65
Bristol	171382	90	128	82	50·8	27·5	38·6	3·67	0·01	0·03
Wolverhampton ...	72990	53	80	26	55·4	27·3	38·8	3·78	0·22	0·56
Birmingham ...	369604	117	293	143	55·0	28·3	39·2	4·00	0·23	0·59
Leicester	97427	75	69	44	55·0	25·5	37·9	3·28	0·21	0·54
Nottingham ...	88888	110	68	27	56·2	26·0	39·8	4·34	0·24	0·61
Liverpool	517567	250	351	260	51·4	30·0	39·0	3·89	0·23	0·59
Manchester ...	374993	207	319	204	53·7	27·0	39·5	4·17	0·31	0·79
Salford	121580	58	115	46	51·5	23·9	38·9	3·83	0·37	0·94
Bradford	143197	54	109	78	54·2	26·5	38·2	3·44	0·17	0·43
Leeds	259527	30	183	117	57·0	28·0	39·5	4·17	0·24	0·61
Sheffield	247378	27	245	96	55·0	26·5	39·6	4·23	0·24	0·61
Hull	130869	91	90	57	55·0	24·0	36·0	2·22	0·25	0·64
Sunderland ...	94257	52	68	36	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	97	59	53·0	25·0	34·6	1·45	0·75	1·91
Edinburgh	178970	100	134	95	50·7	29·0	40·1	4·50	0·60	1·52
Glasgow	468189	228	388	289	...	...	...	...	...	...
Dublin (City, etc.*)	321540	82	199	151	56·5	26·0	41·3	5·17	0·30	0·76
Total of 20 Towns in United Kingd'm	7209603	83	5322	3365	58·4	23·9	38·6	3·67	0·30	0·76
Week ending Mar. 26 Paris	1889842	242	...	1101	...	...	...	...	...	...
Week ending Mar. 19 Vienna	605200	162	...	...	...	...	...	...	...	...
Week ending Mar. 24 Berlin	702437	112	615	496	...	...	33·1	0·62	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·847 in. The barometrical reading decreased from 30·20 in. at the beginning of the week to 29·58 in. on Friday, March 25.

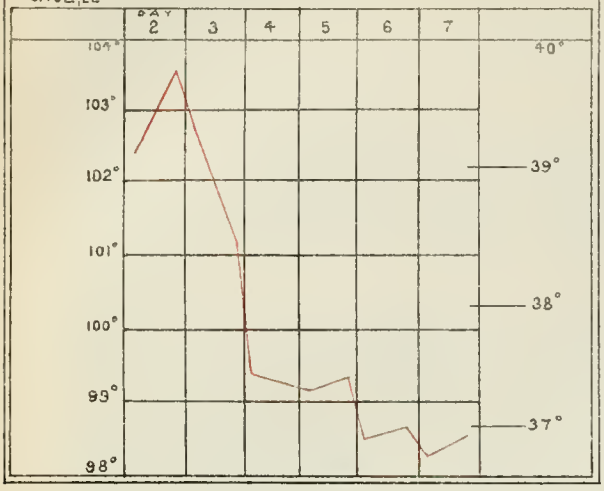
The general direction of the wind was W.S.W., N.N.W., and N.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

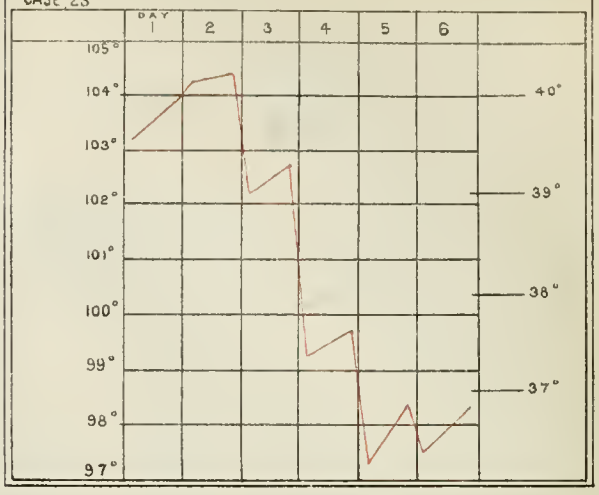
MEASLES.

CASE. 22



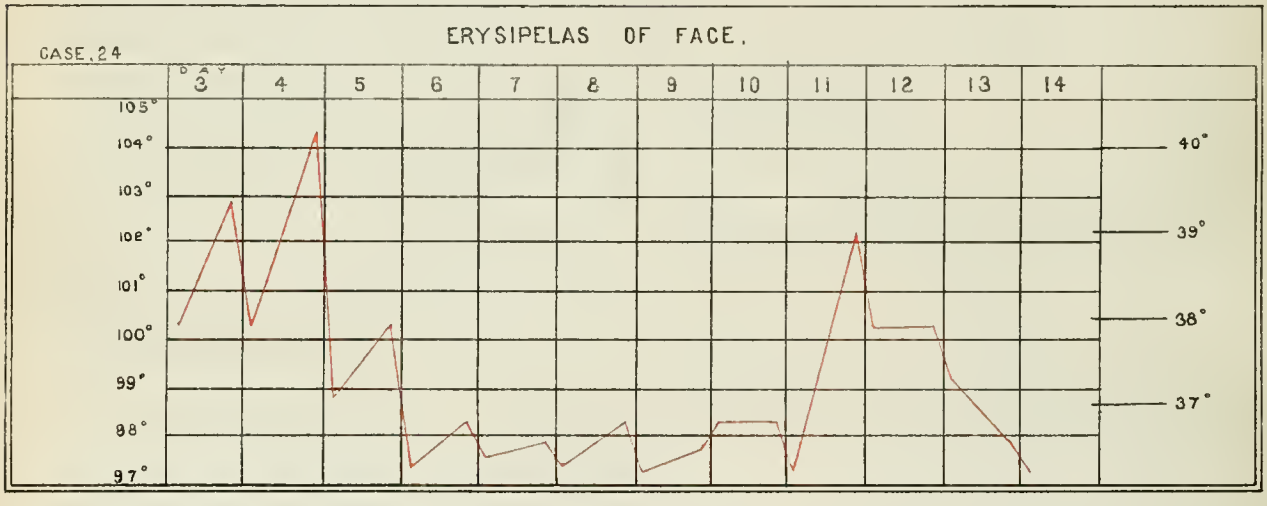
RUBEOLA NOTHA.

CASE. 23



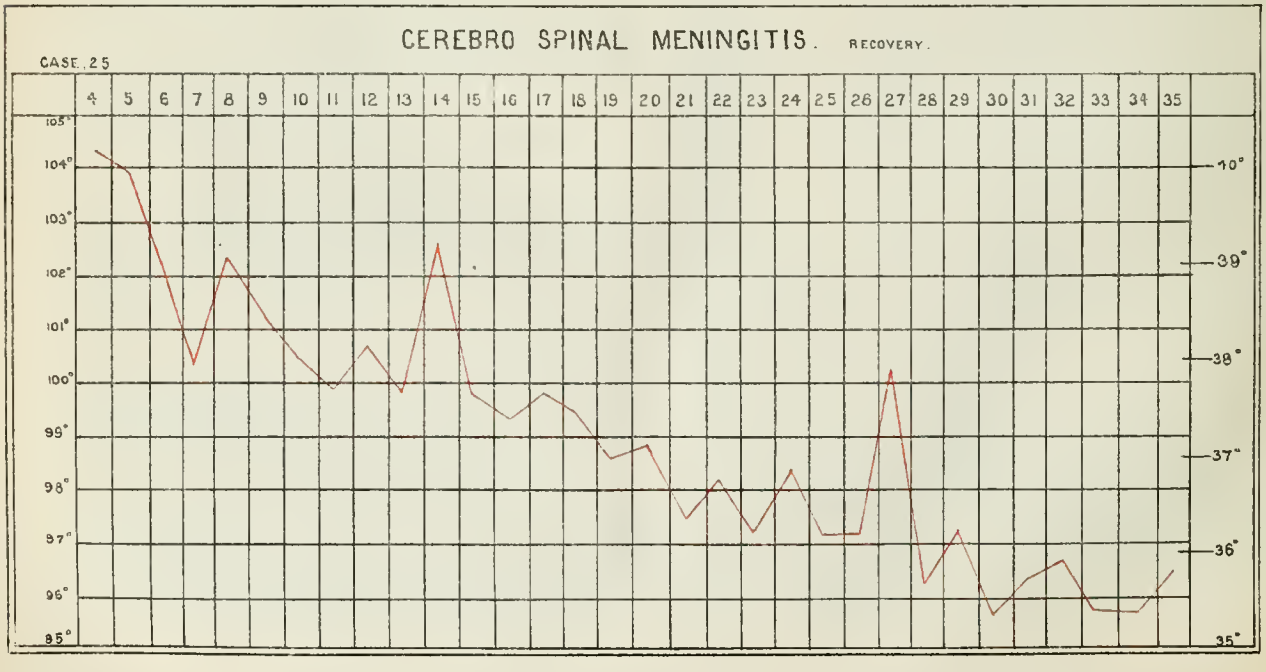
ERYSIPELAS OF FACE.

CASE. 24



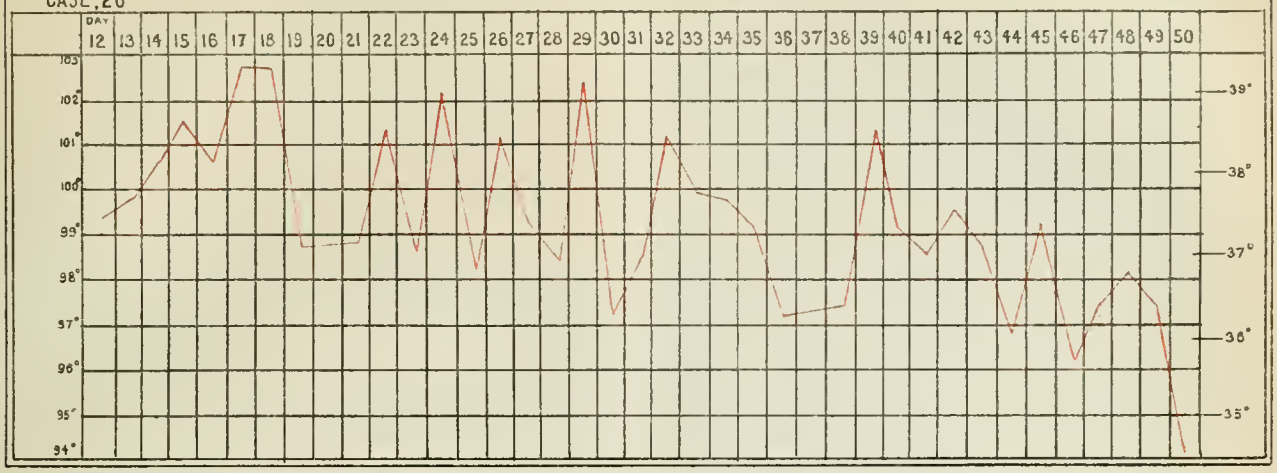
CEREBRO SPINAL MENINGITIS. RECOVERY.

CASE. 25



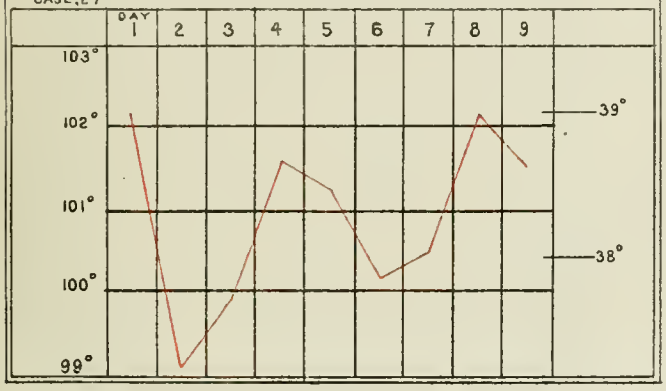
CEREBRO SPINAL MENINGITIS. FATAL.

CASE, 26



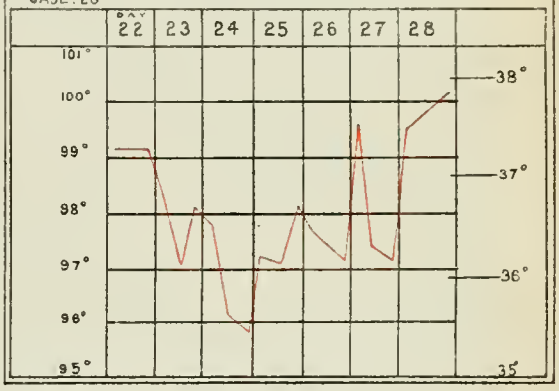
CEREBRO SPINAL MENINGITIS. FATAL.

CASE, 27



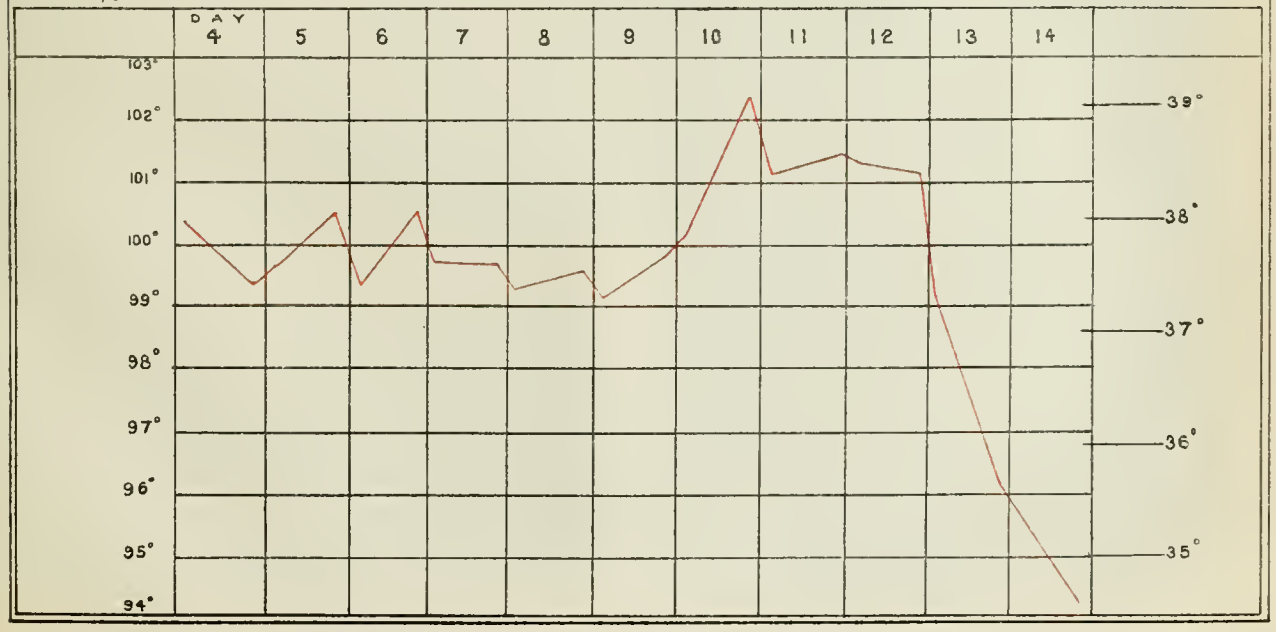
TUBERCULAR MENINGITIS. FATAL.

CASE. 28



TUBERCULAR MENINGITIS. FATAL

CASE, 28



ORIGINAL LECTURES.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
Lecturer on Clinical Medicine in the University of Berlin.

I.—Cardiac Neuralgia (Angina Pectoris).

(*Continued from page* 330.)

Eichwald is of opinion that the stenocardiac attack is consequent on actual arrest of the action of the heart by a mechanical impediment, and that the pain results from an endeavour of the heart to overcome that impediment, in the same manner that over-exercise of the voluntary muscles produces a feeling of pain.

Excellent as Eichwald's theory may be for the purpose of explaining the phenomena, the objection must nevertheless be made that *primo loco* an alteration of the heart's action has not been shown to exist as the first symptom in a stenocardiac attack, but the patient is, on the contrary, suddenly seized with pain whilst in perfect health, and without having previously had palpitation of the heart. The heart's action, as indicated by the impulse and the pulse, during an attack is, according to the accounts given by authors, not so excessive as to produce such pain. We cannot admit that impediment to the heart's action is the cause of certain cases of angina pectoris, for the heart in ordinary cases of obstruction to the circulation—as, for instance, stenosis of the aortic orifice, insufficiency of the aortic valves, atheromatous changes, etc.—responds by a totally different action: the contraction of the ventricles becomes stronger. Finally, in the cases where the heart seems quite normal to physical examination and the angina pectoris appears to be a pure neurosis, any such impediment to the cardiac movements is altogether unintelligible; for if in such cases the impediment, which Eichwald assumes, lay within the nervous tracts supplying the heart, and were due to increased excitability of the vagi, this could only be presumed by showing that the pulse had become permanently slower. And why, again, should a rhythmic irregularity of the action of the heart cause impeded circulation? We are at all times able to diminish the heart's action under pathological conditions by means of certain pulse-lowering remedies, but we never see any abnormal sensations produced by the action of these drugs.

I have in one case, dependent on some central disease, observed the pulse as low as 28 per minute, and this with no abnormal sensations on the part of the patient. I must therefore doubt the statement that changes in the heart's action as such can produce the cardiac pain.

In connexion with an explanation of the pain which is reflected from the præcordial region to other parts of the body, particularly to the left arm, we must refer, in a few words, to the anatomical condition of the cardiac plexus, its composition, and connexion with the nerves of the neck and arm.(a) The cardiac plexus is composed of the cardiac branches of the vagus and the cardiac nerves, which take rise in the cervical ganglia and the first dorsal ganglia of the sympathetic. The superior cervical ganglion of the sympathetic, in which originates the superior cardiac nerve, has communicating branches with the third and fourth cervical spinal nerves, which on their part contribute towards the formation of the cervical plexus. Besides that, the superior cardiac nerve has anastomoses in its course along the neck with branches of the ascending division of the hypoglossal nerve, and this again is connected with branches of the second and third cervical nerves; hereby a manifold connexion is established between the superior cardiac nerve and the cervical nerves.

The median cervical ganglion, from which the middle cardiac nerve originates, has communicating branches with the fifth and sixth cervical nerves, sometimes also with the vagus and phrenic. The inferior cervical ganglion, in which the inferior cardiac nerve originates, has branches communicating with the sixth, seventh, and eighth cervical and first dorsal nerves; but the four lower cervical nerves and the first dorsal combine to form the brachial plexus, and thus the inferior cervical ganglion and the inferior cardiac nerve arising from it communicate with the brachial plexus. There exist in addition the numerous anastomoses of the sympathetic with the vagus: on the one hand, the ganglia of the sympathetic are connected with branches of the vagus, of its trunk as well as of the superior laryngeal, and more particularly the inferior laryngeal branches; on the other hand the vagus is connected with the cervical nerves by means of anastomotic branches from the descending division of the hypoglossal. The cardiac plexus, on its part, has many bonds of connexion with the aortic and coronary plexuses. The pains which, in cases of pectoral angina, are reflected to the parts supplied by the cervical nerves, are then explained by means of the communications between the cardiac plexus and the anterior branches of the four lower cervical and the first dorsal nerves; the pain reflected to the left arm is explained by the fact that the anterior branch of the first dorsal nerve communicates with the inferior trunk of the brachial plexus. That the pains are more frequent down the left than the right arm is, perhaps, partly explained by the position of the heart and aorta towards the left side, in consequence of which irritation from disease of the heart may more easily be caused, and partly by the fact that the nervous communications on the left side are (it is said) more intimate. The pains in the anterior surface of the chest are accounted for by communication between the thoracic nerves and the brachial plexus. Pains again occur, which radiate into the diaphragm; these are explained by the connexion of the phrenic with the fourth and fifth cervical nerves, and through them with the cardiac nerves. The phenomena sometimes observed in parts supplied by the vagus, as dysphagia, vomiting, difficult phonation,(b) etc., are to be referred to the connexions between the sympathetic and vagus, particularly of the cardiac plexus with the cardiac nerves of the vagus. The anastomosis of the cardiac plexus with the aortic and coronary plexuses explains the frequent occurrence of stenocardiac attacks in cases of ossification and stenosis of the coronary arteries.

We sometimes, in attacks of angina pectoris, find the pain limited to one side only—viz., the præcordial region; at other times we see it reflected along the different nervous channels. In addition to purely mechanical conditions, this probably depends on the intensity of the irritation exercised on the cardiac plexus. As in other neuralgic affections, we may assume that in this instance also the number of nerves participating increases with the intensity of the pain. In a patient who was several weeks under my care, the radiation of the pain was more extensive as the initial pain in the præcordial region was more intense. In attacks of but moderate severity, radiation into the right arm did not manifest itself, and on the anterior surface of the chest a comparatively small area was affected.

Let us now consider the causes of the motor changes in the heart which take place during the stenocardiac attack.

It has been already mentioned that, wanting the pathologico-anatomical basis, we cannot start from any one single group of cardiac nerves as the origin of the affection; we can only analyse the phenomena of the heart's action according to our present knowledge of the innervation of the heart, but we shall try to show that the phenomena of a stenocardiac attack may originate in very different groups of cardiac nerves; they can be explained by alterations in the *automatic* regulatory, and in the *sympathetic* nerve systems.

We will first consider the former of these two systems. The heart, as is well known, continues its rhythmic action for a certain time after removal from the body. The centres of innervation for this action are aggregations of ganglia (automatic system of heart's nerves) imbedded within the cardiac muscle. Influences which paralyse these ganglia or the substance of the muscle connected with them at once, according to physiological dicta, stop the contraction of the heart; several poisons introduced into the ventricle or into a solution of which the heart may be immersed are examples of this.

Landois(c) has further shown that disturbance in the automatic action of the ganglia of the heart under the influence of certain poisons may be of two kinds—the function may be increased or it may be diminished down to entire paralysis of the heart. Weak solutions of various poisons, when introduced within the endocardium of the frog, irritate the ganglion cells beneath the lining membrane, and thus excite the heart to more rapid action. Strong solutions quickly paralyse these ganglia, and thus stop the contraction of the heart. If the solutions of such poisons be only applied to the outer surface of the heart, these extreme disturbances are less apparent. Under pathological conditions, the heart's ganglia may possibly be

(a) Compare Sussana, "Monografia della Neuralgia Brachiale, con Appendice intorno all' Angina Pectoris." Milano. 1859. *Gazette Hebdom.* 1858, 46 to 48; 1859, 9 to 13, and 15 to 18.

(b) See Lartigue, *loco citato*, page 22.

(c) L. Landois, "Die direkte Herzreizung," *Greifswalder medicinische Beiträge*, 2ter Band, 1864, S. 161—177.

affected in the same way as in the physiological experiments just mentioned. If from any cause the rhythmic action be altered, whether by abnormal resistance to the circulation from diseases of the aorta, as atheromatous changes in that vessel, or by consequence of the conveyance of too little blood to the ganglia through narrowing or obliteration of the coronary arteries for instance, or by implication of the ganglia—which is not improbable—in disease of the muscular tissue of heart, such as results from myocarditis, fatty degeneration, etc., then the heart may be affected in one of two ways—either its frequency will be increased if the pathological condition be such as to have an irritating effect on the ganglia, or its action will be diminished if the influence be of a more paralytic kind. The assumption that the action of the automatic ganglia of the heart is disturbed in a stenocardiac attack is easily reconcilable with the fact that the action of the heart is, during an attack, at one time increased and at another time diminished. In the same manner as poisonous solutions injected within the endocardium may, according to their degree of concentration, produce the opposite effects above mentioned, so may a pathological irritation excite changes in the action of the heart of different kinds according to its intensity.

(*To be continued.*)

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 331.)

Congenital Cataract.—It is a peculiarity of this, that the cataract so frequently exists only partially, it may be but in the most limited degree, only just enough to be recognised, to an extent almost entirely invading the lens, or the child may be born with complete lenticular opacity. Moreover, it is nearly always a double affection. The exceptions are rare, for I have not met with but eight. This requires that the affection be described under five forms.

In the first, in the slightest state, it is a spot of chalky whiteness, sometimes a mere dot in the very centre of the anterior part of the lens, being degeneration of the lens tissue to that extent. The capsule may be affected to the same degree, or even less, but it may not be implicated. In many instances the cataract is not discovered till years after birth; sometimes not till adult life. It is always well marked in the clear black pupil.

The second is but a more extended form of the above, in which the capsule is affected to a like extent. Besides the partial lens degeneration, primary and secondary, there is an addition of cartilaginous material or earthy, which projects and carries the capsule in front. A white opaque excrescence, stands out more or less pyramidically with a base, that may be as large as the natural pupil, but is generally much smaller. This is the pyramidal cataract of the old authors. An examination of a pyramid that became detached, showed a thickened portion of capsule, over parallel plates of neoplastic cloudy substance. It seemed as if the pyramid had grown from the lens substance, through a hole in the capsule. In some cases, there is opacity at the back of the lens as well, or striæ in several parts. The first case I ever saw was pointed out to me by Sir W. Lawrence, when I was his house-Surgeon, in a boy twelve years old, whose sight was so imperfect from partial opacity of the lens, that the operation for solution was undertaken. The base occupied the entire area of the undilated pupil, the apex nearly touched the cornea. This little pyramid dropped off in the course of absorption of the lens, and remained harmless in the anterior chamber. The other eye was destroyed from an operation, before the boy came to the Hospital. This pyramid must not be taken for inflammatory deposits on the anterior capsule, associated with adhesion of the iris.

The third is the most common. There is central opacity occupying the pupil in the natural state. Greyish-white striæ sometimes pass from it to the equator of the lens. The opacity may be striated with a dense white spot in the middle. It may pass altogether through the entire thickness of the lens, or occupy the anterior portion only, the most superficial part, or a portion of the lens between the centre and the surface, there being yet no nucleus, so that there is transparent lens tissue before and behind the opaque portion. There may be partial opacity in the centre of the lens. There may be two opaque parts in different places, with clear lens tissue before and behind. The deeper opacities may be regular or patchy, or in dots, or in striæ.

It matters nothing, however, as far as the disease is concerned, where the opacity is seated, nor is there any practical value attaching to the accurate diagnosis of the position of such.

Dilatation of the pupil shows the nature of the affection. The unaffected portion of the lens looks quite black, and the more so, if there are no lateral striæ.

Formerly many pathological mistakes were made about this cataract. It was supposed that the lens was smaller than natural, and opaque, and that the striæ were fibres attaching the capsule to the ciliary body. Before the ophthalmoscope was used, and while I was a student, I showed the fallacy of this by pointing out that, when I operated for solution, the "black zone" was lost by the rest of the lens getting opaque. The usual course is for the lens to remain partially opaque through life.

The fourth is the fully formed cataract.

The fifth kind is the rarest. A limited patch of opacity occurs in the cortical portion of the lens, sometimes in the posterior region. When posterior it is often mistaken for opacity of the capsule. Slight haziness of the lens in general is often associated with it.

A few exceptional cases of acquired cataract at this period of life have been met with. There was perfection of vision up to seven years, or eight. It is necessary to direct attention to them to prevent the possibility of the disease in any form being overlooked.

First form. An irregularly shaped patch on the posterior surface of the lens, seeming at first as if on the capsule. In most instances it has been at the equator of the lens, yet extending towards the centre.

Second form. The lens dotted throughout with very minute fine white points, running in the course of the fibres. The general effect is that of a very faint haziness of the pupil. The patients were ten or eleven years old; and they described their dimness and extreme shortness of sight as having been noticed about a year before.

The third form. This has been recorded of only one patient, a boy eleven years old. The irides were very active, and the pupils in their natural state offered no peculiarity of appearance. With the right eye, he could but barely discern a difference of shade between a printed page and a blank one. With the left eye he could read large type. On dilating the pupils and concentrating light on them with a magnifying glass of one inch focus, the whole posterior face of the right lens was seen to be covered with very fine opaque lines, closely set together, radiating from the circumference towards the centre, so as to produce the effect of a concave surface, composed of a delicate fibrous membrane. At the centre of this surface, in the axis of vision, was an opacity in the form of a ring, more dense than the rest; the area however, not being black and clear, but hazy, like the remaining portion of the back surface of the lens. The left eye presented somewhat the same appearances, but in a slighter degree; and the posterior striæ being wider apart, and the ring-shaped opacity in the axis of vision, only indistinctly marked.

It is unnecessary to speak here of the figures of the opacities, after what has been said of them in hard cataract.

The aspect of fully formed lenticular congenital cataract, is bluish white.

Opacity of the capsule is of the commonest occurrence in congenital cataract. It would be omitting a marked feature in this infantile affection were there not mentioned the marked changes that it may undergo in regard to thickness and opacity. The greatest alterations that I have observed in these respects have been here.

The cataract occurring from puberty to manhood, that is up to the period at which the lens is yet soft, being without a distinct nucleus. If the opacity should begin near to the surface, a bluish-white, slightly glistening zone, sometimes interrupted, appears near the equator of the lens. Glistening projections on the anterior surface, and on the posterior, converge and are to be seen in the pupil. The interspaces may be clear or a little cloudy. Then the whole lens-tissue loses its transparency. While the centre remains clear, the cataract is, of course, less dense there. The extreme equatorial parts may long remain clear.

Again, on the anterior cortical portion, or on the posterior,

or both, spots and striæ may form, and which, increasing, unite at the poles and the equator.

The opacity may commence centrally, in a star-like form, and as it progresses make the lens look as if it were divided into sections.

When the entire lens is opaque, the opacity is densest in the centre of the cataract.

Glistening radii are more commonly seen here than in hard cataract, and are brighter. When they are very numerous, and there is, besides, interstitial opacity, the cataract looks like a piece of fractured spermaceti.

The cataract generally retains some transparency till the secondary metamorphosis sets in, and, by opaque illumination, radiating striæ may be seen till a late period.

The appearance of this cataract, when fully formed, is that of a light grey colour, or greyish-white, and in proportion as the cataract occurs earlier in life is the grey more apparent. Sometimes there is a bluish whiteness, resembling milk-and-water. The colour is generally deeper in the centre, but the contrast is not so marked as in the hard variety.

It has been supposed that soft cataracts may increase in size beyond that of the healthy lens, and that indication of it is afforded in smallness of the posterior chamber. The increase is attributed to imbibition from the aqueous humour. This is really no proof, as changes in the posterior part of the eye, especially preternatural vascularity of the ciliary apparatus, may throw the cataract forward, and even the iris, and more or less destroy, too, the anterior chamber. Besides, such enlargement could not take place, except the capsule also enlarges, a very unlikely occurrence.

When cataract is the product of severe inflammation of the eye, that part of it which is visible, not being covered by an adherent pupil nor inflammatory deposits on the capsule, appears of a chalky whiteness, or of a mother-of-pearl lustre.

There is mostly much calcareous degeneration.

The marked characteristics of fluid cataract prevent it from being mistaken. They are of milk-like whiteness or cloudy grey aspect, without striæ or lines or any markings, such as occur among lenticular fibres. There may be minute dots on the posterior part of the anterior capsule. Gravitation of the more solid particles, before spoken of, so that the lower part of the cataract is the denser, is the most marked physical sign.

Inflammatory complications modify the appearance of cataract, but only the capsulo-lenticular variety, by causing the deposit of new formations on the front of the anterior capsule.

The course is this:—The iris inflames and becomes adherent to the capsule of the lens, and then a new product is effused. The appearance is that of a dead white with a dull lustre. There may be chalky deposits, also cholesterine, when there is glistening. Such conditions, especially the latter, are rarely seen except in disorganised eyes which are past treatment.

Diagnosis of the Capsular Disease.

Partial capsular cataract of the anterior capsule has a chalky white or cartilaginous look. It may have a definite outline, or be surrounded by a bluish halo. It is generally central, and can be recognised by its anterior position.

Its characteristics are rendered more manifest by raising the upper eyelid, desiring the patient to look to the ground, and making the inspection sideways.

When partial opacity of the capsule occurs, in conjunction with partial opacity of the lens, or complete, the colour of the two may so resemble each other that, without looking into the pupil obliquely in the manner I have described, an inexperienced observer will be deceived.

The definite outline of the capsule is well contrasted with the posterior, hazy, and diffused lenticular opacity.

That of the posterior capsule can be seen well only with the ophthalmoscope. It appears as a dull concave, deeply-seated opacity.

Complete capsular cataract has chiefly a bluish-white aspect, the blue or the white prevailing according to the absence of the lenticular matter, or the presence of an opaque lens. Any deposits on the inner surface of the capsule, chalky concretions, cholesterine, and fibrous materials are more or less visible.

The capsule is rarely so densely opaque throughout as to conceal the cataractous state of the lens, unless the opacity be caused by injury or be congenital. Some little spots less altered than the rest generally afford the information. The age of the individual does not seem to influence its changes, as in lenticular cataract, for precisely the same conditions may be observed at any period of life.

Whether complete capsular cataract encloses a lens or not is judged of chiefly by its volume. When the lens is absent the symptoms are—flatness of the capsule, greater size of the posterior chamber, with more or less retraction of the iris with perhaps tremulousness.

Sometimes there are dense opaque patches, sometimes thick cretaceous deposits, or capsulo-lenticular cataract which exists at birth. The last stage of secondary lenticular metamorphosis or fluid degeneration is often met with in conjunction with this dense capsule change. It would seem that absorption of the degenerated lens material is always greater, as the capsule is thicker. This is the case, I suspect, why capsule only is met with in children, when the disease, originally capsulo-lenticular, is not operated on early. I am unaware whether there is ever any arrest of lenticular development in such cases of congenital disease, but I suspect that there often is, because there are frequently associated other congenital ocular defects.

An empty capsule is mostly less opaque. It generally extends in part to the ciliary processes. There is frequently more opacity at the circumference, because whatever remains there may be of degenerated lens, as fatty and chalky deposits, are collected in that position, and this arrangement may produce the appearance of a circular cushion or wreath.

Ordinary capsular cataracts do not interfere with operations on the lens.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

AN OPERATION ON THE LOWER JAW.

By C. F. MAUNDER,
Surgeon to the London Hospital.

From various causes, more or less of the lower jaw may demand removal, and one great aim on the part of the Surgeon should be to disfigure his patient as little as possible. Tumours of various kinds call for operative interference, and, if growing from the alveolus, can be easily cut away, leaving the line of the base of the jaw intact, and without any external wound of the cheek. So far as I am aware, it has been customary to incise the cheek more or less with a view to the removal of half the base of the jaw, for example, or for the removal of the ramus, so large an extent of jaw, as half the base not having been hitherto taken away through the mouth. In speaking of these operations on the jaw, I make a distinction between ablation of portions of jaw for tumour and the mere extraction of a sequestrum. In the former instance a careful dissection is necessary in order to separate the healthy attachments of muscles, while, in the latter case (necrosis), the bone is lying more or less loose, and requiring only a certain amount of pulling and twisting to get it out of its bed. I have assisted at the removal of the *whole* lower jaw, become necrosed in the person of a lucifer-match maker. The dead bone was cut in two at the symphysis, without section of integument, and then either half, having been seized with forceps, was twisted out of its place, and brought out through the mouth.

With a view to prevent deformity, and with a hope that some new bone may be developed, I have recently (March, 1870) removed a portion of the lower jaw comprised between the line of the right canine tooth and the middle of the left ramus, without wounding the cheek at all, and preserving a good share of the periosteum. The patient is a female, 10 years of age, and the left base of the jaw was enlarged to the size of a hen's egg, the swelling projecting both outwards and inwards to the floor of the mouth, displacing the tongue somewhat, and deforming the lower part of the face. The tumour had a history of two years, had enlarged a good deal of late, was painless, smooth on the surface, and hard and resistent to touch. It gave one the impression that a growth within was expanding the jaw. I did not pretend to make a diagnosis beyond suggesting that it was probably benign, and that the first part of my operative procedure would be exploratory. I thought it possible that I might have to deal either with a cyst or with a fibrous or cartilaginous growth, and, if so, that I might be able to evacuate the one and enucleate the other, and at the same time preserve the line of the jaw unbroken; but in this I was disappointed.

Operation.—Chloroform having been administered, I drilled a hole into the tumour through the mucous membrane covering it, and proved it to be a soft solid within hard walls. I then broke down a portion of this wall with chisel and mallet,

and, having extracted a portion of the growth, handed it over to Messrs. Sutton and Tay for immediate examination with the microscope. They reported the growth to be myeloid in its nature, and I then proceeded to isolate the portion of bone involved in the disease. The integuments of the chin, including muscular attachments and periosteum, were first turned down off the symphysis, partly with a scalpel and partly with a raspatory, so as to expose the right side of the jaw opposite the right canine tooth (which was then extracted by Mr. A. W. Barrett) to the action of the saw and cutting forceps. The soft parts were protected from injury by the saw by a spatula passed up through the floor of the mouth behind the bone. The section here being completed, the gum and mucous membrane were severed down to the bone, and a raspatory introduced separated the periosteum, and with it muscular attachments to the required extent, and now, the lower half of the left ramus being bared, this process of bone was cut across with forceps. While effecting this latter step, and using the bone as a lever to aid the application of the forceps, the base broke in two, being now a mere shell of bone. The ramus also was splintered slightly by the forceps. One or two touches with the knife, and the now loosened bone was detached completely. Bleeding was trifling, no ligature being requisite. The muscles of the tongue had been severed at the back of the symphysis, and, to secure this organ forwards, the ligature, put through the tip for a similar purpose during the operation, was fastened to a hare-lip pin passed through the integument of the chin.

For several days subsequent to the operation the mouth was repeatedly syringed with Condy's fluid and water, and fluid nourishment was plentifully administered. The case has progressed favourably throughout, and, although three weeks only have elapsed since the operation, the patient can protrude the tongue, can articulate tolerably well, and has been running about during some days past.

ACUTE HYSTERIA IN THE MALE—TREATMENT BY HYPODERMIC INJECTION OF MORPHIA.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Physician to the Infirmary for Epilepsy and Paralysis.

In July, 1868, I was called to see a young gentleman, aged 23, who had, as I was informed, been suffering from "brain fever" during the last three days. His friends gave me the following history:—About a week ago he received a letter informing him that a young lady to whom he was attached had engaged herself to another gentleman. On receipt of this news he flew into a violent rage, and smashed a good deal of glass and china which happened to be on the table. He then began to talk about the frailty of women, indulging in most sarcastic remarks on the sex in general. Two days afterwards a friend took him to Richmond for a change. The whole of that day he was silent and morose, and returned in the evening in very bad humour. During the night he again became violent, and broke several pieces of furniture. Next morning, about 9 o'clock, he had a severe convulsive attack, in which he bit his tongue and foamed at the mouth, the limbs being considerably distorted for about fifteen minutes consecutively. After the attack he was exhausted, and remained so for about a quarter of an hour, when a similar paroxysm occurred, which was followed by many others in the course of the day. In all these attacks consciousness was not entirely lost. Between the fits he would either lie quietly in bed, or suddenly jump up, roll about the floor, and try to strangle himself, or to smash furniture. A Medical Practitioner was called in, who prescribed five grains of bromide of potassium several times daily. On an attempt being made to give him this medicine in a wineglass, he ground the glass to pieces between his teeth, and it was believed that he had swallowed some pieces of it. I saw him the day after, at 5 o'clock p.m., when I found him in much the same condition as just described—viz., occasionally seized by convulsive attacks, half-conscious, and violent. He would not answer any questions. There was evidently no meningitis, as the pulse, the skin, and the pupils were in their normal condition. Under these circumstances, I looked upon the case as one of acute hysteria, caused by sudden and severe mental emotion. As it was impossible to make the patient swallow any medicine, I rapidly injected, during a temporary lull in his strugglings, half a grain of acetate of morphia into the cellular tissue of the forearm. Five minutes afterwards he was perfectly composed. In fifteen minutes he went to sleep, and slept for five hours consecutively. He then awoke, and was violently sick several times, although he had eaten nothing for two days. He got out of bed next morning about 10 a.m., and was quite calm, making no allusion to what had occurred. I saw him again at 5 p.m., and as there were then slight symptoms of restlessness returning, I repeated the injection, but used only one-sixth of a grain, the patient not offering the least resistance. The next day I was informed that he had had a good night's rest, and was perfectly rational and collected. I saw him again (not professionally) six weeks afterwards, when, in answer to my inquiries, he said that he was quite well, and never alluded to his having been ill. Some months ago I heard from his friends that he had continued in excellent health ever since, and was engaged to be married, having quite dismissed from his mind all thoughts of his former attachment.

I will only add that I generally, in cases which require the subcutaneous administration of sedatives, use one part of atropia to twelve parts of morphia, in order to counteract the sickness and vomiting; but in the case just recorded I thought it best to utilise the vomitive effects of morphia simultaneously with its sedative action.

ON THE CAUSE OF MOOLTAN AND FRONTIER SORES.

By NATHANIEL ALCOCK, L.C.P.I.,
Assistant-Surgeon, 35th Regiment.

Throughout the continent of India, and at considerable distances from each other, there are several districts in which peculiar forms of boils are endemic, occurring alike among the native population and the white troops stationed in these places. The locality christens the affection as "Delhi boil," "Scinde boil," "Mooltan and frontier sores." Of these last I can speak from personal experience, having seen a very large number while stationed with my regiment at Mooltan, and also when serving with a detachment of the same at Dera Ismail Khan, our most distant outpost in this direction, situated on the narrow strip of plain between the western bank of the Indus and the Suliman range of mountains.

These sores commence as indolent blind boils, continuing for weeks like kernels in the skin, slowly increasing, surmounted by a somewhat livid cuticle, till at length they ulcerate to a slight extent in two or three places simultaneously, presenting the appearance of a chronic anthrax; and finally, by destruction of the parts intervening between the openings, a large ulcer is formed. They are almost invariably accompanied by a livid spongy condition of the gums, which are easily provoked to bleed, are inclined to recede from the teeth, and in some instances tend to suppurate. They seldom occur during the first year of residence. They affect both sexes and all ages down to 5 or 6 years. They usually form on the limbs or face, rarely on the trunk. Accidental abrasions become specific sores in those whose constitutions are prepared for their development. They were four or five times more frequent in those stationed on the frontier than among those residing in Mooltan. They became developed in several on the voyage home who had been unaffected while in India, and in one or two instances appeared after our arrival in England. They could be healed by a variety of substances—sulphate of copper, tincture of iodine, carbolic acid, application of potassa fusa, red precipitate ointment, etc., accompanied by tonic medicines—but were always tedious to a degree, and liable to reopen, unless the treatment was assisted by change of locality.

The recognition of the cause of these sores is most desirable, since, if it prove remediable, not only would much personal inconvenience be averted, but the forces serving in these localities would be rendered numerically much stronger by the removal of the prevailing source of inefficiency, which affects at least 10 or 15 per cent. Their origin has been attributed alike to causes local and constitutional: to an introduction into the cuticle of a parasitic fungus—a surmise on possibilities, without demonstration; and to the existence of scurvy—an assumption of the development of a disease in spite of its antidotes, since, although in the hot months fresh vegetables are scarce, they are not altogether absent, and the usual rations of fresh meat, milk, and bread, are always furnished, the deficiency of vegetables being supplemented by the issue of dholl, which contains

a large percentage of the supposed antidotes of scurvy. The fact of the liability of the natives, in whose diet there is neither alteration nor restriction, to this affection, limits the mode of its production to some influence common alike to both races, and this doubtless is the water of the locality. On the authority of the engineer officers at Dera Ismail Khan, I am enabled to state the following facts—viz., that those engaged in sinking a well invariably experience a foul vapour before the water is reached; that the wells become rapidly foul on being first opened; that they can only be purified by constant extraction of water to prevent stagnation; and that they as certainly revert to a foul state if left unused.

Through the very great kindness of Dr. Parkes, Professor of Hygiene at Netley, I am in possession of an analysis of some of this water which I brought from India, and which was found to contain as its chief ingredients carbonate of soda and sulphate of soda in considerable quantities, much decaying vegetable matter, and sulphuretted hydrogen to the extraordinary amount of 1·512 cubic inches per gallon. There was a strange absence of infusoria and of growing life of any kind, with the exception of some small cells, monad-like in movement, of which nothing more definite could be discerned by a microscopic power of 750 diameters. Here, then, is a water charged with sulphuretted hydrogen, doubtless the result of decomposition of its component sulphates in the presence of the decaying vegetable matter, and therefore containing within itself a prolific source of such impurity.

In Dr. Parkes's work on practical hygiene, I find that the effects traceable to sulphuretted hydrogen in the case of men working in an atmosphere in which it was known to exist, as in tunnels and mines, were anorexia, anæmia, and debility; whereas, in the only instance there recorded in which it passed into the system with the drinking water, an endemic of boils resulted, the cause of which was shown by Dr. Clemens to be infection of the drinking water of the neighbourhood by sulphuretted hydrogen from chemical works in the vicinity. Dr. Parkes also states "that the so-called Delhi boil has, for example, much decreased in frequency since the waters of the Jumna were used instead of the impure well waters." I also learn from analyses of the waters in and about Mooltan that the recognised fact of the greater prevalence of sores amongst those stationed at the fort, three miles distant from the main barracks, was coincident with the existence of an increased quantity of carbonate of soda, sulphate of soda, and such constituents as come under the head of "loss by ignition," evidently decaying vegetable matters in the water of that place.

These facts seem to me to leave but little doubt that the Mooltan and frontier sores result from a cachexia produced by the prolonged daily ingestion of small quantities of sulphuretted hydrogen gas, while at the same time they point to an easy and feasible remedy in boiling the water used for drinking purposes, or a still more efficient preventive in distilling the same—a course which might also be adopted, with unquestionable advantage and at comparatively trifling expense, on the appearance of cholera in any Indian station, the conveyance of this disease by water, as its vehicle, being now an accepted fact to the majority of scientific investigators. It may not be a groundless speculation, though impossible of proof, that the general condition of diarrhœa which coexists with cholera arises from minor infection by cholerine, which has gained entrance with the air during inhalation and deglutition, and which, by exposure to and dilution with oxygen, has been lessened in power, whereas the fully developed disease results from ingestion of the unimpaired poison with the water.

North Fort, Liverpool.

A Woman with four Breasts. — A primiparous woman was admitted under M. Lorain, and was delivered next day of a dead premature child. She was found to have four breasts, two in the normal position and with the normal puerperal appearances, and two which from their position might be called axillary, and attaining the size of a small orange. She menstruated at 12, and at the periods she experienced pain in the small breasts. The colostrum also which these contained was small in quantity, and the granular bodies were less and transparent, while the milk globules were fewer. The areolæ were also very small. In spite of an attack of fever, the lacteal secretion was regularly established in all the breasts, but the milk examined microscopically was found of a much poorer quality in the supplementary breasts.—*Revue Photographique des Hôpitaux*, January.

ON THE CURE OF CHRONIC GONORRHŒA, GLEET, AND LEUCORRHŒA BY THE APPLICATION OF ICE.

By GUSTAV ADOLPH ABRATH, M.D., etc.,
Medical Officer to the Hospital for Foreign Seamen, Sunderland.

There are no diseases with which the Medical Practitioner has to deal more troublesome in their nature or more persistently chronic than inveterate gonorrhœa, gleet, and leucorrhœa. Although in the majority of cases they are amenable to treatment, yet instances occasionally occur which baffle our therapeutical efforts, however skillfully selected and perseveringly continued, until at last the unfortunate patients lose confidence in their Professional advisers and become a ready prey to charlatans and quacks. Any additional remedies, therefore, which experience may from time to time add to those already in use against these affections, will no doubt be received as valuable contributions to our stock of practical knowledge. Acting under this belief, I now venture to introduce to the notice of the Profession the efficacy of ice in chronic gonorrhœa, gleet, and leucorrhœa. In my experience it has proved most successful, as the following cases will show :—

Case 1.—Captain M., a German, aged 36, had suffered for the last three years from gleet, which had resisted all the remedies prescribed by several Practitioners, including some of the highest reputation in Berlin, Paris, and London. In the winter of 1867 he consulted me, stating at the same time that he had employed all sorts of remedies, including injections, blisters, and the treatment adopted during a sojourn for six weeks in a hydropathic establishment, but without relief. I prescribed sulphate of quinine with sulphate of iron, and told him to apply cold applications as generally employed. But thinking afterwards that the application of intense cold internally to the surface of the urethra might be more beneficial, I took advantage of a severe frost at the time to procure fine icicles, which I manufactured artificially. I tore a piece of linen cloth into fine long fringes, hung it out exposed to the frost, and kept pouring water over it from time to time, until icicles sufficiently long were formed. These (some of them required gently scraping with a scalpel while held by dissecting forceps) I introduced into the urethra in the manner of a bougie, and allowed them to remain until dissolved. This was done night and morning. The treatment was persevered in for ten days, at the end of which time the captain was quite better, and remained so permanently, which a letter from London when he arrived from a long voyage showed.

Case 2. — Mr. S., a negro, aged 28, steward on board an American vessel, a most intelligent man, who spoke English, German, French, and Italian fluently, had a gleet for more than two years, against which all remedies were tried in vain. The same treatment by icicles was adopted—tonics, acid. nitr. mur. dil., and infus. calumb.—and he recovered in fourteen days, since which time, as he informed me on accidentally meeting him on London-bridge in August, 1868, he had remained well.

Case 3. —Mr. R., aged 42, captain of an English vessel, has suffered from gleet nearly two years in spite of all remedies. The ice treatment with tonics, pot. bicarb. cum infus. gent., effected a cure in fourteen days.

Case 4.—Mr. F., aged 25, mate of a Scotch vessel, had suffered from gleet for about eighteen months without relief from various kinds of treatment. I applied the ice treatment, and he was cured in eight days.

Case 5.—Mr. Van der T., aged 33, mate of a Dutch vessel, after suffering from gleet for about two years, was successfully treated in the same manner as the preceding cases by the application of ice after twelve days.

Case 6.—Mr. L., aged 40, a trimmer, suffered from gleet for fourteen months. Had tried various remedies without benefit. In his case the ice treatment effected a cure in less than a fortnight.

Several other cases of a similar nature were also treated by me in this manner, and all successfully. In all cases, nevertheless, the general health of the patient should be carefully inquired into, and the presence of any complication ascertained, and then a suitable general treatment should be combined with the local. The method of applying the icicles should be as follows :—The bladder should be evacuated, and the urethra washed out by the injection of a little cold water. About six icicles should then be introduced in succession night and morning, each being allowed to melt away. In northern countries icicles might be easily manufactured in the form of ice bougies

with a central stem which is not fragile. In more temperate and variable climates ice machines might be employed to produce them.

The treatment of leucorrhœa, blennorrhœa, or fluor albus, is also of primary importance, in consequence of the very stubborn disposition of this affection, which may be caused by either vaginal or uterine catarrh; but, without entering into any pathological disquisition on the subject, I shall content myself with the details of some important cases successfully treated by the application of ice.

Case 1.—Mrs. M'N., aged 36, a native of Scotland. She began to menstruate regularly at the age of 14 years, and has borne six children, the first when 20, the last when 30 years of age. All labours were natural except the last, during which craniotomy was performed. Shortly after she began to suffer from leucorrhœa, and afterwards to menstruate at irregular periods, but six months previous to consulting me menstruation had ceased. She suffered much pain periodically. She had the advice of several eminent Practitioners in Edinburgh and Glasgow, and had employed preparations of iron, injections, escharotics, sea-bathing, etc., but with slight benefit. She came to Sunderland to reside in April, 1868, suffering from leucorrhœa, when she consulted me. On an examination by the speculum, I observed that both lips and portio vaginalis of the cervix were very much eroded by ulceration, which produced an offensive ichorous discharge containing blood. Cold water was first injected into the vagina, and then ice per vaginam applied to the cervix for one hour night and morning, and complete cure was effected in five weeks. A nutritious diet and aperients were also necessary in this case. In the course of six weeks afterwards she menstruated, and has since been delivered of a stillborn child.

Case 2.—Mrs. L., aged 38, has had three children, the youngest when 35 years of age; from that time she suffered from leucorrhœa and irregular menstruation. After trying various methods of treatment without relief, she consulted me in June last. I found, on a digital examination and by the speculum, that there was extensive ulceration of the cervix, both lips being much affected. I employed the ice treatment as in the previous cases, and the patient quite recovered in a month, and has since continued well.

Case 3.—Mrs. P., aged 26, has borne four children; after the birth of the second she suffered from leucorrhœa and irregular menstruation; her third labour was complicated with placenta prævia, the fourth premature—at the end of seven months. Since this event she suffered severely from leucorrhœa. The cervix on examination was found to be swollen and covered with granular ulcerations, best known as cockscomb granulations, which easily bleed—"Die fungosen oder Hahnenkamm-Geschwüre der Portio vaginalis" of the Germans. There was a very considerable discharge of thick purulent greenish-looking matter streaked with blood. The ice treatment was adopted as in the other cases; the patient recovered in a month, and has continued well.

Case 4.—Mrs. T., aged 30, has had three children, the second six years ago; the third labour was premature. She had suffered for a long period from leucorrhœa, which was found to be due to chronic inflammation and ulceration of the cervix. The affection was completely subdued in five weeks by the ice treatment.

Case 5.—Mrs. W., aged 30, has borne one child at the age of 24 years; since her delivery she had suffered from leucorrhœa, and menstruated very irregularly and with much pain. She consulted me in August last; a speculum examination revealed chronic inflammation and ulceration of the cervix, as in the preceding case. The ice treatment effected a perfect cure in less than five weeks; she has since borne a healthy male child.

Case 6.—Mrs. L., aged 32, has had three children, the third five years ago; since that time she had suffered much from leucorrhœa, with irregular menstruation and violent dysmenorrhœa, but during the previous six months the catamenia were absent. After trying many remedies without relief, she consulted me in August last, when I found her condition much the same as in the two previous cases. The ice treatment in this case proved quite successful in five weeks.

Case 7.—Mrs. R., aged 36, when 30 years of age, gave birth to one child, when the forceps had to be applied. Since this event she had suffered from leucorrhœa with occasional pain in the vagina; her menstruation was regular. She consulted various Practitioners, but obtained only temporary relief. In September last she was found to be suffering from ulceration of the cervix; the ice treatment was applied, and the patient recovered in six weeks.

Case 8.—Mrs. G., aged 22 years. She gave birth to a child at the age of 17, and has suffered much from leucorrhœa since, and complained of a cutting pain in the vagina. She had never placed herself under Medical treatment. Her condition was found to be similar to that of the previous case. She was cured by the ice treatment in about four weeks.

In all the cases detailed above the general health and strength of the patients were much impaired; consequently a nutritious diet, milk, wine, etc., were prescribed. I could relate several cases of vaginal catarrh simply which were successfully treated with ice.

There are several points connected with leucorrhœa which should be attended to by the Practitioner—namely, the state of bowels and urinary organs; also whether there are tumours, polypi, or dislocation of uterus, etc., which are often the cause of leucorrhœa, and some of which are irremediable as well as malignant diseases. Before the ice is introduced into the vagina up to the surface of the uterus, a gentle stream of cold water should be injected, and any adherent discharges removed with a sponge. At the os uteri we often find an adherent plug of matter, which should be removed, and then the ice applied.

As a believer in cellular pathology, I consider that there are a great number of diseases in which the value of a local treatment has not yet been ascertained; but it is to be hoped that future investigation will add to our knowledge on this subject.

Sunderland.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE MIDDLESEX HOSPITAL.

OPERATIONS.

On Wednesday, March 30, we saw one or two operations performed upon interesting cases at this Hospital. Perhaps it is owing to the comparative infrequency of primary amputations in this institution—from its distance from railways, docks, and factories, which supply so largely the Hospitals nearer the East-end—that one seldom sees here an amputation case in which there is not something of unusual interest; for these cases, when they occur, are generally made the most of, some novel treatment being employed in most instances. Thus, although we have seen at this Hospital but few large amputations, we have seen many varieties of local applications to the freshly cut flaps, as chloride of zinc, sulphurous acid, and carbolic acid, alone or in combination; we have noticed the methods of threading the ligatures separately through the flap close to the seat of deligation, of soaking the threads in various disinfectant fluids, of passing strong sutures across the deep parts of the flaps to secure their firm apposition, of drainage tubes left in the stumps, of using torsion, acupressure, and special artery-forceps, and of cutting the ordinary threads close and leaving them, to say nothing of the varieties of after-dressing to the stump. On this day, in the case of the amputation which we are about to mention, a new fluid—solution of chloride of aluminium—was to have been sponged on to the flaps, but for some reason the old chloride of zinc was substituted at the time.

This was a patient under the care of Mr. De Morgan, and the case presented certain features of interest. A carter, strong and healthy, aged 35, two years ago fell whilst carrying a heavy load of coal, and struck his knee, hurting it severely. He came to the Middlesex Hospital in November last with a stiff and swollen joint, but with no very marked symptom of the joint itself being diseased. An obstinate ulceration outside the head of the tibia pointed rather to some affection of this bone not involving the cartilage. After prolonged treatment in the ward, however, the discharge indicating caries of the bone, on February 15 Mr. De Morgan had the patient brought into the theatre, and, when chloroform had been administered, made a large semilunar incision outside the head of the tibia, reflected back the soft parts, and came upon the diseased bone. A small sequestrum, deeply lodged in the head of the bone, made it necessary to open the joint for its extraction. As there seemed no further disease present, a strong solution of chloride of zinc was freely sponged into the joint and wound, the flap of skin replaced, and the patient returned to bed, the same lotion being kept constantly applied. For two weeks after this operation the man appeared to be doing very well, the knee remained quiet, and there was but little pain or general

disturbance of any kind. A little later, however, pain and swelling returned about the joint, the man lost strength, the foot and leg swelled, there was an offensive discharge from the knee, and the temperature kept persistently over 100°, with rigors and sweating. Under these circumstances amputation became necessary, and this was now done by Mr. De Morgan after Teale's method, getting the long flap from the outer side and removing the lower end of the femur. A solution of chloride of zinc was sponged into the wound, and many vessels were tied. The joint was found not much diseased, but there was a limited necrosis of the external condyle of the femur just beginning to separate opposite to the site of the former necrosis in the tibia. The cavity from which this latter had been removed was in good process of repair, and one could not easily see why the former operation had not been perfectly effectual, notwithstanding that the joint had been so freely interfered with.

Mr. De Morgan next removed with a wire-thread écraseur a "gelatinous" polypus, the size of a large pea, from the auditory meatus of a girl, aged 16. The growth had slowly recurred after removal elsewhere six years previously. A point to be noted about the case was that no chloroform was employed, and the girl screamed constantly as if in great suffering. One would have thought that so slight an affair could have been well borne without an anæsthetic, but this was clearly not the case.

Another case worth noting was that of a woman, aged 45, from whose perinæum Mr. Nunn removed some recurrent epithelioma. The disease had first shown itself three years ago with itching between the anus and vagina, followed by a slowly ulcerating and painful growth. On January 20 last Mr. Nunn excised the mass freely with the cutting galvanic cautery, ligatures being also needed to arrest the very copious hæmorrhage. She made an excellent recovery, and left the Hospital apparently well on February 21. She shortly returned, however, with a small nodule to the left side of the scar, and this Mr. Nunn now cleanly cut away with the scalpel, staying the bleeding with hot irons.

RADCLIFFE INFIRMARY, OXFORD.

PERICRANIAL NODES, HEADACHE, AND EPILEPSY IN THE SUBJECT OF EXTREME SYPHILITIC CACHEXIA—RAPID DISAPPEARANCE OF SYMPTOMS WITH GENERAL IMPROVEMENT UNDER IODIDE OF POTASSIUM—SUBSEQUENT DEVELOPMENT OF KIDNEY DISEASE.

(Under the care of Dr. GRAY.)

Caroline S., aged 25, unmarried, was admitted December 30, 1868, presenting great emaciation and weakness, a muddy earthy tint of skin, and a general appearance of extreme cachexia. Constant frontal headache. Small scar on forehead, caused two weeks ago by falling on her face in a fit: this was the first fit she ever had; the second occurred two days ago. She has a large hole in the roof of her mouth, the result of necrosis and exfoliation of hard palate, for which, with ulcerated throat and other symptoms, she was treated in the Infirmary about three years ago. Considerable enlargement of upper part of left tibia. No other past traces or present manifestations of syphilis. The primary disease was contracted some years ago at Aldershot Camp; its precise date uncertain. During the last eighteen months she has never menstruated, and on three occasions has coughed up a good deal of blood. A sister is said to have died of decline. No cough at present, and no stethoscopic sign of lung mischief, except a little prolonged expiration at back of right apex; fair appetite and digestion; no œdema of legs; urine normal. To have ol. morrhuæ 3ij. ex pot. iod. gr.v., sp. ammon. co. 3ss., inf. aurant. 3j. ter die.

January 2, 1869.—Headache continues. Another fit occurred to-day, and was witnessed by Mr. Winkfield, the House-Surgeon, who described it as an undoubted epileptic convulsion, though not severe. Pt. ol. et mist.

7th.—Headache much the same; no more fits. Since last date three or four small painful nodes have risen on the scalp.

10th.—Still much headache and pain from the nodes, especially at night. No further convulsion, but this evening she had what seems to have been an attack of epileptic vertigo. She suddenly became motionless, neither spoke nor heard, and looked in a sort of waking dream; then, after remaining half a minute or so in this state, she came to, quite ignorant of what had occurred in the interval either to herself or around her. As the oil caused nausea, it was stopped. Dose of pot. iod. to be gr. viij. ter die.

18th.—Headache quite gone; nodes scarcely perceptible and not tender; gains flesh and improves in appearance very fast.

February 10.—Has continued the iodide up to the present. No nodes; no return of headache or other head symptoms, except for six days, when the iodide was intermitted on account of conjunctival irritation. During this interval the headache became increasingly troublesome. Enlargement of head of tibia much diminished. The gain in flesh, colour, and strength, in the short time which has elapsed since admission, is very remarkable. To-day she went home and ceased to take medicine.

July 7.—Again became in-patient. Seems to have gone on well to about the middle of March. Since then gradual loss of condition, with constant headache and recurrence of fits, of which she has had seven, some of them convulsive, some only vertiginous. The last occurred four days ago. For some weeks past the legs have swelled. Urine is now pale, highly albuminous, and under microscope shows a few large transparent casts. No appreciable enlargement of liver or spleen. Pot. iod. gr. x., decoct. sarzæ 3jss. ter die.

22nd.—An attack of vertigo on 13th and 16th. Still a little daily headache, worse at night. The albuminuria and dropsy much the same. Free action of bowels daily. Pot. iod. gr. x., ferri tart. gr. v. ter die.

September 15.—No vertigo since August 2; no headache for the last four or five weeks; no chest symptoms. In spite of this and of great gain in flesh and improvement in her general appearance, the albuminuria and dropsy increase rather than diminish. For the last month she has ceased the iodide and taken tinct. ferri perchlor. ♏ x. ter die. To-day she went home.

Remarks.—This case illustrates well the twofold virtue of iodide of potassium, in the more remote sequelæ of syphilis, as a drug which may not only remove symptoms, but also attack and modify the disease (the syphilitic cachexia). The rapid improvement on taking the drug, and the speedy relapse on its disuse, leave no doubt as to the share it had in the result. Any influence from the cod-liver oil may be left out of the question; it was taken so short a time and in such small quantity. The kidney mischief was evidently some profound degenerative change (probably amyloid) of those organs beyond the power of iodide of potassium or steel, separately or combined, to touch. The syphilitic origin of the epileptic symptoms can hardly be doubted, setting in as they did, and becoming fully developed before any albumen appeared in the urine. The modification they underwent in the progress of the case—the softening down, so to speak, of the *haut mal* to the *petit mal*—is noteworthy.

UNILATERAL FACIAL PARALYSIS, WITH BILATERAL DEAFNESS, PAIN, AND NOISE IN HEAD, IN THE SUBJECT OF SYPHILIS—NON-IMPROVEMENT AFTER FOUR MONTHS' TREATMENT WITH IODIDE OF POTASSIUM AND MERCURY, SEPARATELY AND COMBINED.

(Under the care of Dr. GRAY.)

Charles H., aged 25, came as out-patient on March 3, 1869, with incomplete motor paralysis of right side of face; greatly impaired hearing on both sides; constant noise "through from one ear to the other;" frequent pain in one or other ear and about forehead and temples, worse at night. A large accumulation of wax was syringed out of both ears a few days previous, but without relief to these symptoms. With the speculum both membranæ tympani appear quite normal. He presents marked traces of syphilis—viz., adhesions in right eye from old iritis; abundant coppery stains on arms and legs from former eruption; chronic painless enlargement of glands in one groin, on each side of occiput, and in front of each ear. Behind right ear he has an enlarged gland and some periosteal thickening over lower part of mastoid. There is painless enlargement of middle of one clavicle, with no history of fracture. No disorder of general health. The paralysis, in addition to the ordinary features of such disease, presents some worthy of special record. (1) There is a good deal of conjunctival redness, with constant overflow of tears, on the paralysed side. This eye remains wider open than the other. In ordinary automatic winking, its lids do not quite close—hence, no doubt, the conjunctival irritation—but by special effort he can completely and firmly close them. This Trousseau(a) would insist upon as crucial proof of the cerebral origin of the paralysis, and certainly the other symptoms in the case point to

(a) Trousseau's Clin. Lect. vol. i. p. 311, New Syd. Soc. Transl.

the same conclusion. Against this, however, is the fact that C. H. can not merely shut both eyes simultaneously, but, with special effort and aid from adjacent muscles, he is able to shut the eye on the paralysed side while the eye on the sound side remains open. Now, according to the high authority of Trousseau's translator and commentator, M. Victor Bazire,(b) such retention of power of independent action on the part of the paralysed orbicularis never occurs in facial paralysis of cerebral origin. (2) Hearing is much more acute on the paralysed than on the sound side. Thus the right ear hears a watch tick to six or seven inches; the left fails to hear the tick unless the watch almost touches the ear. (3) Tongue is protruded straight, but there is considerable and persistent deviation of uvula towards the right side, with lowering of the right half of soft palate.

History.—In good health till he caught a venereal sore last midsummer. The sore healed in about three months, but the accompanying glandular enlargement has never subsided. Sore throat and eruption appeared in August, facial paralysis in September. The latter is said to have been more marked than it now is. Iritis and deafness came on together about Christmas, accompanied for some ten days with very severe headache, chiefly on the right side. Since then no persistent headache, but a varying amount of frontal and temporal pain, worse at night, and more constant on the right side. At different times he has had a good deal of deep-seated pain in several limbs.

Treatment and Progress.—For the first month, under Dr. Gray's care, he took a mixture of biniodide of mercury with a little excess of iodide of potassium. The gums were slightly touched the greater part of this time. On April 12, except that the tears had ceased to overflow from right eye, not the least improvement could be detected, and, in addition to headache, noises, etc., he had great tenderness of parts of the scalp. The iodo-mercurial treatment was now relinquished, and for the next two months he took pot. iod. gr. x. in extract. and decoct. sarzæ ter die. At expiration of this time he had lost all pain, but the paralysis, deafness, and noise in head were no better. He now began liq. hydrarg. perchlor. ʒ ss. ter die, and continued it for about a month, when he was lost sight of. In the meantime no perceptible improvement took place, and some patches of hard raised red scaly skin were coming out in the palm of one hand.

Remarks.—The failure of specific treatment for the time it was tried in this case suggests the possibility of the paralysis having had other than a syphilitic origin. The date, however, of its appearance in the midst of the secondary manifestations of that disease hardly leaves room for doubt in the matter.

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Medical Times and Gazette.

SATURDAY, APRIL 9, 1870.

THE PRESENT CRISIS.—THE PROFESSION AND THE LEGISLATURE.

It is difficult to overestimate the importance of the present crisis in the position of the Medical Profession. At no former time was there so strong a disposition on the part of the corporations to reform abuses; and reform, so far as the College of Surgeons is concerned, has proceeded with more rapidity than could have been expected. That other changes are required no one can doubt for a moment, and if the Council of the College do not carry them out it will be a great misfortune to the Profession. Foremost amongst the changes we would recommend is the enlargement of the franchise. This would give greater security and importance to the College than anything else. And why should there be any difficulty in the matter? Members of a certain standing should be admitted on the recommendation of a certain number of their *confrères*, as is done now with those who were Members prior to 1844.

No less opportune time could have been chosen to destroy the College than the present, and the promoters of the late meeting displayed neither sagacity nor tact in the mode they attempted to carry out their object. But let us see what would be the result of handing over the education and examination of Medical students to the State. Let us inquire a little into the past, as a guide and a warning. Take the most celebrated Medical Reform Bill of our time—that of Sir James Graham—as an example. Sir James was a man of ability and acquirements, and Home Secretary in a Liberal administration. Well, how did he propose to protect the interests of the Profession? Why, by what he called "free trade in physic." He would have given the right to practise to any one who pleased to do so, and would inflict no penalty for the false assumption of any title! And when remonstrated with on this extraordinary proposition, he defended himself, and mark, amidst the cheers of the House, by quoting, in favour of quacks of all kinds, the famous lines of Hudibras—

> "The pleasure is as great
> In being cheated as to cheat."

Imagine a set of examiners appointed by Sir James Graham![a] It is almost needless to pursue the question further, and yet it might be made even more striking. Suppose a homœopathic lord were President of the Council—and this is not an improbability—he might form a homœopathic examining board, and this, perhaps, on the authority of an Act of Parliament. We know that, some time since, the governor of one of the Channel Islands appointed a homœopathic Practitioner Surgeon to a militia regiment, and this in spite of the remonstrances of the other Medical officers, and persisted in retaining his nominee when his colleagues carried their opposition even to resignation.

But, admitting that a Lord President was orthodox in his views of Medical practice, what would be his qualifications for selecting a competent board of examiners? We all know how personal influence bears upon a minister, and would this be an exceptional case? Why should it? No; there is too much reason to fear that an Act of Parliament empowering a minister of the Crown to choose a Board, or any part of a Board, would give rise to endless jobbing, intrigue, and disaster. And again, how have successive Governments treated Medical men when they have sought redress from them for grievances of no ordinary kind? Have they ever assisted us in the poor-law question? How did they treat us when we demanded that justice should be done to our brethren in the naval service? Why, by haughty defiance or silly jesting. And was not the modicum of relief which we afterwards obtained for them the result of our firm antagonism to the Government?

Are we, then, justified in placing ourselves, bound hand and foot, in the power of an irresponsible minister? Happily the revolutionary party was beaten at the late meeting, and assuredly if another meeting be held, if they venture to be present, they will again be ignominiously defeated. Under Government rule the Profession of Medicine would sink to the lowest possible position, and years would elapse before we could shake off the evil influence, which, like the old man on the shoulders of "Sinbad the Sailor," would be a continual source of annoyance. The arts and sciences, in

(b) Trousseau's Clin. Lect. vol. i. p. 314, New Syd. Soc. Transl.

(a) Sir James was forced to withdraw his Bill by the united opposition of the Profession.

this country at least, flourish often in spite of the Government, and sometimes wither beneath its care. Every one knows the story of Canova's admiration of Waterloo-bridge, and, when informed that it was built by a private company, his question, "What sort of bridge does your Government construct?" He was taken into St. James's-park, and there shown the little wooden structure which spanned the lake at that time, and was told that was a specimen of Government architecture and building. We can well imagine his astonishment. The anecdote is not without a certain bearing upon the question before us; and it suggests the undesirability of placing the architecture and building of the Profession in the hands of the State.

INEBRIATE ASYLUMS IN THE UNITED STATES.

No. I.

Rather more than a year has now elapsed since a very remarkable article appeared in an American journal (the *Atlantic Monthly*) entitled "Inebriate Asylums and a Visit to One." Until we read that article we must plead guilty to having been totally ignorant of the very existence of such a man as Dr. Albert Day. And yet, if the statements therein contained were to be depended on, we felt that we were reading the history of a man whose name will be indelibly recorded in the annals of Medical science. Knowing the tendency which many of our Transatlantic friends have of magnifying the virtues of their heroes, we resolved not to act hastily, and to postpone bringing Dr. Albert Day's marvellous history before our readers without some further and corroborative testimony. This testimony we have at length obtained in the form of several annual reports of the Washingtonian Home, of which Dr. Day was superintendent for about nine years, and of the New York State Inebriate Asylum, to which Dr. Day was promoted in the spring of 1867. These reports, drawn up by Dr. Day himself although written in the most modest and unassuming style, fully bear out the statements contained by the writer in the *Atlantic Monthly;* and hence, after noticing our hero's early history, we shall proceed to discuss the nature of his labours and the success with which they have been crowned. In thus bringing prominently forward Dr. Day's claims to the gratitude of drunkards generally, we must guard ourselves against being supposed to ignore the labours of Skae, Peddie, Christison, and other British Physicians in the same direction; and we heartily trust that our *confrère's* success on the other side of the Atlantic may serve to stimulate us at home to follow in his steps. The few details we shall proceed to give regarding Albert Day's early life are taken from the *Atlantic Monthly*. When he was born we are not informed; and all we know of his early life is this—that his father was a farmer in the State of Maine, where drunkenness was then fearfully prevalent, and that when he became an orphan at the age of 13 he tied all his worldly goods into a bundle and walked to a farmer's house some miles distant, to whom he addressed the plain question, "Do you want to hire a boy?" The farmer accepted his services, and from hoeing corn and chopping wood the boy advanced to an apprenticeship to a mechanical trade, was moderately prosperous, married early, and soon obtained a seat in the Legislature of Massachusetts. He is one of the few persons now living who never tasted an alcoholic drink; and from the age of 16 he was a staunch teetotaller, and was known wherever he lived as possessing a singular pity for drunkards, and as a firm believer that with timely and judicious assistance a majority of them might be restored to self-control. We regret that we cannot find space for the graphic account given by the writer in the *Atlantic Monthly* of Albert Day's experience with his first patient, an apparently hopeless sot, named Jack Watts, who was "dead beat" by the extreme civility of his friendly neighbour and the practical help which was afforded him. Jack Watts never drank again, and died a few years ago without a single relapse. This case made an indelible impression on Day's mind. When he was residing at Boston in the exercise of his trade, he took an active part in originating a home for drunkards in that city, and when, in 1857, the Washingtonian Home was opened, he took the post of Superintendent because no one else seemed capable of discharging the duties of the office. He now very wisely studied Medicine in Harvard University, and in due time obtained his degree of M.D. After nine years' service at the Washingtonian Home, he was transferred in May, 1867, to the Binghamton Asylum in the State of New York.

Regarding his success in the Washingtonian Home, we will content ourselves with extracting the following quotation from Dr. Day's report for the year 1866, the last complete year of his residence in that institution:—

"When we commenced our work our institution stood alone, as the representative of our peculiar department of Christian philanthropy. So far as we know, we are the first institution ever started expressly for this work.

"We had no record of past experiences of other institutions, or the efforts of other men in this direction to warn or guide us by their failures or successes, and our treatment was therefore at first somewhat empirical, and the experience upon which all effort should be properly based was necessarily the result of our own experimental observation.

"It is, then, but fair to suppose that the result of our constantly increasing experience, together with the more liberal appliances that the beneficence of the commonwealth has enabled us to use, would result in more judicious and skilful treatment, and thus the consequent chances of recovery in individual cases be improved. This, I am sure, is the case, and I can say with confidence that we have learned much in the proper application of Medical science to the treatment of this disease, and the beneficial results of our enlarged experience and more liberal views are plainly visible to me in hundreds of cases that lie under my constant observation.

"Since my connexion with the 'Home' (about nine years), there have been registered as admitted under its care the names of twenty-three hundred patients. Of this number four hundred and ten have suffered from the various forms of mania known under the general name of delirium tremens. Twenty-seven inmates of the 'Home' have died during this time, a large proportion of these deaths being caused by consumption, pneumonia, and other diseases aggravated by intemperance. Of course it is impossible to estimate with any degree of accuracy the proportion of this number who have been completely reformed. Many are dead, and hundreds are scattered all over the country, or have passed from under my observation. But it is safe to say that a majority have remained firm to their determination formed while with us, while a much larger proportion have had their condition alleviated, with hopes of eventual and permanent cure.

"It will thus be seen that our instrumentality has been the active agent in the cure and reformation of many hundreds, that the amount of sickness under our care has been very large, and of every variety of form that inebriety can induce, and with fatal results much smaller than has usually been thought possible in the treatment of delirium tremens. It will be found, I have no doubt, that there is no other institution in the United States, either organised expressly for the treatment of inebriety, or treating it incidentally with other diseases, that can show a record at all compared to this, either in the number of patients or the success attending their treatment."

Amongst the various topics referred to in this, his last Washingtonian report, are the limited capacity of the buildings generally, and especially the total lack of accommodation for such patients as require more restraint than the majority of patients demand, and his regret that there are no similar homes for ladies who in large numbers and representing every phase of social life, are the victims of an insatiable appetite for stimulants in various forms—generally either opium or liquor—and who require the seclusion and treatment of an institution like the Washingtonian Home.

The following statistics are by no means devoid of interest. There were admitted into the Home during the year ending December 31, 1866, 349 cases, of whom there returned for the second time 34, for the third time 18, for the fourth time 6, and for the fifth time 2. There are now doing well and apparently reformed 215, while 65 are greatly improved, and 9 are

incurable and unfit to be at large. The average number of days each patient remained was 27, and the average cost was 37 dollars 13 cents. We may mention that the State votes an annual grant of 5500 dollars to this institution. Amongst those admitted during the year 1866 were 56 merchants, 68 clerks, 8 lawyers, 6 Physicians, 3 clergymen, 11 printers, 4 actors, and 2 chemists, the balance comprising artists, mechanics of every kind, and common day-labourers.

We think it probable, from a paragraph in the last page of his interesting report, that Dr. Day had a prophetic suspicion of his early removal to the larger sphere, into which we shall follow him in our next article. "It is a pleasant thought," he observes, "that, while ours is the pioneer institution in this important work, other institutions are likely to be modelled from it. I have been consulted several times of late by gentlemen from other and distant cities, who contemplate a work among their own communities to be based substantially on our plan. In thus contributing of our efforts and experience to other States, we may truly feel that we are sustaining the well-earned reputation of our own Commonwealth as a pioneer and example of every good work."

In concluding the present article we may observe that in addition to the Washingtonian Home at Boston, which we have just described, there are three other inebriate asylums in the United States—namely, the Sanatorium in Media, near Philadelphia, opened in 1867; a retreat at Chicago, opened in 1868; and the one at Binghamton, called the New York Inebriate Asylum, which was nominally founded in 1858, but had no real existence until Dr. Day was appointed its superintendent in the spring of 1869. In our next article we shall give a description of the mode in which this establishment is conducted.

THE WEEK.

TOPICS OF THE DAY.

The new buildings of the University of London in Burlington-gardens are to be opened by her Most Gracious Majesty the Queen, on Wednesday, May 11. Her Majesty will be accompanied by the Prince and Princess of Wales, and the Princess Louise. Lord Granville, the Chancellor of the University; Mr. Grote, the Vice-Chancellor; the Chancellor of the Exchequer, Member for the University; and Dr. Storrar, Chairman of Convocation, will receive the Queen, and conduct her through the rooms to the large theatre, where an address will be presented.

Before this number of our journal is in the hands of our readers, the new Medical Acts Amendment Bill will probably have been introduced into the House of Lords by the Lord President of the Privy Council. We shall take the earliest possible opportunity of making them acquainted with its contents. In the meanwhile, we may state that it is generally rumoured the Bill will contain clauses enabling the General Medical Council to compel if necessary, the different licensing bodies in each division of the Kingdom to unite in forming a conjoint examining board. If this be one of the main provisions of the Bill, it will, at least on this very important point, have secured the assent of the moderate and, we believe, by far larger proportion of Medical reformers. There are other points, however, in relation to which the Bill will have to be subjected to the most careful scrutiny. We have elsewhere expressed the feeling of suspicion and dislike with which the Profession of Medicine generally regard the idea of Goverment interference in matters of Medical education, examination, and discipline. We will not, therefore, enlarge on this point, except to state our conviction that no Bill will be acceptable to the great body of Medical men which gives to the Government of the day or to Government officials, whether Medical or otherwise, the right to superintend or interfere with the education and examination of Medical candidates. In this matter the Medical Profession claims to be as free and unfettered by Government interference as the clerical, or the legal, or any other profession in the Kingdom. Such a provision we should regard as a fatal blot in the Bill, and we trust that, should it be introduced, it will meet with the most strenuous opposition from the General Medical Council, the corporations, and universities.

At the last meeting of the General Medical Council, the following important resolution was agreed to:—"That . . . the universities and Medical corporations established in each division of the United Kingdom shall be requested to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong, and shall, on or before June 1, 1870, transmit such scheme to the consideration of the General Medical Council." We are now rapidly nearing the middle of April, and, as far as we can learn, any compliance with the request of the Medical Council on the part of the universities and Medical corporations is practically as far off as ever. The scheme started originally by the Royal College of Physicians, and afterwards altered by the Royal College of Surgeons and approved by the committees of the two Colleges and generally by the universities, has been arrested by the very just refusal of the Apothecaries' Society to forego the right of participating in the examination of the General Practitioner in Medicine. As we have already said, it cannot be declared that an obstacle has been raised by the Apothecaries' Society. It is simply the result of the unfair character of the terms offered to the Society. Clearly the error is with those who are claiming for the first time a monopoly in examining in the practical part of Professional education. The effect of this unfortunate disagreement, however, has been, as we informed our readers last week, to arrest the progress of negotiations and to bring the point in dispute directly before the other parties to the contract—viz., the universities. It does not seem improbable that the opportunity thus offered may lead the universities to reconsider their position in the original scheme and to put forward a larger claim to representation and power. We do not think that such a claim can be pushed to any extent, for the simple reason that the universities are not purely Medical bodies, and that hitherto they have had no part in the examination of the General Practitioner, and it must be ever remembered that whilst the examination in question is to be the minimum one for those who desire to take the higher walks of practice, and to possess university degrees in Medicine or the Fellowships of the Royal Colleges, it is to be the sole examination for the ordinary Medical man. We think, therefore, that the universities ought not to claim an equal share in these examinations with the Medical corporations. But there can be no doubt that they are contracting parties in the matter, and, as we have already said, the present suspense may induce them to reconsider their acquiescence in the scheme of the Colleges. And thus, whilst time is running on, matters will only become more complicated. It does seem to us that the request made by the General Council to "concert" a scheme has given a new face to the whole affair. Hitherto no attempt has been really made to concert one. It is true that a scheme, which we willingly acknowledge in its main characters might secure the acquiescence of all parties, has been offered by two of the contracting bodies, but its details have been confessedly designed in their own interests, and it shows in one or two important respects a total disregard of the interests of others. This cannot be called an attempt at concerted action in any true sense of the term. The resolution of the Medical Council seems to offer a new basis for negotiation, and we should be heartily glad if we heard that meetings, in which all the bodies were fairly represented and fairly heard, were being held for the purpose of complying with the request of the General Medical Council.

Dr. Paget, the President of the Medical Council, has addressed a very temperate and dignified letter to the *Times* in answer to the palpable blunders and indiscriminate accusations against the universities, Medical corporations, and General

Medical Council advanced by Sir John Gray in his recent speech when moving the second reading of his Bill. The following extract from Dr. Paget's letter gives a complete answer to Sir John Gray's principal charge :—

"Sir J. Gray stated of the nineteen licensing bodies that, 'with few exceptions, none of them resorted to the practical test of bringing the candidate to the bedside and asking him to specify and explain the disease.' Now, the fact is that thirteen of the nineteen bodies constantly apply this test, and, of the other six, two apply it partially, and one confers its degrees only on Medical Practitioners of some years' standing."

Dr. Paget concludes his letter by expressing a hope, which will be shared by the large majority of the Profession, that the beneficial results of a consolidation of examining boards "may be attainable without unjust disparagement of those who have already, under many difficulties, effected great improvement in Medical education, and are earnestly striving to effect more."

Another death of a lunatic patient with fracture of four ribs and various bruises on different parts of his body! This case occurred at Hanwell Asylum, and has been investigated by Dr. Diplock, the Coroner for West Middlesex, and a jury, who came to the conclusion that death was the result of natural causes. The patient was a man in weak health, suffering from paralysis of the bladder. He was admitted into Hanwell on February 26. He was carefully examined on admission, and then bore no marks of injury. On March 28, Dr. Hawkes, the resident Medical officer, was requested to see him, and found him lying on the mattress in a padded room in an epileptic convulsion. The convulsions continued all day. Dr. Hawkes examined the man's chest, and found crepitation on the left side. He asked whether he had had a fall. The attendant answered in the affirmative. The man died on the following day unconscious. After death simple non-penetrating fracture of four ribs was found, with congestion of the lungs. The Medical evidence was to the effect that the man had died from the epileptic attack, and on this the jury framed their verdict. It is difficult, however, to conceive that so serious an injury, and the congestion of the lungs which it probably caused, had no prejudicial influence in the case. The attendants gave evidence that the man, when seized with the fit, had fallen on a chair, although it does not appear that any attendant witnessed the fall. Be this, however, as it may, and without attributing acts of violence to the asylum attendants, which in other cases have been only too clearly proved, this case is one which, no less than the former ones, calls for an inquiry into the present management of our public lunatic asylums. In an asylum like that of Hanwell it ought to be simply impossible that a lunatic should fall down and break his ribs without any one seeing the fall or being present to prevent such an accident. One great means of reform would be the more careful selection and proper training of the attendants on the insane. No greater responsibility than the care of human beings who cannot take care of themselves can be put on any man, and yet the only qualification which is held to fit a man for an attendant on lunatics is at best the kind of canine trustiness which distinguishes a gaoler, and often simply the failure to succeed in any other employment. We believe that the Commissioners of Lunacy have not—or, at all events, do not—exercise the power of preventing the appointment of an attendant who has at one asylum already been discharged for misconduct from another.

A small-pox riot in Berkshire is a remarkable testimony to the enormous change which vaccination has wrought not only in getting rid of small-pox, but in the ideas on the subject current amongst the people of England. A hundred years ago the Bible which contained the register of the births and deaths of a family commonly also contained an entry of whether each child had had the small-pox or not. It was regarded as a matter of course that every one should have it in its turn. Nowadays, if small-pox is expected to be brought within 160 yards of a school, the inhabitants raise a riot and destroy the house into which it is proposed to bring it. We think the authorities of Maidenhead were quite right in taking measures to segregate their sick, but they were wrong in choosing the immediate vicinity of the village of White Waltham to which to send them. And, however indefensible a breach of the law under any ordinary circumstances may be, the immediate danger of small-pox being brought into their midst is an extenuating circumstance, which no magistrates or jury in dealing with the rioters would fail to take into account.

A Parliamentary return has lately been published which gives the gross mortality, as well as the mortality from zymotic disease, in each division of the kingdom during the five years 1864-8. One of the most noticeable points brought to light by the return is the low death-rate of Ireland compared with that of England and Scotland. In England and Wales the average death-rate for each year of the five was 1 in 43 of the mean population, whilst the deaths from zymotic disease were 1 in 190 of the population. In Scotland the calculation is based on four years only, the mortality returns for 1868 not being yet completed. But the average mortality of four years shows a death-rate of 1 in 44 of the population, and the deaths from zymotic disease were 1 in 194 of the population. There is, therefore, a close correspondence between the mortality of Scotland and England. The Emerald Island, however, is more fortunate. The average mortality in Ireland was only 1 in 60 of the population, and the deaths from zymotic disease amounted to 1 in 308 of the population. Reading these figures, one is reminded of Johnson's sarcasm against our Irish and Scotch cousins, which, however, the facts neither of English nor Scottish mortality any longer justify, if ever they did so :—

> "For who would leave unasked Hibernia's land?
> Or change the rocks of Scotland for the Strand?
> There none are forced by dire disease away,
> But all whom hunger spares with age decay."

We have had too many deaths from starvation in London during the past winter to be able to boast. Of zymotic diseases, small-pox has literally almost ceased to destroy in Ireland. In Scotland the mortality from it was 1741 in 1864, and only 100 in 1867. Fever and scarlet fever are our two most fatal diseases of this class. In the five years in the whole kingdom fever destroyed 141,465 lives, and scarlet fever 120,793. Every one of these deaths probably represents seven cases of illness. Mankind needs another Jenner.

The Registrar-General has again published an explanation of what is implied in the general death rates of a population; giving a *résumé* of the circumstances which modify or diminish the value of the returns, or which must be taken into account when studying them. This is a very sensible and seasonable answer to the criticisms of Dr. Letheby.

The mistaken policy of permitting ladies to study Medicine in the University of Edinburgh is already bearing fruit. It appears that a Miss Edith Peachey has obtained so high a place in Professor Crum-Brown's class examination in chemistry as to become entitled to a Hope Scholarship, which would give the possessor the right of working with the male students in the laboratory for a certain number of months. That a young lady should have obtained so good a knowledge of chemistry is exceedingly creditable to her talents and industry; but, unfortunately, it does not make it more desirable that in the same University students of the two sexes should be thrown constantly into each other's society. The Professor therefore refuses to give the lady the scholarship, on the ground that she was not taught in the same class as the male competitors, and she naturally complains of the injustice shown her. The matter is referred to the Senatus. But the whole thing shows what will be the inevitable result of teaching young men and young women Medical science under the same roof. There will be a continuance of squabbles, which must

ruin the University as a Medical School, or which will terminate in a repeal of the law which admitted—can we say any longer?—the softer sex.

In the case of Keymer *v.* the London and Brighton Railway Company, the barrister for the defence, Serjeant Parry, the Lord Chief Justice, and the jury, animadverted on the exorbitant nature of some Medical charges—viz., 7s. 6d. per visit for the ordinary attendant, and £3 3s. for a Physician's consultation-fee. As we do not know the distance which the Practitioners respectively had to travel to visit their patient, we shall express no opinion as to the charges. But we would only ask the lawyers whether solicitors and barristers would consider such remuneration for their professional services excessive. We trow not.

Professor Tyndall has written a letter on filtered air in the *Times* of April 7, in which he avails himself of Professor Lister's assertion as to the innocuous character of air in the pleura which has been filtered from organic particles through the lung, in cases of broken rib where the pleura only is perforated, in support of the germ theory of disease, of which he has become so warm an advocate. He says that air introduced from without into the pleura is harmful—an assertion in which he is opposed by many living authorities; amongst others, by Mr. Skey, who says, if we mistake not, in his work on hysteria, that he has never witnessed any bad results from its introduction. The innocuousness of introduced air is also supported by the fact that chronic emphysema has been most successfully treated by the drainage-tube. Without entering into the argument on either side, we would, however, notice that in all we have seen of Professor Tyndall's writings on the subject he preserves a singular reticence as to the views and labours of Medical men who have been for a long period past at work on the germ theory, and that he seems quite to overlook the introduction of germs into the body by means of water, which irrefragable evidence proves to be the most common and most deadly means of introducing disease.

The Eastbourne Local Board have received from the Medical officer of the Privy Council a letter expressing the satisfaction of the Lords of the Privy Council at the course which the Board is pursuing in the improvement of the sanitary condition of the district.

THE NEXT ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

The annual election of Fellows into the Council of the Royal College of Surgeons will take place, as usual, early in July next, and as the subject is already attracting some attention, judging from the number and the nature of the inquiries made, it may perhaps be interesting to furnish the following particulars.

As far as at present is known, there will only be two vacancies, one caused by the resignation of Mr. Joseph Swan, and the other by the retirement in the prescribed order of Mr. Thomas Paget, of Leicester, who, it is surmised, will not offer himself for re-election.

Of the gentlemen at present known as coming forward for the vacancies something will be added presently, before which it will perhaps be as well to take a retrospective view of the present Council in chronological order. The father of that assembly appears in the person of Mr. J. F. South (the only life member remaining, and long may he live to afford the Council the benefit of his great experience!). This gentleman was elected in 1841, and has filled the President's chair twice —viz., in 1851 and 1860—but is no longer an examiner. Taking the Council in seniority, the next member is *Mr. John Hilton, F.R.S.,(a) elected in 1854, who became President in 1867; *Mr. Richard Quain, F.R.S., elected with the former gentleman, and who succeeded him as President; *Mr. Edward Cock, elected in 1856, and now ably filling the highest position in the College; *Mr. Samuel Solly, F.R.S., elected with the previous gentleman, and now senior Vice-President of the College; *Sir William Fergusson, Bart., elected in 1861, and now junior Vice-President; Mr. Thomas Paget, elected in 1862; *Mr. S. A. Lane, in 1863, with Messrs. *George Busk and Henry Hancock; Mr. T. B. Curling, in 1864, with Mr. F. Le G. Clark; Messrs. Turner and James Paget, in 1865; Mr. C. Hawkins, in 1866; Messrs. Hewett, Spencer Smith, and Birkett, in 1867; Messrs. Simon, Humphry, and Holden, in 1868; and Messrs. Gay and Erichsen, in 1869. These gentlemen are all Honorary Fellows of the College, with the exception of Mr. Holden, who is a Fellow by examination.

The names of five candidates have been mentioned as likely to be brought forward—viz., two Honorary Fellows and three by examination. Of the former, taking them in seniority, is Professor Erasmus Wilson, F.R.S., December 11, 1843; Mr. T. Spencer Wells, August 26, 1844. The Fellows by examination are Messrs. Holmes Coote, December 24, 1844; Henry Lee (same date), and Barnard W. Holt, August 12, 1847.

Of the metropolitan Fellows next in rotation there are—Messrs. Holthouse, J. W. Tomkins, G. L. Cooper, E. J. Chance, C. G. De Morgan, James Dixon, R. W. Tamplin, T. W. Jones, W. W. Cooper, Edwin Canton, W. A. Hillman, and Henry Savage.

Of the provincial Fellows there are—Messrs. Carden, Worcester; Dickin, Shrewsbury; Crompton, Birmingham; Wood, Gloucester; Sir Henry Cooper, Hull; Messrs. Johnson, Norwich; Stubbs, Liverpool; Lestourgeon, Cambridge; Nunneley, Leeds; Long, Liverpool; Embleton, Newcastle-on-Tyne; and Hammond, Cambridge. The list, of course, might be increased; we have only given one dozen of each.

(a) Those gentlemen marked thus * are members of the Court of Examiners; the other members of that board—Messrs. Skey, Partridge, and Adams—are not on the Council.

THE ISLINGTON VESTRY.

The following extract from a report of the proceedings of the Islington vestry is too good not to be republished *in extenso*. On the motion that Dr. D. Turner should be appointed Medical officer of St. Peters,

"Mr. Fairbank objected to the appointment of Dr. Turner, as he considered the Doctor had been too liberal in his relief of the famine fever patients, and because he was now ordering in an extravagant manner steel wine to his patients. Mr. Fairbank considered poor people had no right to such expensive medicines, believing they did them no good, and remarked that Dr. Turner was the only Medical officer who was ordering it. He was ordering something like four pints a week of this medicine.

"Mr. Hillman said he agreed generally with Mr. Fairbank, but it must be remembered, with respect to the fever patients, that the Board had left the relief to the discretion of the Doctor, and they could not complain if he had committed an error of judgment.

"Mr. King said he was glad to know that Dr. Turner had used his discretion, and he had by the use of his judgment stamped out that fearful disease famine fever. He thought, instead of objecting to what Dr. Turner had done, they ought to accord him a special vote of thanks.

"Mr. Cufflin said he was much surprised at the objection raised by Mr. Fairbank, and more especially as he recollected that on inquiring into that gentleman's charge against the Doctor of giving excessive relief, it was found that the Doctor might have given double the amount he did without doing any harm. As to the steel wine, he thought it would hardly redound to the credit of the guardians if they rejected an officer because he gave medicines to the poor that were 'only fit for persons in a higher station of life.' (Hear.)

"The Chairman said he must bear his testimony to the obligations the guardians were under to Dr. Turner for preventing the spread of a most fearful disease.

"Mr. Timewell said he had every reason to believe that Dr. Turner was a most useful officer.

"The motion was carried, Mr. Fairbank only opposing."

FROM ABROAD.—THE OUTRAGE ON PROFESSOR TARDIEU—HEIFER-VACCINATION AT BRUSSELS.

Our readers, we have no doubt, will sympathise with Professor Tardieu on account of the gross outrage he has been subjected to by his class in relation to the testimony he delivered in the recent trial of Pierre Bonaparte. Certainly the most eloquent and most renowned teacher of Medical Jurisprudence in our own times, one of the peculiar features which rendered his lectures especially interesting and instructive has been seized upon as the vehicle of insult. M. Tardieu, consulted by the tribunals in almost all cases of importance, has been in the habit of afterwards detailing these before his class, and exhibiting to them the reasons which have induced him to arrive at the opinions which, as an expert, he delivered in the courts of justice. It is evident that this practice must impart a reality and actuality to his teaching of the most valuable character, and which, it has been well said, holds in his course the same position as the clinical lecture in the lectures on Medicine and Surgery; and, in fact, these lectures have been always highly appreciated, not only from the great variety of facts they deal with, but from the lucidity of exposition with which the various circumstances are brought out.

On the occasion of his return from the trial at Tours, the lecture-room was crowded not only with his usual pupils, but by many young persons quite strangers to the theatre. On his entrance, the Professor was greeted with the usual applause by the habitual attendants, but this was mingled with sounds and exclamations of a very different character. In the calmest manner he recounted the Medico-legal events of the trial, reminding his audience, as on other similar occasions, that they had nothing to do with the verdict. During the half-hour this expounding of the case lasted, he was listened to in silence, but no sooner had he terminated than a frightful row ensued, in which insults of the grossest kind were heaped upon the Professor by a portion of the audience, their indignation having been seemingly especially excited by the portion of M. Tardieu's evidence which admitted that the mark of a blow exhibited by the prisoner might have been caused by the button of the glove of his victim. On the second day the tumult rose to a still greater height, so that the Professor, after two efforts, gave up in despair all attempts at resuming his ordinary lectures. Loud calls for his resignation were uttered, and even a coin was thrown at him, and he only regained his carriage under the escort of a body of pupils who had in vain tried to stem the howling mob. Next day an enormous crowd took possession of the theatre long before the time for the assembling of the students for lecture, and the Professor, pale as death, but perfectly calm, again essayed to lecture. The same result followed, the applause of his students being drowned in the vociferations of the strangers, and all attempts at going on had to be abandoned.

Although no one can feel surprise that general indignation should prevail with respect to the scandalous conduct and termination of the recent trial, yet this wreaking vengeance on a witness whose part in the transaction was that of a simple expert, and whose veracity cannot be questioned, was cowardly and brutal to the last degree. That such scenes should be allowed to prevail in a country so boastful of its love of order can only excite surprise, for no means seem to have been taken to exclude from the theatre all but those who had a right to be there, and the little support the unfortunate but undaunted professor obtained either from his colleagues or the authorities was at once scandalous and surprising. Again, we are told that the great body of students were indignant at the proceedings. If so, surely the means of putting a stop to them was in their own hands. Certain it is that were the theatre of a London school invaded by a set of ruffians bent upon insulting a professor, its habitual frequenters would speedily know how to deal with them. Happily, such a scene here is simply impossible.

Since the above was written we have seen an account of M. Tardieu's reception at his fourth attempt at lecturing. This was even more tumultuous than its predecessors, and notwithstanding that the cries of "Vive Tardieu!" were very numerous, those of "Resign," "Go to the Senate," and suchlike, utterly prevented the Professor proceeding. An ugly feature in the last disturbance is the complicity of the habitual frequenters of the lectures, for when many of these had been admitted by their tickets they passed these out to the crowd in order to bring in rioters who had no connexion with the class. A meeting of the Faculty is to be immediately held to decide upon what is to be done, and it is probable that the Easter vacation will at once be declared.

The mania for the employment of heifer vaccination in Paris having, in the face of certain notable failures, undergone a sudden arrest and a reaction set in, Dr. Warlomont, official vaccinator at Brussels, who has followed the practice of animal vaccination during four or five years, enters a protest against its becoming discredited by the hasty procedures that have taken place in Paris. Writing from a calmer locality, he declares his unlimited confidence in heifer vaccination, providing that this be conducted under certain conditions acknowledged by all conversant with the subject as essential for securing its efficacy. These having been observed, he says, he can oppose to the few failures observed in Paris—where, in the hurry and tumult consequent on such multitudes seeking for vaccination and revaccination, the proper precautions may easily be overlooked—a series of 2556 infants vaccinated last year at Brussels without a single failure. The essential thing of all others is that the virus be not taken from the heifer later than the fifth or sixth day, when the pustule has a shining, silvery aspect. The virus is inoculable long after this, but the pustules continue to degenerate in each successive inoculation, and the only safe course is rigid confinement within the above-named limits. All pustules not presenting this silvery aspect are to be mistrusted, but virus derived from good pustules at this stage invariably succeeds. So certain is this, that Dr. Warlomont has found that failure in his cases has been observed in scarcely 1 per cent. of the insertions made, and even this proportion is to be explained by some fault in the procedure, where as many as 2000 punctures have to be made in one day. Of course, the amount and duration of the protection obtained from heifer virus can only be ascertained hereafter. At present, Dr. Warlomont has met with no case of variola or varioloid after his now numerous vaccinations.

As to abundance of supply from this source, although accidental circumstances arising from the public panic in relation to revaccination have rendered this temporarily uncertain in Paris, a good organisation in Belgium has enabled demands from every part of the country (as many indeed as 1500 in twelve days) to be readily supplied. Moreover, it is found that the virus can be far better preserved than in tubes by dipping ivory points in it, allowing these to dry, and dipping them again. Whatever the relative value of the heifer and the Jennerian virus, it is certain that this last cannot be had to provide for the present emergency; and that, if the heifer virus were not obtainable, vast numbers who are now vaccinated would remain without any protection. How far this may have arisen from the hasty and exclusive adoption of animal vaccination and the neglect of keeping up the supply of the Jennerian virus is another question. M. Henocque, confirming Dr. Warlomont's statements, observes that many will learn with surprise that, in some of the great cities of France, vaccine virus has been wholly wanting for weeks, and that several families have been *internées* in the provinces from this cause, not daring to return to Paris without having been revaccinated.

PARLIAMENTARY.—THE SALE OF POISONS IN IRELAND—THE SERPENTINE MUD—WATER SUPPLY ON SUNDAYS.

In the House of Commons, on Friday, April 1,

Mr. Agar-Ellis asked the Solicitor-General for Ireland whether there was any law in Ireland for the prevention of

the unlimited sale of poison; and, if not, whether it was the intention of the Government to bring in a measure for that purpose.

The Solicitor-General for Ireland, in reply, stated that there was an Act of Parliament at present in force in Ireland regulating the sale of arsenic. The provisions of the Pharmacy Acts, however, of 1862, 1868, and 1869, which imposed limitations on the sale of poisons generally, did not extend to Ireland, and he saw no good reason why they should not. He hoped before long to be able to lay on the table a measure on the subject.

On Monday, April 4,

Mr. W. O. Stanley asked the First Commissioner of Works whether he would submit for the consideration of the Medical officers of the Board of Health and some land surveyor of experience in drainage operations, or other competent authorities, the present mode of depositing the noxious mud and clay taken out from the Serpentine river in the deep excavations from which the gravel has been removed, more particularly in Kensington-gardens, to the depth of five feet, without any adequate drainage; and to obtain their opinion if the health of all those persons who may frequent the park and gardens may not be seriously endangered in wet seasons from the want of the natural drainage through the gravel subsoil, and in summer heat from the noxious exhalations of the fermenting deposit.

Mr. Ayrton said, with regard to the mud taken out and deposited in the place whence the gravel was excavated, the subject was carefully considered by Mr. Fowler before he recommended this mode of carrying on the works. It occurred to him, as a practical man, to be very desirable that the mud should be carted away and sold as manure; but, unfortunately, that could not be done. If the mud were carted away at the expense of the public, the expense of the work would have been at least doubled; but Mr. Fowler's experience suggested that if the mud were worthless as manure, it could not be of any supremely deleterious character. The drainage under the mud had, therefore, been carefully provided for, a good deal of lime had been mixed with the mud, and would be spread over it as far as was necessary to prevent it from being injurious to health; and the ground would then be covered with turf and planted. The same operation had been performed in the Regent's-park under less favourable circumstances, because upon a clay soil, and no one had discovered that any injury had been caused to health. But the work would be carefully watched, and if there was any reason to apprehend injury to health, it must be prevented at any cost to the public.

On Tuesday, April 5,

Mr. Stapleton moved for leave to bring in a Bill to compel the Metropolitan Water Companies to supply water for domestic purposes on Sundays.

Mr. Clay, on behalf of the Water Companies, offered no objection to the introduction of the Bill, but pointed out how much they had done already to give a general Sunday supply. In fact, every one who asked for it could have it at once.

Mr. Bruce also acceded to the introduction of the Bill, and it was supported by Dr. Brewer and Mr. Sclater Booth, who glanced at the larger question of a constant water supply.

REVIEWS.

Psychologie Naturelle. Etude sur les Facultés Intellectuelles et Morales dans leur Etat Normal et dans leur Manifestations Anomales chez les Aliénés et chez les Criminels. Par Prosper Despine, M.D. Tomes 3. Paris: F. Savy. 1868.

The doctrine that great criminals are in some way insane is not absolutely novel. The importance of M. Despine's book lies in this—that he has defined more accurately than his predecessors the doctrine of irresponsibility of certain criminals; that he has most laboriously gathered together a mass of facts which he considers go to prove his position; and, finally, that he has striven to bring the doctrine into accord with the laws of normal and abnormal psychology. He views his subject from the stand-point of an alienist Physician; he need not be astonished if the subject presents itself otherwise to the minds of lawyers, or if Physicians more accustomed to study psychology subjectively than objectively should be unable to accept all the inferences which he draws.

We do not imagine that any apology is necessary for our undertaking the review of this book, inasmuch as we cannot exclude normal psychology, even when it deals chiefly with the deep questions of moral responsibility, from the studies of a conscientious Physician; especially when we have regard to the fact that our Profession rightly and legitimately undertakes the care, management, and cure of disordered minds, and is constantly appealed to in courts of law for opinions upon questions involving the mental condition of individuals placed at the bar of justice. Perhaps the best mode of treating this work will be to state as briefly as we can the views entertained by the author, and then to offer such a commentary upon them as occurs to us as reasonable. In doing this it is impossible to dissociate the three volumes, inasmuch as the proofs offered of the most important of the opinions broached in the first volume are derived from observations and reflections detailed in the subsequent ones.

With the school of Scotch philosophers represented by Reid and Stewart, M. Despine divides the mental faculties into the intellectual and reflective, and the instinctive faculties or sentiments, and categorically announces the laws which govern them and their relation to each other thus:—1. When the instinctive and reflective faculties act simultaneously, the latter are subject to the direction of the former—*i.e.*, the man thinks as he feels. A man in whom good sentiments predominate will have good thoughts and good desires, while a man in whom perverse sentiments predominate will have evil thoughts and desires, and his reflective faculties will exercise themselves in the direction of those thoughts and desires, whether for good or for evil. 2. Man always wills to do that which he desires the most, when he does not feel himself under an obligation arising out of the sense of duty, or when he is not constrained by a force or by circumstances independent of himself—that is to say, by a necessity to do that which he least desires. This is the law of interest. 3. Nothing has so powerful an influence upon the mind of man as his mode of feeling, as the witness of his instinctive conscience. As a consequence of this law, one instinctive element alone has power always to combat successfully the inspirations of another instinctive element, so that, if one sentiment does not meet with another opposed sentiment in the mind, it governs that mind so that the reflective faculties only act in the direction of that sentiment. 4. It is not possible for a man voluntarily to do that which is invincibly repulsive to his instincts.

Of the instinctive faculties, the moral faculty or moral sense is that which occupies most fully the attention of the author. It is properly defined as the faculty by which we possess an instinctive knowledge of good and evil, with which is associated the sentiment of duty, of obligation to do what is right and good, and to avoid doing what is wrong and evil. It is further the sentiment by virtue of which a man who has done what is wrong experiences subsequently a feeling of shame and remorse, which the author asserts that it is impossible for him not to feel sooner or later, or to conceal from the sight of others. He distinguishes between this instinctive moral sense and the religious sentiment, and also between it and a bare intellectual knowledge of what is right and what is wrong, the latter being a knowledge which is not united necessarily with any sense of moral obligation. He contends further that not only is this moral sense possessed by different races, persons, sexes, and ages in different degrees of force and completeness, but that, in some persons, it is altogether wanting. He considers that it is absent in the lowest races of men, as the Bosjemans and Australians, whose conduct is guided by their desires and notions of interest, and also in a considerable number of persons of the superior races of men. Such persons are "moral idiots," just as persons of the same races whose reflective faculties are in abeyance are intellectual idiots. Such persons may reason ably in the direction of the sentiments they possess and which govern them, but, having no sense of duty, act only in accordance with the desires which these sentiments inspire. They can commit the most monstrous and cruel crimes with premeditation and *sangfroid*, and, after they have committed them, experience no remorse, no pity for their victims. Indeed, it is by this test that he considers such individuals may be recognised. No sane man, possessed of moral sense, could commit such great crimes, and exhibit afterwards no sense of the wrong that he had done. The greater part of M. Despine's second volume is occupied by the proofs of this proposition. It consists in narrations, with commentaries, of the conduct of individuals who had committed great crimes, as derived from the records of public trials. It is unnecessary to follow him through this accumulation of evidence, because we do not think that his narrations prove anything more than this—that the moral sense in these persons is so weak, or, rather, the sense of moral obligation which accompanies it is so small, that, in the presence of a mischievous or covetous desire which promises pleasure or gratification in its fulfilment, it is unable

to restrain the individual from the crime to which he is impelled. Bad education in early infancy, the neglect of proper culture of the innate germs of the moral faculty, a habit resulting therefrom of obeying the dictates of the perverse desires, and the lack of cultivation of a habit of self-restraint, appear to us to account satisfactorily for the phenomena in question without having recourse to the theory that great and remorseless criminals are all persons who have not and never had even the germs of the moral faculty in their souls. Indeed, some of the narrations adduced to prove this point seem to us to prove too much for ready acceptance. We may refer to one instance to illustrate what we mean. It is that of two apprentice boys to a barber, who, in order to share the spoil of a drunken man who entered the shop to be shaved, agreed in a very brief consultation to murder him. Both these lads, according to the author, were completely and naturally moral idiots. So, too, in the numerous instances of concerted cold-blooded murders and heinous offences, such as rape, or rape with murder, where several persons have been jointly engaged. Is it to be believed that natural moral idiocy is so very common a condition as to be capable of explaining these frequent casual concurrences of remorseless individuals in the same act of crime? If so, moral idiocy must be far more common than intellectual idiocy, or, indeed, than any other form of psychical derangement. Again, it appears to us curious, on this theory, that the moral idiocy declared in the remorseless, even boastful commission of great crimes, such as deliberate murder or rape with violence, is mostly met with among the lowest and neglected classes of society, who in other things are more reckless than the upper classes. Is moral idiocy so much less common at the upper than at the lower level? Or will not the education and surrounding influences of the two classes account for the difference without having recourse to an hypothesis of natural deficiency in the moral faculty? People physically brutalised in their bringing up are very apt to be morally brutalised at the same time. Given the same starting-point in the germs of the various intellectual and instinctive faculties in the infant, it is clear to our mind that, putting aside some differences of capability for culture, which do not imply total incapacity for culture, all the faculties, intellectual and instinctive, good and bad, may on the one hand be strengthened by habitual exercise, or, on the other, be dwarfed by habitual neglect and disuse.

M. Despine rightly says that "the chapter in his work devoted to the subject of free will is, without contradiction, the most important of the whole, inasmuch as everything in his argument depends upon it, and because from it the most important of his practical deductions flow." Persons who admit the freedom of the will at all are in the habit of extending it to the exercise of the will in every direction. They speak of our power of willing, and say that we are free to will to do this or that at our pleasure. This, however, is not the view of M. Despine. He limits the freedom of the will very considerably, and in the manner we are about to point out. He says every act of willing does not emanate from the free will, for that in a good many cases where the will is exercised it is out of our power to exercise it in any other way than we do—that, in short, our wills are themselves governed by laws imposed upon them by our Creator, through which they cannot possibly break. Explaining the exercise of free will as the exercise of free choice, when different modes of action are open to us and present to our minds, with the reasons and motives for one or the other, he says that the will is *compelled* to operate in one direction in each of the following circumstances:—1. When the desires and motives to a decision are not combatted in our minds by any desires or motives opposed to them. We then follow the *necessary* law of willing in the sense of such desires or motives. 2. When desires or motives are opposed in the mind upon a decision which does not affect the moral sentiment or the feeling of duty. In such a case the will, he says, invariably operates in the direction of that desire or those motives which are the most powerful, and this by virtue of a natural law which leaves the individual no power of choice. 3. When the desires or motives do affect the conduct as regards right and wrong, but when the desires or motives to the right are stronger than those which tend to the wrong course of action. In this case the will operates again in the direction of the strongest motive, irrespective of choice or freedom; the determination to the right course is not affected by the fact of its being right, but because the motives or desires in that direction predominate over those in the other direction. Here he can see no freedom of the will. Let us stop a moment now to point out what appears to us a fallacy in this last proposition. It starts from the assumption that we have no voluntary control over our desires or motives. They are things to which we are subject, not things which are subject to our wills. Is this so? Surely it is in our power to control our thoughts and to direct them as we choose one way or another. Our consciousness tells us that it is so. It is also in our own power so to train and control the exercise of our instinctive faculties as to bring ourselves into a habit by which good or evil desires or motives may acquire a predominant influence over our wills and decisions, independently of any special reference to the sense of duty arising in any individual decision. If so, how can it be said that our desires and motives are out of our voluntary control, and that when they coincide with what is right our wills are not acting freely in choosing what is both most desired and also right at the same time? We admit that this habit may be gained not to satisfy the moral sense, but by education based upon lower considerations. We are not mere psychical machines; we can do very much voluntarily to form our own characters, and so far as we thus educate ourselves to give habitual prominence to amiable sentiments and right motives, so far we are acting as free agents in the exercise of our wills thus directed.

The only case in which M. Despine recognises freedom in the will is where the desire which leads a man to do what is wrong is greater than his desire to do what is right, the fact of the one course of action being morally right, and the other morally wrong, being present to the mind. In this case the moral sense is involved, and a man is free to choose whether he will do wrong in accordance with his strongest desire, or do violence to his strongest desire in order to satisfy his sense of obligation to do what is right. No doubt it is under these circumstances that the struggle between the desires and the sense of right is experienced, and it is in this case that we are most conscious of the operation of freedom in our will when we decide to do the right thing. But, to fall back again upon M. Despine's "natural law," what is this but the result of a balancing of motives and desires? We act rightly in this case because our desire to satisfy our moral sense is greater than our desires of self-interest; our sense of moral obligation is a motive more powerful than our perverse desires. Our wills act in the sense of the more powerful motive. If this be true, we arrive at this result: that in all the cases adduced by M. Despine our will follows a law of necessity imposed by our Creator. And then, where is the freedom of the will at all as defined by our author, unless we find it in the voluntary free choice open to all of us to give greater power to our good than to our evil desires, by educating our instinctive faculties in the direction of what is right and good? At any rate, we are at all times free to choose whether we will habitually prefer dwelling in our thoughts upon those qualities of God or our neighbour which are of a nature to exalt our benevolent affections, or the reverse, and thus to cultivate in ourselves such feelings of love, or hatred, or indifference, as shall give direction and strength to the desires and motives which, according to our author, influence the will by a natural law.

We must observe further that M. Despine limits the freedom of the will even more than we have pointed out. He distinguishes between grave and heinous and lesser crimes. He speaks of the former, such as parricide, murder, arson, acts of cruelty or ingratitude, and treason, as *impossible* to the man endued with a moral sense. "It is necessary," he says, "to have no feelings at all to commit any of these. If the authors of these monstrous and repulsive acts had had any good feelings at all, and if these feelings had raised their voice at the moment when these individuals premeditated or executed these acts, it would have been impossible to commit them. They would infallibly have been stopped by the horror they would have experienced from their moral sentiments." Impossible! Then there could have been no choice, no freedom in the will deciding against the act and against the perverse desires moving to the act. The will must act, then, under these circumstances, under the influence of the other sentiments, and not from a purely moral motive—not because the action is wrong, but because it is so dreadful as to rouse against it a sentiment of disgust. If the will refuse to commit such acts because they are not merely wrong, but are condemned more forcibly by the moral sense than other wrong actions, so strongly as to reinforce the sense of duty by the sentiment of disgust, then it comes to pass that Despine admits in this case a powerful motive arising out of the feelings overruling the less powerful motive arising out of a perverse desire. He ceases to refer the decision of the will to do right to the moral sense alone. We would simply ask whether it is not in a man's power to extend this feeling, by exercise and reflection, to other immoral acts of a less heinous character? The exercise of the will is thus

limited, then, by M. Despine :—"A moral man can only exercise his moral liberty with respect to desires of secondary perversity, desires which are not invariably repugnant to his moral sense." We would ask again, is it not in the power of man so to cultivate voluntarily and freely his benevolent affections and amiable sentiments as that other wrong actions shall be so heinous in his eyes as to be "invincibly repugnant to his moral sense"—as to become impossible for him to commit? To our mind the fact appears to be this—that the moral sense and its accompanying sense of duty or obligation is in most men too weak to deter them from a decision on the side of a strong perverse desire, unless it be backed up by other motives arising out of the sentiments and affections which have been habitually directed and strengthened, on their benevolent side, by reflection on what is lovely in man and attractive in the nature of the Deity. This is the essence of the religious sentiment and principle, the true nature of which, it appears to us, M. Despine has entirely mistaken. But we cannot enter into this part of his subject.

The only condition under which a man endued with a moral sense can, according to M. Despine, commit a great crime, is when he is under the influence of some strong passion. In the impassioned state (and this includes exaggerations or perversions of good sentiments as well as bad sentiments) his moral sense is blinded *involuntarily* by the passion which takes full possession of his mind; and as the free will, in his view, only operates to decide for what is right against perverse desires, the man in this condition must be regarded as deprived for the time of his free will—of moral liberty, and so is morally irresponsible for his perverse acts. We must protest against this monstrous doctrine. We say it is in the power of any sane man, if he chooses, to restrain his passions within moderate bounds, and, if so, how can it be said that his moral perceptions are blinded involuntarily when he voluntarily permits the blinding of them?

As a matter of course, out of his doctrine of free will emerges M. Despine's doctrine of moral responsibility. A man can only be held responsible for the morality of his conduct when he is free to choose the conduct which he will pursue. Hence, according to M. Despine, the man who is devoid of moral sense—"a moral idiot"—is to be held irresponsible for any crime he may commit; so must the man who from being "in the impassioned state" is momentarily deprived of the exercise of his free will. The only responsible man is he who, endued with moral sense, and free to exercise a choice between good and evil when his desire to evil is stronger than his desire to good, chooses to follow his evil desires and to do violence to his moral sense; and this, it is to be recollected, according to M. Despine, only can refer to crimes the result of *lesser* degrees of moral perversity. Great crimes are exeluded altogether. No man is ever to be held morally responsible who commits murder, parricide, rape, and suchlike repulsive crimes! Persons who do such things are either naturally and permanently or momentarily moral idiots; they do not commit these acts of free will, and therefore are not to be held morally responsible for what they have done. We have shown already where we consider the fallacy of the argument to lie.

We will now show where the fallacy of another deduction of the author lies—namely, that such persons ought not to be punished for the crimes they have committed. The only persons who should be punished are, according to Despine, persons who, endued with moral sense and free will, have committed acts of less perversity. It would be cruel and unjust, according to M. Despine, to punish great criminals for doing that which they cannot help doing in obedience to the law of the nature with which God has endowed them. It would be both unjust and useless to punish the man who, though endowed with moral sense, commits a crime in the impassioned state—first, because he was not free to decide on moral grounds against doing it; and next, because when the passion has subsided he sees he has done wrong, and regrets it, and punishment can add nothing to the remorse which he then experiences. Such a line of argument might have weight (we do not say it would) were the author writing about divine retributions, but is altogether inapplicable to the question of punishment inflicted by the State. The State inflicts punishment upon criminals not because they break the moral law of conscience, but because they have broken those laws which itself has established for the security of life, person, and property. So far as the State, thus acting for the advantage and protection of society, is concerned, a crime is not an act committed perversely against the dictates of conscience, but an act which the law prohibits as injurious to society. It does not ask, therefore, whether a man is endued with a sense of *moral* obligation, but whether he knows that the act he has committed is prohibited by the law of the land, which he knows all are bound to obey. For it, right and wrong are obedience or disobedience to the law. And all it asks is whether the person who has committed a crime, knew at the time when it was premeditated, that it was a thing forbidden by the law, and therefore that he ought not to commit it. If so it holds that the person is responsible to the State for having committed it, and punishes not with the object of making other people more moral, but to deter others by example from breaking the law in a similar manner, to strengthen their moral resolutions, and to assist them in controlling their passion by the dread of punishment should they commit an act which the law condemns. It is true that in a moral and well-ordered State the law of the State will be in accordance with the moral sense of mankind, so that crimes against society will be equally violations of the law of conscience; and hence it endeavours to hold in especial restraint, by extraordinary penalties, offences which do the most grievous violence to the moral sentiments. But it is as crimes against society that they are punished, not as mere moral faults. Before it can consent to overlook such crimes it must be assured that the person who has committed them did not intellectually know that society condemns them, and therefore that he ought not to commit them; that he was governed at the time by some insane notion which dominated over his reflective faculties and influenced the direction in which they were exercised; that some reflective faculty was deficient, or that the history of his life shows some insane moral perversion in a special direction which will account for the act which he has committed. It admits the impassioned state as a condition extenuating criminality only when the result of strong provocation, or when it is an exaggeration or perversion of the most powerful of the good sentiments, and is not brought about by the habitual neglect of the practice of self-restraint.

In the above remarks we have confined our criticism to one branch of the author's subject, but it is that which he himself puts most prominently forward. If we do not agree with him in all points, we are nevertheless quite alive to the value and importance of his work, and to the highly conscientious manner in which he has dealt with questions where declamation has often been made to do duty for sober argument.

FOREIGN CORRESPONDENCE.

FRANCE.

PARIS, February 24.

M. VERNEUIL has introduced an excellent modification of Larrey's *procédé en raquette* for the disarticulation at the shoulder-joint, by means of which hæmorrhage is completely guarded against, and which permits, if necessary, to operate without any assistance—a great desideratum to the military Surgeon.

The two cases in which I have seen M. Verneuil execute his operation were both for accidents, and where, on account of the anæmic condition of the patients, it was of the greatest importance to avoid any further loss of blood.

In Larrey's process the patient is made to sit up in bed—already a great inconvenience because of the danger of syncope in case chloroform has been administered—and an aid is required to compress the artery in the anterior flap the moment the Surgeon is about to finish its section. That this latter part of the operation is by no means an easy one must be acknowledged by all Surgeons, especially military Surgeons, who are sometimes necessitated to call in the aid of persons unacquainted with the duty assigned to them. But even with tolerably intelligent aids it may happen that the axillary artery is not properly grasped, and a serious hæmorrhage is the consequence. I know of an instance which happened in the trenches before Sebastopol, where a French Surgeon about to perform this operation by candle-light was left in the dark because the aid failed to grasp the artery as he was finishing the anterior flap, and the jet of blood put out the candle. It is unnecessary, I suppose, to say what became of the patient in this case.

M. Verneuil's operation is as follows:—The patient placed upon his back near the edge of the bed, the point of the knife—very much like in Larrey's process—is introduced a little below and inside the acromion (a), and carried in a vertical direction downwards a distance of $2\frac{1}{2}$ inches, cutting through the

(a) In practising this incision inside to the acromion between it and the coracoid process, the joint is less covered by the acromial vault, and the capsular ligament more easily opened.

deltoid to the bone. An anterior flap is now traced with the blade of the bistoury, beginning a little below the superior extremity of the first incision, and following in an oblique direction down and inwards until arrived at the inferior limit of the axilla on the arm. The posterior flap is traced in a similar manner upon the posterior aspect of the shoulder, or may also be made by continuing the incision for the anterior flap out and upwards to the first starting-point. Thus far nothing more than the skin has been incised. The muscles in the anterior flap are then divided by successively cutting through the deltoid, the pectoralis major, beneath which lies the long tendon of the biceps, and the coraco-brachialis. This brings to view the vasculo-nervous fasciculus of the axillary vessels and nerves. After dissecting the flap upwards, a needle of Deschamps is passed beneath the axillary artery and vein above the point of origin of the anterior circumflex and inferior scapular arteries. The completion of the anterior and the section of the posterior flap, together with the disarticulation, can now be effected with ease and without assistance. I need not tell you that a bringing together of the flaps is not even thought of. I have had occasion to observe in former letters that our Paris Surgeons never attempt union by first intention. The wound is stuffed with lint dipped into alcohol.

The ligature of the vein is a good practice. The proximity to the brachio-cephalic trunk and the possibility of an insufficiency of the valves in these vessels exposed to the danger of the introduction of air. M. Verneuil is also in the habit of resecting the nerves of the brachial plexus as high up in the axilla as possible. In his first operation, neglecting to take this precaution, peripheral neuromata developed themselves in the stump, forming little hard and very painful tumours which had to be removed some time later. I may mention *en passant* that, out of seven disarticulations at the shoulder performed by M. Verneuil in the Lariboisière Hospital for injury, all have been successful. With the same operation for pathological causes, the results have been altogether different. The modifications and advantages of this over Larrey's process consist in (1) the position of the patient; (2) hæmorrhage impossible; (3) no aid required; (4) ligature of the vein; (5) resection of the nerves.

ITALY.

Letter from Naples:—Mobility of the Liver—Ligature of Internal Iliac Artery—Electro-Therapeutics.

Naples, February 10.

An interesting, and perhaps unique, case of extreme mobility of the liver has been recorded by Professor Cantani. The patient was a lady, aged 54, and eleven years previously, immediately after her last confinement, the liver had descended from its usual place into the hypogastrium, occupying a position extending from the umbilicus nearly to the symphysis pubis. The liver was of normal size, and could be freely moved in every direction, and by placing the patient in a recumbent position, with the sacrum elevated upon a cushion, it could easily, with a little manipulation, be returned to its place, descending again when she reassumed the erect position. During the whole period of eleven years it had occasioned no injury to health and but little inconvenience; but as it had been diagnosed in the beginning as a uterine tumour, the lady had become a prey to hysteria and melancholy, believing herself to be a victim to an incurable disease, and these symptoms had been considered as a proof of the diagnosis. On being reassured as to the nature of the supposed tumour, she rapidly regained her former health.

The operation of tying the internal iliac artery has been successfully performed by Professor Gallozzi. It was rendered necessary owing to a diffused traumatic aneurism resulting from a stab of a poignard in the superior and interior margin of the right gluteal region; the patient a young man aged 22. Recovery was satisfactory, but was much retarded by the occurrence of an immense abscess occasioned by the unabsorbed *débris* of the aneurismal sac.

Electro-therapeutics are coming prominently into notice with the Italian Medical Faculty, and the galvanic cautery has proved very efficacious in the extirpation of tumours. Several interesting cures have been lately recorded—one a case of scirrhous tumour of the right breast, reappearing after two operations, when the cure appears to have been not merely local but radical, it having manifested no signs of returning after a lapse of six months; another, an aneurism of the ascending aorta, under the care of Professor Ciniselli, of Cremona, completely cured by electro-puncture; and recently a large vascular tumour has been extirpated by the same means at our own Hospital of Gesù-Maria.

The third triennial Riberi prize of 20,000 francs (£800) will be conferred next year by the Royal Academy of Medicine of Turin upon the author of the printed work or manuscript issued during the years 1868-69-70, or of the discovery made during that time, which shall by them be judged to have most effectually contributed to the progress and advancement of Medical science. Papers must be sent in before December 31, 1870.

GENERAL CORRESPONDENCE.

ANIMAL VACCINATION.

Letter from Dr. E. Ballard.

[To the Editor of the Medical Times and Gazette.]

Sir, — I should like to place together two statements which appear to me to have a causal relation the one to the other. The one is to the effect that the animal vaccinations recently done in Paris by MM. Lanoix and Constantin Paul have been marked by failure, and that out of thirteen vaccinations by the latter gentleman at Beaujon only one was a success. This will be seen recorded in the last number of the *Medical Times and Gazette*. The other statement is to be found in the corresponding number of the *British Medical Journal*—namely, that so great is the rush for vaccination from the heifer, in consequence of the small-pox panic, that in one morning and forenoon M. Lanoix and an assistant, between them, inoculated from the calf 1800 individuals. Allowing six hours of such work for a morning and forenoon, this would give twenty-four seconds to be expended on each person vaccinated! Moreover, it is not stated that the virus was taken from the calf at the time when it is most active. Yet an inference is drawn most unfavourable to heifer vaccination. Is this fair? I assert boldly that, so far from failure being common in direct vaccination from the calf, it is an exceptional occurrence—that success is the rule, although failure is not so rare as in arm-to-arm vaccination when efficient virus is used. But what can be expected in a season of panic when hurry and carelessness probably distinguish the operations performed? To implant animal virus successfully demands more time and caution than to implant humanised virus. The fault commented on lies more probably in hasty and inefficient arrangements than in the inapplicability of an animal vaccinifer to the purposes of extensive popular protection. I am, &c. Edwin Ballard.

THE STATISTICS OF THE ROTUNDA LYING-IN HOSPITAL.

Letter from Dr. George Johnston.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having read in your journal of March 12, 1870, an article commenting on my clinical report of the Rotunda Lying-in Hospital for the year ending November 5, 1869, I regret that the writer does not seem to take the view of the matter that I intended to convey; else he would have seen that what I had undertaken to show was proved—viz., that in the first instance no death out of the number which occurred in the Hospital during the year could possibly be traced to the air, atmosphere, or any poison lurking in or about the wards; 2nd, that where a death from metria did take place, the disease did not extend itself to any of the other patients; and 3rd, that although epidemics prevailed outside the Hospital, there was nothing of the kind within its walls—and in order to prove the truth of these statements I compiled the tables, in Table II. of which is given a tabular list of the deaths from zymotic diseases, and the condition of these patients when admitted, from which it will be seen that there were quite sufficient reasons for their sickness and its fatal termination even had they been confined in their own homes. For instance, one is admitted after being forty-three hours in labour. Another had been fifty-four hours in labour prior to admission, and came in with her pulse 100, tongue dry with brown fur—in fact, all the symptoms of fever. The third case was one of erysipelas, which manifested itself two hours and a half after delivery, evidently proving that the disease was latent in her system before coming into Hospital. In cases 4 and 5, the disease was clearly owing to mental fret and remorse, these poor women being the victims of seduction. The sixth came

in with acute bronchitis, inflamed varicose veins, and labouring under great distress of mind, having been deserted by her husband and turned out by her relatives, and, as she stated to me, "came in to die." The seventh was admitted suffering from peritonitis, with her pulse 100 and extreme abdominal tenderness, having been forty-three hours in labour before she was brought to the Hospital. The eighth had been three weeks lying ill before admission. The ninth was a case of tedious labour; symptoms of peritonitis developed themselves in three hours after delivery. The tenth came in with fever, of which alone she died, there being no abdominal symptoms whatever. The eleventh had been in great distress, worn down with want, starvation, and mental depression for some time previously. The twelfth caught cold in a railway train a week before, lay in a lodging without any Medical attendance till she was brought to Hospital, when it was found she was suffering from acute arthritic rheumatism; peritoneal symptoms set in immediately after delivery, which, added to her previous ailments and her extreme mental depression, for she was unmarried, hastened her end. Now, sir, after reading these facts, can any one suppose that the sickness and death of these women were in any way attributable to their being confined in the institution, or that the position of the wards in which they died could have any influence in the fatal result, a point upon which the writer seems to lay great stress, as he states, "which facts appear to us to be of considerable importance"? I must say that the point, although an ingenious one, has no bearing on the cases under consideration. For I repeat again, if you will only look at the conditions under which those fatal cases were admitted, you will plainly see that the wards or their particular position had nothing whatever to do with the matter—that it was quite immaterial what side or which floor of the house the patients chanced to be placed—the result would have been equally the same. The fact of the deaths, so occurring, could only be attributed to the circumstance of the labour, as we term it, being in that particular part of the house at the time these patients presented themselves for admission; but that the north side or lower floor of the Hospital is more liable to engender or foster sickness than the south side or upper floor, cannot, I think, be proved from the foregoing account. And I feel I am strengthened in that opinion by the statistics of the late Dr. Shekleton's seven years' Mastership, from which I find that 34 deaths from zymotic diseases took place in the northern wards of the upper corridor, while 30 deaths occurred in the southern wards on the same corridor, and on the lower corridor on the north side 23 deaths, while on the same corridor on the south side 26 deaths occurred; so that the number of deaths on the north side of the building amounted to 57, while those on the south side amounted to 56, and those on the upper corridor were 64, the deaths on the lower corridor being only 49, thereby showing that the deaths on the first floor were actually less by 15 than those on the upper story, and the deaths on the north side of the building in seven years exceeded by 1 the deaths on the south side, which is somewhat contrary to the observation of your commentator, inasmuch as the excess by 1 is, I conceive, not so very remarkable. And finally, with regard to his observations on Table No. III., showing the number of patients admitted into the Rotunda Lying-in Hospital from each municipal district, the number of deaths from zymotic diseases which occurred amongst them, and the number of deaths from the same causes in the districts from which the patients come, according to the Registrar-General's report, and stating that "the absence of information as to the relative population of the districts, at different ages, and of each sex, the sex and age of those whose deaths are given in the table, how many of the deaths were from the zymotic diseases of childbed, and the number of births in each district, renders the table, for the purpose to which Dr. Johnston applies it, utterly valueless."

I maintain that it is not at all necessary to enter into these details, which I could not if I were willing, inasmuch as the Registrar-General's report, the only authority to be relied on, does not go so far. It is, I conceive, quite sufficient for me to show that sickness of a zymotic nature may prevail, and that to a great extent in these several districts, so much so that 1417 deaths from these diseases occurred in them, while of the 1159 who came into Hospital from the various localities where these diseases predominated, all went through their puerperal state favourably, with the exception of the number mentioned in the tables. It matters not what the age, sex, or state (married or single) of the victims of these diseases may have been. All I wish to prove was that sickness of a contagious and fatal nature did prevail outside, and yet the Hospital was perfectly free from it, and therefore that I was warranted in stating that patients coming into the Hospital were fully as safe, if not safer, than if they were confined in their own homes.

I am, &c.

Dublin. George Johnston, M.D. Ed., F.K.Q.C.P., etc.

MALATE OF IRON.

Letter from Dr. F. W. P. Jago.

[To the Editor of the Medical Times and Gazette.]

Sir,—The country people on the borders of Dartmoor (Devonshire) put a quantity of iron nails into a bottle and fill it with cider. After standing a week, or longer, it is considered fit for use. From time immemorial the above remedy has been in use "for improving the blood." The dose is a wineglassful three times a day. It appears to me to be as good, if not better, than any other form of iron in anæmia, amenorrhœa, etc. The result I attribute to the malate of iron formed by the action of cider on iron. I beg to call attention to so simple a remedy, and which could be obtained at no great cost in a more scientific manner.

I am, &c.

Plymouth, April 5. Fred. W. P. Jago, M.B.

HYDRATE OF CHLORAL AS A HYPNOTIC.

Letter from Dr. Robert Gardiner Hill.

[To the Editor of the Medical Times and Gazette.]

Sir,—Those whose practice chiefly lies in the wards of an asylum are frequently baffled in their efforts to procure sleep for their suffering patients by the ordinary remedies of the Pharmacopœia, and hence it is that chloral becomes an agent of priceless value, more especially in cases of acute mania. I consider the Profession to be deeply indebted to Dr. Richardson for so valuable an introduction into the country, and, as my experience of its value has been tested in numerous cases, I will, with your permission, illustrate it by narrating the following striking example from my own practice:—

The patient was the wife of a respectable tradesman; her well-developed physique was evidenced by the strength of her muscular power. Her age was about 40, and she was stated to have been ill some two or three weeks. My attendance commenced on October 22, 1869, when I found her in a highly excited condition, in an eminent degree dangerous to herself and others. There was no difficulty in at once pronouncing it to be a case of acute mania. The characteristic feature that claimed my attention was the reported fact that she had had no sleep for a fortnight, and that all the well-known remedies had only aggravated her condition by intensifying her restlessness. Having made an attempt to precipitate herself from an upper window, the precaution had been taken of guarding against the repetition of it by deal boards securely nailed across them. The attendants who alternately performed watch and ward were her husband, one of his assistants, and a professional nurse, all of whom were more or less worn out from want of rest. I at once advised the necessity of additional aid, not only as a measure of relief for the sane, but for the better protection of the insane patient, who, from fulminating her threats, would proceed to acts that rebuked all control. I prescribed beef-tea between meals, porter at dinner, and whisky at bed-time, with a mixture of carbonate of ammonia, chloric ether, and decoction of bark, thrice a day.

October 24.—No improvement.

October 27.—Has a very large boil on her left hand, with considerable swelling of one joint of the forefinger of the right hand. To continue, substituting port-wine for whisky, and to have a draught at bed-time of one grain of acetate of morphia, with Hoffmann's anodyne.

October 30.—Still much excited, and no sleep after the draught. Is said to have had, however, a few hours' sleep after a drive on the 28th. Has a large boil at the bottom of her spine. At this stage of the case it was determined to turn over a new leaf, and try the effects of chloral.

November 1.—Took two half-drachm doses of this medicine last evening. Within ten minutes after taking the first dose she slept for two hours. The second was then administered, followed by five hours' sleep. To-day she is much more tranquil and good-tempered. Has several boils on lower extremities. Persevere with tonic mixture by day and chloral at night.

November 2.—Required only one dose of chloral last evening, having slept all night. Is mentally greatly improved, though the boils are either inflaming or discharging.

November 6.—Has had three good nights' rest after each repetition of the chloral, and is pronounced to be much more amenable to management by the watchers.

November 12.—Rest at night all that is desirable; diminishing doses of chloral are now given; the boils nearly healed. From this date onwards the improvement was progressive, and on January 11 she was able to go to Brighton. A residence there of three or four weeks completely restored her, and on her return to town she was able to resume her domestic duties, and is now as well as she was prior to her attack.

The difficulties and disadvantages of treating mania at home were never more completely exemplified than in this case. Air and exercise could only be commanded as it were by stealth, a cab being the vehicle and a distant green the object, to be reached at the still evening hours when the hum and noise of the world would be less attracted by the noisy exclamations of the patient herself.

Thanks, then, to chloral, and him who made us acquainted with its therapeutic virtues. It only remains to be said that when I first commenced the use of it the market value of the article was 2s. 6d. the drachm. It is most gratifying to record the fact that it can now be procured for about twopence-halfpenny. I am, &c. Robert Gardiner Hill.

Earl's-court House, Old Brompton, March 14.

THE CLUB QUESTION IN BIRMINGHAM.

Letter from Mr. R. MacPherson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall feel obliged if you will permit me to reply to some statements in the last letter of your Birmingham correspondent, which, in my opinion, present an erroneous view of the present state of the club question in this town. In February, 1868, 158 Medical Practitioners in Birmingham and its immediate neighbourhood signed a document pledging themselves not to accept any fresh club appointment at a less payment than that decided upon by the Friendly Societies Committee of the British Medical Association—viz., 5s. They further bound themselves not to become candidates for, or allow themselves to be elected to, the office of Surgeon to any society that might become vacant owing to the resignation or dismissal of the Surgeon on the question of remuneration at that rate (5s.).

Of this large number of signatures eight only subsequently withdrew their names. Some of these gentlemen, too, have accepted club appointments at the old rate when an opportunity offered itself. But surely this cannot be taken as evidence that the "old rate of club remuneration is being generally accepted." I must state, with sincere regret, that two or three cases have occurred of Practitioners, whose names are still attached to the document, applying for or accepting appointments at the old rate; but neither is this evidence that the "old rate is being generally accepted," a statement your correspondent is apparently desirous to impress on your readers. I am acquainted with a firm in this town who hold upwards of twenty club appointments at rates ranging from 4s. to 10s. Before this document was signed, two years ago, not one of these clubs paid a higher rate than that universally current at that time—viz., 3s. So lately as last week a society had declined the services of their Medical attendant to whom they had been paying 4s., and appointed another at 5s.

The Friendly Societies Committee still meets at intervals, and at every meeting satisfactory evidence is received that the old club payments are being replaced by sums more nearly approaching an equitable remuneration than those formerly obtained. In fact, to those not wilfully blind, there is abundant evidence that the movement is surely, if slowly, progressing; and, notwithstanding the opposition at first provoked, and the difficulties of various kinds still to be overcome—none greater than the defection in our own ranks—there is every reason to hope that male adult clubs which pay their Surgeons 3s. per member per annum will, at no very remote period, become extinct, even if Medical men may still be found eager to regard that time-honoured sum as an equivalent for their services.

It is to be regretted that partial statements on a matter of such interest to the majority of the Profession as the club question should be put forth to the Medical world at large. Such statements tend to deter Medical men in other places from making an effort to raise the standard of fees in a kind of practice which has long been confessedly underpaid.

I am, &c. Robert MacPherson,
Hon. Sec. of Friendly Societies Committee.

Birmingham, April 5.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY.

Friday, March 11.

Dr. Barclay in the Chair.

Dr. Buzzard asked for a committee to report on a case under his care. Drs. Greenhow and Fagge, with Mr. Callender, were appointed.

Dr. Wilks brought forward some cases illustrating the remarkable Disturbance of the Heart which often occurs in renal disease, more especially when this is of the acute form. During the late prevalence of scarlatina and the succeeding nephritis he had met with several cases of the kind where the patient was seized with a sudden and violent palpitation of the heart accompanied by all the usual distresses resulting from disturbance of the heart's action. The same symptoms might be observed in chronic renal disease, but to a less degree. Knowing that acute inflammation of the heart may arise in the course of scarlatina or nephritis, he had always been on the watch for its occurrence, but in the present class of cases the disturbance of the heart's action subsided after a few days without leaving any trace of an inflammatory process; only in one case did death occur. He believed, therefore, that the cardiac disturbance was of nervous origin, and was a symptom of blood-poisoning or uræmia. As regarded treatment Dr. Wilks had seen most of the cases in consultation, and thus different methods had been adopted. In nearly all stimulants had been administered in consequence of the fears of momentary stoppage of the heart's action. Digitalis had certainly been of no avail. In one case henbane appeared to check the heart's action. His own opinion was that the condition named being a result of uræmia must be treated after the ordinary manner by diaphoretics, purgatives, &c.

Dr. Weber had seen five or six such cases—four after scarlet fever, the others independent of it. Four were acute renal cases. Œdema of the larynx might occur in the same way. In one case the heart was normal at the time, but three weeks after there was a mitral bruit. In two cases hot baths did much good, the effect being almost immediate. Purgatives were also beneficial. Alcohol suited badly in two. The wet sheet also did good. In two the urine became healthy; in the others not.

Dr. A. P. Stewart said it was curious so few present had seen such cases. He looked back over forty years, but remembered one case only. In it there was extensive anasarca after scarlet fever. Œdema of the lung was also present, and proved fatal in a few days. The symptoms appeared to result from nerve affection induced by blood poisoning. In many cases of scarlatina the heart was really affected, and in many of these there was no kidney affection. When the lung symptoms were troublesome, cupping had often given marked relief.

Dr. Wilks said that such cases being very striking may have impressed him the more forcibly. Inflammation may have occurred and not been detected. The cases were not followed out.

Mr. Holthouse exhibited a cast of an Inguinal Hydrocele, which had been mistaken for strangulated hernia. The symptoms which led to this belief were a tympanitic and painful abdomen, vomiting, and general prostration; then the situation and form of the tumour, and a truss which the patient was wearing, seemed to confirm it; but the fact that he was suffering from diarrhœa and bad living was overlooked. The case was one of arrested descent of the testis, this organ being lodged in the inguinal canal, whilst its sac—the vaginal process of peritoneum—extended to the groin and upper part of the scrotum; into this sac, which was closed above, fluid had become effused, forming a tumour which was situated between the skin and the aponeurosis of the external obliqne, and resembling in shape and direction a large bubonocele. Mr. Holthouse referred to a tumour of a similar character which was brought before the notice of the Pathological Society by Mr. Curling in 1858, and which is published in their *Transactions*, as well as to a recent case of acute hydrocele of the groin, recorded by Mr. Hulke in last month's *Lancet*. The physical characters of these tumours are sufficient to distinguish them from hernial protrusions, which they resemble.

Mr. Barwell said this recalled one of the first cases he had seen; the symptoms were those of inguinal hernia, but only serum was found. In another case a man came to Hospital supposed to have hernia. There appeared, on examination, to

be only one testicle in the scrotum, and the swelling was supposed to be due to the other. However, a wasted one was ultimately found in the scrotum. The tumour when tapped gave out serum, and then got well.

Mr. Croft said lately two such cases had been brought to St. Thomas's Hospital. In both the symptoms were acute, and were taken for strangulated hernia; but the train of symptoms was imperfect. Ice was used, and then they were tapped.

Mr. Callender read a note upon Cases of Amputation in which Ligatures had been used, with a view of showing how very rare had been the accident of secondary hæmorrhage at St. Bartholomew's Hospital in cases of this kind, and also the recoveries would compare favourably with those recorded in which acupressure or torsion had been employed. In 108 amputations performed by Mr. Paget and Mr. Callender there was secondary bleeding in 2 only, whilst in 480 performed by the staff in a period of years 6 deaths had resulted from this cause, just 1·2 per cent. Out of 46 cases of amputation during 1869 (21 of the thigh and 20 of the leg being included) 39 recovered. Mr. Callender thought that some discredit had unfairly fallen upon the ligature which ought really to have attached to the carelessness with which it had been employed, though he did not think that tying an artery required more care than twisting or acupressing it.

Mr. Barwell thought it important to get rid of the ligature. If torsion would stop bleeding perfectly, it was the better plan.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, March 19, 1870.

Dr. Aldis in the Chair.

The Chairman put a question to the members present as to how many of them had disinfecting ovens in their parishes, when it appeared that hardly any of them had the advantage of such an apparatus.

A paper, by Dr. Cleig, of Epping, was read by the Secretary. The paper was entitled "A Scheme for the Better Supervision of Sanitary Matters," etc. It professed to be based upon the existing mode of inspection adopted by the Poor-law Board, so far as regards areas, and to be similar to that of the factory inspection as regards powers, leaving to the various local authorities the power of self-government so long as they carry out the Acts of Parliament affecting their respective districts. The writer proposed that, in each union, a sanitary commission should be elected from the board of guardians and magistrates conjointly; that this commission should elect a clerk, a Medical officer of health, a surveyor, a registrar, a collector, sanitary police officers, and disinfectors. It was proposed that the union Medical officer should be the sanitary Medical officer for his district; that the Government should appoint a Medical officer in chief and thirteen sanitary inspectors. The duties and powers of the sanitary commission seemed to be much the same as at present, magistrates' orders to be executed within one month, and heavy penalties to be inflicted in cases of default. Dr. Cleig suggested that the plans of all new houses or buildings should be submitted to the sanitary commission and the surveyor, who should see that provision is made for proper offices, ventilation, etc. The commission ought to furnish proper water-supply and sewers, to regulate the letting of lodgings, and to furnish Hospital accommodation for infectious diseases. The sanitary Medical officer—*i.e.*, the union Medical officer—to report to the Medical officer of health, in case of epidemics, daily in duplicate, so that a copy might also be forwarded to the sanitary inspector-general for the district. The duties of the disinfectors should be to attend to disinfecting, removing into Hospital, etc. The sanitary police officers to perform such duties as are now usual, except disinfection. The surveyor would have to superintend new buildings, in respect of cubic space, ventilation, water-supply, drainage, etc., and to be surveyor of roads. The clerk to perform such duties as are now performed by the vestry clerk and accountant of metropolitan vestries. It should be incumbent on the registrars to send in weekly returns to the Medical officer of health. The Medical sanitary inspector-in-chief should supervise all the sanitary work of the kingdom and have under him thirteen inspectors-general for the supervision of districts; these inspectors to receive copies of all local reports, register, and forward them to the Medical sanitary inspector-in-chief.

The plan was criticised by some of the members, and especially by Dr. Tripe, who said that it bore a great resemblance to a scheme laid before the Social Science Association by Mr. Sandford.

A paper was read by Mr. Liddle on certain Defects in the Nuisance Removal Acts, with a few suggestions for their amendment. After referring to the good that had been effected during the last sixteen years in the removal of nuisances injurious to health, and in the general aspect of the metropolis, Mr. Liddle proceeded to point out the defects in the five Nuisance Removal Acts—viz., those of 1855, 1860, 1863, 1866, and 1868—and the inconveniences arising from the very fact of so many separate Acts existing. Taking each Act in detail, he showed the points in which each was deficient, and threw out for the consideration of the Association the following suggestions for the amendment and consolidation of the existing Acts when a fitting opportunity should arise:—1. All the sanitary Acts should be consolidated into one general Act, and sanitary clauses in other Acts should be transferred thereto. 2. No distinction should be made, in carrying out sanitary regulations in houses occupied by the poorer classes, between those tenanted by one family and those tenanted by several. 3 and 4. The definitions of "nuisance" in the Nuisance Removal Act and in the Sanitary Act should be extended. 5. In cases of emergency, the sanitary officers, with the sanction of the Board in writing, should be empowered to take legal proceedings for the abatement of a nuisance. In the case of a stopped drain causing a nuisance injurious to health, the surveyor ought to have power to remove the nuisance forthwith, and charge the expense on the owner. 6. The smelting of the precious metals ought not to be made an exemption. 7. Provision should be made for compelling the repair of rain-water pipes, and for carrying the contents into the main sewer. 8. Owners ought to be compelled to provide a privy or water-closet within the curtilege of each house. 9. For the better recovering the cost of improvements made in premises under a magistrate's order, the Board ought to have a lien on the property so improved. 10. The conflicting clauses, 8 and 27, of the Nuisances Removal Act, relating to trade nuisances, ought to be amended by giving the magistrate compulsory powers. 11. Owners should be obliged to pave the fore and back yards of the poorer houses, and to the satisfaction of the Board. 12. The minimum penalty ought to be fixed by the Act, not left to the magistrate, and ought to commence on the day the order is made, not served. 13. A form of summons ought to be provided for proceedings to be taken under Sect. 27 of the Nuisances Removal Act. 14. The local board should have power to take proceedings for the removal of a nuisance proceeding from a contiguous district either separately or jointly with the board of that district. 15. A joint owner ought to be enabled to recover expenses from the other joint owners without being obliged, as at present, to appear by summons before a magistrate. 16. If a nuisance from a defective drain in a neighbour's house should be felt in an adjoining one, and not in the house where the defective drain exists, the sufferer appears to have no remedy under the Nuisances Removal Act. 17. The penalties for carrying on noxious trades on a large scale ought to be larger to be deterrent. 18. There ought to be a means of preventing the recurrence of nuisances arising from any deposits without repeated summonses. 19. The order for entering premises under the 11th section of the Nuisances Removal Act ought to give power of entering daily until the works necessary for the abatement of a nuisance have been completed. 20. In addition to the nuisances defined by the 8th section of the Nuisances Removal Act, and the 19th section of the Sanitary Act, it would be desirable to include the following:—(1) The retention of a dead body in a sleeping or living room; (2) carts and barges carrying offensive matter, unless properly enclosed; (3) offensive urinals; (4) any house insufficiently lighted or ventilated; (5) the keeping of pigs within a certain distance from a public highway in the metropolis; (6) any public building insufficiently ventilated; (7) any dwelling-house not properly supplied with water; (8) overcrowded or badly ventilated workshops or schools; (9) offensive or injurious trades; (10) houses imperfectly drained; (11) houses so dilapidated in the roof or staircase as to be dangerous or injurious; (12) houses not provided with proper dust-bins; (13) any house not provided with a proper privy or water-closet; (14) any house not provided with proper eaves, gutters, or rain water-pipes; (15) the basement rooms of any house being used as sleeping rooms contrary to the Building Act of 1865.

On the conclusion of Mr. Liddle's paper, Dr. Tripe, Dr. Stevenson, Dr. Vinen, Dr. Ross, Dr. Gibbon, and others,

analysed points that had been touched upon, and related the various shifts they had recourse to to make up for the shortcomings of the various Acts, and the different views taken of them by different magistrates. All were agreed that a consolidation of the several Acts would be a great step.

It was ultimately agreed that the General Purposes Committee should meet and discuss the suggestions thrown out by Mr. Liddle. A vote of thanks was then unanimously passed to that gentleman for his paper, and the meeting terminated.

MEDICAL SOCIETY OF LONDON.

MONDAY MARCH 14.

JOHN GAY, Esq., President, in the Chair.

ANNIVERSARY MEETING.

AFTER a vote of thanks, proposed by Dr. ROUTH and seconded by Mr. WEEDEN COOKE, had been accorded to the retiring President, Treasurer, Secretaries, and Council of the Society, and most courteously acknowledged by Mr. P. Marshall,

The PRESIDENT gave his inaugural address, in which he took a survey of the rise and progress of the Medical Society of London from its origin in 1773 to the present date. He referred to Jenner, Lettsom, Abernethy, Clutterbuck, and the other illustrious and distinguished men who had been warm supporters of the Society in its earliest years; he noticed the difficulties the Society had encountered and surmounted, and pointed out the best ways to maintain the progress and high repute of the Society.

The address was listened to with very marked attention, and often very warmly applauded by the numerous audience.

Dr. RICHARDSON made a communication

ON THE PRODUCTION OF RAPID ANÆSTHESIA AND ON A NEW ANÆSTHETIC COMPOUND FOR THAT PURPOSE—METHYLIC ETHER.

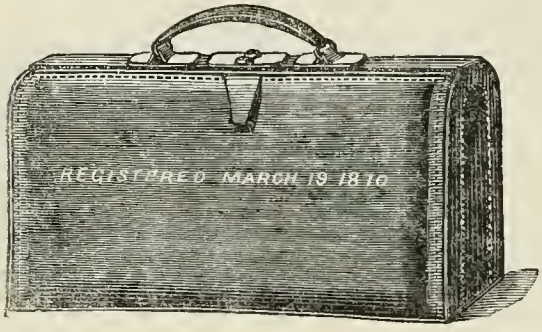
Dr. Richardson commenced by explaining that within the past two or three years a practice had been followed of producing a quick insensibility which should be succeeded by equally quick recovery. Two agents had been employed for this purpose—(*a*) nitrous oxide gas, (*b*) bichloride of methylene. Accepting that the principle of producing quick insensibility had a practical intention and usefulness, Dr. Richardson said that he had objection to the methods which up to the present time were adopted for carrying the principle into practice. His objections to nitrous oxide gas were as firm as ever. He held still that the employment of an agent which excluded all atmospheric air during inhalation, which produced the most perfect asphyxia, which required for its administration costly and troublesome apparatus, and which, if administered beyond a given period, even for some seconds, must of necessity kill, was a bad agent for anæsthesia. The administration was, in fact, a rude and vulgar process, retrogressive in science. Respecting bichloride of methylene, though it was hard to speak a word against any application of a remedy which he, the author, had himself introduced, he must be candid and say that he was not favourably impressed with the application of bichloride for *quick* general anæsthesia. That it was marvellously rapid in its action was true, that it answered the end had in view was true, and that it had now been used for the *rapid* inhalation an immense number of times without a casualty was also true. But these facts could not conceal the further and all-important fact that the bichloride of methylene belongs to a dangerous family of chemical substances, and cannot therefore be played with without risk. It had been extolled as safer than chloroform, and that was allowed, for as it contained an equivalent of chlorine less than chloroform it was naturally safer; but the safety was relative, not absolute. Under these impressions, the author was led recently to review experimentally the action of the whole of the more promising anæsthetic fluids and vapours, including chloride of methyl, chloroform, amylene, hydride of amyl, bichloride of methylene, ethylic ether, methylic ether, and some others which were given on a table placed before the Society. The result was that he had decided in favour of methylic ether for rapid anæsthesia. The anæsthetic properties of methylic ether were first discovered by Dr. Richardson in 1867, and the substance has been reported upon by him in two reports to the British Association for the Advancement of Science. On May 20, 1868, he inhaled it for the first time himself, Dr. Sedgwick and Mr. Peter Marshall administering it to him, to complete insensibility. He was narcotised completely in one minute, was unconscious for seventy seconds, and recovered almost instantaneously without nausoa, headache, or other unpleasant symptom. From that time the author has been in the habit of narcotising occasionally with methylic ether, and recently he has used it systematically with marked success. The ether is made by digesting one part of pure methylic alcohol with two of strong sulphuric acid. The mixture is heated, and the methylic ether which passes over as a gas, is subjected to frequent washings in strong potassa solution. The ether remains as a gas even below zero; it has an ethereal odour; it is, chemically, an oxide of the radical methyl. Its vapour density is 23, taking hydrogen as unity, and it burns in air. The strongest objection to methylic ether is, that it is a gas; but happily the difficulty is to a large extent overcome, the gas being very soluble in various substances. Water takes up thirty-seven volumes of the gas, yielding an ethereal fluid of pleasant taste. Pure ethylic ether and alcohol take up over a hundred volumes. For practical purposes the author prefers absolute ethylic ether of sp. gr. 720, and boiling point of 92° Fahr. as the solvent. The ether is charged with the gas at a temperature of 32° Fahr., and the compound is at once bottled and firmly corked down. It should be kept for a time before being used, the process of keeping producing a comparatively stable compound. In using this compound, which he proposes to call methyl-ethylic ether, the author at present employs the simple mouthpiece invented by Mr. Rendle, and made merely of leather. He is adding to this a reserve bag, in order to conserve the ether. From one to two drachms may be put into the inhaler for quick narcotisation. Dr. Richardson next described cases in which the methyl-ethylicether had been administered to the human subject for extraction of teeth. In eleven cases the whole operation, from commencement of the inhalation to the complete recovery, was under three minutes, in several cases one minute was sufficient, while in two cases forty-five seconds sufficed. In no case was there spasm, syncope, or asphyxia during inhalation, nor any after-nausea, and in all cases there was a semi-consciousness, so that the patients did what they were bid to do, remembered often what had been said, and yet were not conscious of pain. The author next described the action on the nervous centres of methyl-ethylic ether, comparing it with chloroform and other anæsthetics containing chlorine. He showed that the ether produced no such excitation of the nervous centres which supply the vascular system as chloroform does, and that consequently there was absence of muscular spasm, of contraction of blood-vessels, and of syncope from fatal contraction of the heart. When it was carried to the extent of arresting life in the inferior animals, it produced death by paralysing the organic nervous centres. This extreme result was preceded by convulsive action similar to that which is seen in death from hæmorrhage, the convulsion being due to the absence of arterialised blood in the muscles. So well, however, did the heart still retain its power, that in one case, in a lower warm-blooded animal—a guinea pig—the respiration returned *spontaneously* in pure air four minutes and forty-five seconds after it had ceased from inhalation of the ether. No fact could more definitely speak in favour of the safety of this agent. In conclusion, the author said that, as he had confined himself this time to rapid anæsthesia for short operations, his remarks must be taken as bearing on that subject only. He had introduced *methylic* ether as the readiest and best agent he at present knew of for the purpose described. It was better than nitrous oxide gas, because it allowed air to be given with it, and did not asphyxiate. It was better than bichloride of methylene, because it did not produce muscular spasm and syncope. At the same time, he did not consider it as perfect, nor should he consider general anæsthesia perfected until he or some other observer should discover an agent that will destroy sensibility without interfering at all with organic muscular life, volitional power, or consciousness. Methylic ether approached towards this perfection, though it did not touch it, and it encouraged perseverance in experimental research. For these reasons it was worthy the attention of the Society.

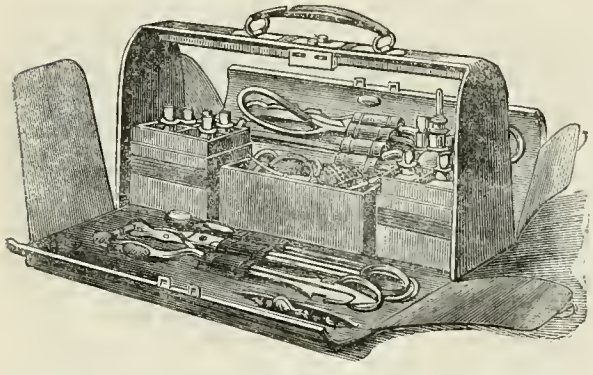
PRIZE QUESTION.—The Belgian Royal Academy of Medicine offers a medal of 1000 fr. for the best essay on the following subject, to be delivered in before March 1, 1872:—"Examine into the causes of sporadic and epidemic typhoid fever, and indicate the prophylaxis and treatment of the disease." The Academy is desirous that candidates during their etiological investigations should examine the question whether terrestrial magnetism plays any part in the genesis of epidemic typhoid fever.

NEW INVENTIONS.

IMPROVED OBSTETRIC BAG.

Messrs. Arnold and Sons, of West Smithfield, have invented an obstetric bag, which certainly seems as near perfection in the way of obstetric bags as anything we have seen. In the first place, and this is no mean recommendation, it has the appearance of an ordinary, but very neat, travelling bag. It is not bulky or cumbersome, and may be carried in the hand without fatigue, and without attracting notice. In the next place, it holds almost everything that is likely to be wanted under any emergency in the lying-in room. The following is a list of the contents:—Midwifery forceps, improved perforator, craniotomy forceps, blunt hook, crotchet, frænum scissors, female catheter, Skinner's inhaler, chloroform bottle, uterine





syringe and enema, Dr. Richardson's spray apparatus, stoppered bottles for ergot, tinct. opii, sp. ammoniæ co., tinctura ferri, æther, chloroform, brandy, etc. These things are so arranged as to be most accessible. Any one of them can be removed and replaced with the greatest ease. The bag, we believe, is constructed and fitted according to the suggestions of Dr. Greenhalgh, than whom no one is better acquainted with the requirements of the obstetrician. The bag can be procured from the manufacturers either by itself, or with the fittings complete.

AUSTRALIAN COOKED MEAT IN TINS.

We have received from Messrs. W. J. Coleman and Co., of 13, St. Mary-at-Hill, a specimen of their Australian cooked meat, which can be now purchased at from fivepence halfpenny to sixpence halfpenny per pound. Judging from the sample we have received, this meat is excellent in taste, in odour, and flavour; it has all the freshness of meat killed yesterday, and it undoubtedly is nutritious and wholesome. It ought to become highly popular on account of its cheapness and excellence, and we commend it to the attention of our Medical brethren, especially to those who, practising amongst the lower middle and poorer classes of society, are frequently obliged to order an amount of animal diet which they know, at ordinary prices, to be beyond the means of their patients. The meat may be eaten cold, or it may be made into excellent rissoles or stews.

The Dr. Evans Testimonial Fund (Birmingham) already amounts to upwards of £1100.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 5th inst., and, when eligible, will be admitted to the pass examination:—

Brown, James, of the Leeds School.
Delamotte, P. W., of the Charing-cross Hospital.
Dunstan, Robert, of Guy's Hospital.
Edmundson, T. R., of Guy's Hospital.
Ewart, William, of the Berlin and St. George's Hospitals.
Fosbroke, G. H., of the Westminster Hospital.
Garton, William, of the Liverpool and St. Thomas's Hospitals.
Granville, U. G. D., of University College Hospital.
Greenfield, W. S., of University College Hospital.
Hewett, F. C., of St. Bartholomew's Hospital.
Hindle, James, of the Manchester School.
Hogg, E. H. J., of the Birmingham School.
Horner, A. C., of St. Bartholomew's Hospital.
Jacobs, H. R., of the Hull and St. Mary's Hospitals.
Lyth, J. B., of the Liverpool School.
Mawson, W. A., of the Leeds School.
Molyneux, H. J., of the Liverpool School.
Monro, C. E., of St. Thomas's Hospital.
Morris, Enoch, of the London Hospital.
Neal, Breward, of the Birmingham School.
Parkes, W. E., of the Birmingham School.
Poignand, Malcolm, of St. Bartholomew's Hospital.
Power, G. E., of Guy's Hospital.
Procter, Thomas, of St. Mary's Hospital.
Robinson, Mark, of St. George's Hospital.
Snell, Simeon, of the Leeds School.
Taylor, H. O., of Guy's Hospital.
Utting, James, of Guy's Hospital.
White, G. B., of the Birmingham School.
Wilson, W. W., of the Birmingham School.
Wright, J. F., of the Middlesex Hospital.

The following gentlemen passed on the 6th inst., viz.:—

Biggs, G. M., of University College Hospital.
Branfort, H. S., of Guy's Hospital.
Cartwright, H. G., of Guy's Hospital.
Cheesewright, J. F., of the Charing-cross Hospital.
Eastes, Thomas, Guy's Hospital.
Fenn, C. D. of Guy's Hospital.
Fenn, E. H., of the Middlesex Hospital.
Frean, Richard, of the Middlesex Hospital.
Goldsmith, S. J., of St. George's Hospital.
Gray, F. A., of University College Hospital.
Groves, Matthias, of St. Bartholomew's Hospital.
Harries, T. D., of Guy's Hospital.
Hartridge, Gustavus, of King's College Hospital.
Hatfield, W. H., of St. Bartholomew's Hospital.
Klien, C. H., of St. Bartholomew's Hospital.
Lungley, Frank, of Guy's Hospital.
Mackenzie, Lewis, of the London Hospital.
Marshall, John, of Guy's Hospital.
Morgan, W. L., of the London Hospital.
Morrell, R. B., of King's College Hospital.
Parry, T. S., of University College Hospital.
Paterson, R. H., of Guy's Hospital.
Salmon, A. L., of St. Bartholomew's Hospital.
Skaife, Frederic, of St. Bartholomew's Hospital.
Shemill, G. R., of University College Hospital.
Smith, G. F. K., of Guy's Hospital.
Stamford, William, of the Middlesex Hospital.
Strafford, Thomas, of St. Bartholomew's Hospital.
Turner, George, of Guy's Hospital.
Turner, Willoughby, of St. Bartholomew's Hospital.
Wall, W. B., of University College Hospital.
Williams, W. H., of St. Mary's Hospital.

Also on the 7th inst.:—

Addy, Boughton, of St. Thomas's Hospital.
Baker, Charles E., of King's College.
Bethell, Alfred, of King's College.
Bird, C. H. Golding, of Guy's Hospital.
Bird, G. Gwynne, of St. Mary's Hospital.
Bridgman, Henry E., of St. Bartholomew's Hospital.
Cowley, J. Selwyn, of St. Bartholomew's Hospital.
Drew, William T., of St. Mary's Hospital.
Elam, Shrofield, of Guy's Hospital.
Fairbank, William, of St. Bartholomew's Hospital.
Gibbs, Henry, of St. Bartholomew's Hospital.
Jackson, T. W., of Guy's Hospital.
James, A. C., of Guy's Hospital.
Kebbell, Alfred, of the London Hospital.
Ker, Hugh R., of Guy's Hospital.
Lush, William J. H., of King's College.
Lycet, J. Allan, of the Middlesex Hospital.
Norman, J. Clement, of St. Bartholomew's Hospital.
Odell, William, of St. Bartholomew's Hospital.
Percival, G. H., of Guy's Hospital.
Popham, F. W. H., of University College.
Richards, J. E., of University College.
Sobey, Arthur L., of St. Bartholomew's Hospital.
Thompson, Francis H., of St. Thomas's Hospital.
Tyson, Edmund, of Guy's Hospital.
Waeher, Frank, of Guy's Hospital.
Winterbottom, Augustus, of St. George's Hospital.

It is stated that 22 candidates out of the 108 examined failed to acquit themselves to the satisfaction of the Court of Exa-

miners, and were consequently referred to their anatomical and physiological studies for three months. During the examinations, the following members of Parliament attended and watched with great interest the mode of conducting the examinations:—Messrs. Dalrymple, Lush, and Brady. There will be an examination this day of an additional 108 candidates.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, March 31, 1870:—

Blyth, Alexander Wynter, Tollington-park.
Cass, Edward Earnshaw, Goole, Yorkshire.
Harvey, Christopher, Plymouth.
Herman, George Ernest, Chatham.
Hodgson, William, Brigham, Cumberland.
Humphreys, John Henry, St. Leonard's-on-Sea.
Symons, Henry Edward, Stoke Newington.

The following gentlemen also on the same day passed their First Professional Examination:—

Hanson, William, Charing-cross Hospital.
James, James Bowen, Middlesex Hospital.
Joseph, Joshua Raphael, Guy's Hospital.
Passmore, Frederick George, Guy's Hospital.
Ticehurst, Charles Sage, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ATTHILL, R. C.—Resident Medical Officer at the Charing-cross Hospital.

BAKER, WILLIAM MORRANT, F.R.C.S. Eng.—Surgeon to St. Bartholomew's Hospital.

FAWCUS, HENRY ROBERT, M.D. Univ. St. And., M.R.C.S. Eng.—Medical Officer and Public Vaccinator for the Lowick District of the Glendale Union, Northumberland.

HILLMAN, JOHN, M.R.C.S. Eng., L.S.A. Lond.—Medical Officer and Public Vaccinator for the Wolverley District of the Kidderminster Union.

HOLLIS, WILLIAM AINSLIE, M.B. Cantab., M.R.C.P. Lond.—Physician to St. Bartholomew's Hospital.

LEGG, JOHN WICKHAM, M.D. Univ. Lond., M.R.C.P. Lond.—Physician to St. Bartholomew's Hospital.

LEITCH, J. GIBSON, M.D.—Medical Officer of the First District of the City Parish, Glasgow, *vice* Mr. J. Leitch, Surgeon, resigned.

LOMAS, WILLIAM RORY, L.S.A. Lond.—Medical Officer and Public Vaccinator for District No. 4 of the Pontefract Union, Yorkshire.

ROBINSON, C. A., M.R.C.S.E., L.M., etc.—Resident Medical Officer to St. Peter's Hospital for Urinary Diseases, 1, Berners-street, Oxford-street.

SHUTTLEWORTH, G. E., B.A. Lond., M.D. Heidelberg (Exam. 1869), M.R.C.S. Eng., L.S.A.—Medical Superintendent of the Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.

STEPHENS, EDWARD, L.R.C.P. Edin., M.R.C.S. Eng.—Medical Officer and Public Vaccinator for the Ilminster No. 1 District of the Chard Union, Somersetshire.

THORNE, RICHARD S., M.B. Univ. Lond.—Physician to St. Bartholomew's Hospital.

WHIDBORNE, GEORGE HERBERT, M.R.C.S. Eng.—Medical Officer for the Tedburn St. Mary District of St. Thomas's Union, Devon.

MILITARY APPOINTMENTS.

The following was accidentally omitted from our last week's impression:—

BREVET.—Deputy Inspector-General Alexander Gibb, M.D., to have the honorary rank of Inspector-General of Hospitals.

In accordance with the provisions of the Order in Council of February 22, 1870, the following officers have been placed on the retired list of their respective ranks:—Inspector-General of Hospitals and Fleets George Burn, M.D., C.B.; Deputy Inspector-General of Hospitals and Fleets Abraham Rose Bradford; Staff Surgeons Robert Thomas Clark Scott, John Fitzgerald Charlton, M.D., James Vaughan, Charles Deane Steel, Samuel William Webb, Robert Grigor, M.D., Henry Richardson, M.D., James Walsh, M.D., and John Irwin Crawford, M.D.; Surgeons Maurice C. West, M.D., James George Risk, James Gregory Buchanan, Joseph Caldwell, James Campbell, and John Wallace; Assistant-Surgeon Joseph Dalton Hooker, C.B., M.D.

BIRTHS.

BARNES.—On March 31, at Hammersmith, the wife of Mr. E. C. Barnes, of a son.

CHRISTISON.—On February 23, at Agra, the wife of Alexander Christison, M.D., Surgeon Bengal Army, of a son.

COLLUM.—On April 1, at Croy, Surbiton, Surrey, the wife of Robert Collum, M.D., of a son.

GRANT.—On March 31, at Ninnage Lodge, Westbury-on-Severn, Gloucestershire, the wife of Henry S. Grant, Surgeon, of a son, stillborn.

PAUL.—On April 1, at 26, Burton-crescent, the wife of Jas. S. Paul, L.R.C.P.E., of a daughter, stillborn.

PAYNE.—On April 4, at Wimbledon, the wife of Charles Henry Payne, M.D., of a son.

PENNELL.—On April 4, at 1, Powis-square, Kensington-park, the wife of John Wilson Croker Pennell, M.B., of a daughter.

MARRIAGES.

BEVAN—WILLETT.—On April 2, at Above-bar Chapel, Southampton, the Rev. Llewelyn D. Bevan, LL.B., only son of Hopkin Bevan, Llanelly, to Louisa Jane, elder daughter of the late John Willett, M.D., of Bishop's Lavington, Wiltshire.

YOUNG—KIDD.—On March 1, at Christ Church, Cuddalore, Madras, S. H. B. Young, Lieutenant H.M.'s Madras Staff Corps, son of the late D. S. Young, F.R.C.S., Surgeon-General Madras Army, to Maria Rebecca, eldest daughter of the Rev. J. D. Kidd, Senior Chaplain H.M.'s Madras Establishment.

DEATHS.

BROWN, HENRY STAINTON, younger son of Samuel W. Brown, F.R.C.S., of Lewisham, on March 31, somewhat suddenly, in his 27th year.

BURTON, WILLIAM WILLOUGHBY COLE BURTON, M.R.C.S. Lond., son of the late Rev. W. G. P. Burton, at Loch Carron, Rosshire, of inflammation of the lungs and pleurisy, on March 26, aged 37.

EVANS, SUSAN, wife of Thomas Evans, M.D., at Mynd House, Gloucester, of bronchitis, on April 5, aged 67.

M'LEOD, CHARLES GILBERT ALEXANDER, only son of A. W. M'Leod, Surgeon, at 4, Cedar-road, Fulham, on April 4, aged 25.

SHEIL, CATHERINE M., daughter of the late Dr. Sheil, Ballyshannon, Co. Donegal, on March 18.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ASYLUM FOR IDIOTS, EARLSWOOD, REDHILL, SURREY.—Assistant Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before the 28th inst.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before April 16.

CARNARVONSHIRE AND ANGLESEY INFIRMARY.—House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary, at the Infirmary, Bangor, on or before the 20th inst.

DINGLE UNION.—Medical Officer for the Ventry Dispensary District. Candidates must be duly qualified and registered. Applications and testimonials to the Hon. Sec., Patrick M'Donnell, Esq., on or before the 14th inst.

DINGLE UNION.—Medical Officer for the Dingle Dispensary District. Candidates must be duly qualified and registered. Applications and testimonials to the Hon. Sec., William Collier, Esq., on or before the 14th inst.

HANWELL LUNATIC ASYLUM.—Additional Assistant Medical Officer; must have both Medical and Surgical qualifications and be registered, and not more than 35 years of age. Applications and testimonials to R. W. Partridge, Clerk to the Visitors, on or before the 21st inst. Applications must be made on a printed form, which may be obtained on application.

KENSINGTON DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before April 16.

STAMFORD, RUTLAND, AND GENERAL INFIRMARY.—House-Surgeon, Apothecary, and Secretary; must be M.R.C.S. and L.S.A. Applications and testimonials to the Chairman of the Committee of Management on or before April 12. Election on the 19th.

TEIGNMOUTH, DAWLISH, AND NEWTON INFIRMARY.—House-Surgeon. Candidates must be duly qualified, and members of the Church of England. Applications and testimonials to the Chairman of the Committee on or before April 18.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Plomesgate Union.—Mr. Henry L. Freeman has resigned the Saxmundham District; area 13,398; population 4076; salary £75 per annum.

Ruthin Union.—Mr. Evan Peirce has resigned the Llarhaiadr District; area 24,201; population 3537; salary £50 per annum.

Skipton Union.—The Gargrave District is vacant; area 17,604; population 1852; salary £18 per annum.

APPOINTMENTS.

Bath Union.—Frederick W. Hanham, L.R.C.P. Edin., L.F.P. and S. Glas., to the Fourth District.

Heston Union.—Vivian Wearne, M.R.C.S.E., L.S.A., to the First District and the Workhouse.

Leeds Union.—Thomas Land, M.R.C.S.E., L.S.A., to the Industrial School.

Newcastle-in-Emlyn Union.—Thomas Jones, M.R.C.S.E., L.S.A., to the Llandyssal District.

Nottingham Union.—William F. Lill, M.R.C.S.E., L.F.P. and S. Glas., L.S.A., to the Second District.

Petworth Union—Samuel Rutherford, M.R.C.S.E., L.S.A., to the Fourth District.

DR. ALFRED WILTSHIRE has been appointed junior Physician to the West London Hospital.

DR. CAHALAN, the supporter of Kickham, the "national" candidate at the last election for Tipperary, and chairman of his committee, has received a letter threatening him with most sanguinary vengeance unless he discontinues his Professional attendance upon a man in Cappawhite who has been beaten to within an inch of his life. The Doctor disregards the letter, except, if possible, by giving more attention to his unfortunate patient.

British Medical Benevolent Fund.—Ten applications for relief were laid before the committee at their last meeting, and the sum of sixty pounds dispensed in grants. A donation of £5 from Bernard Kendall, Esq., of Rajpootana, India, was announced, also an additional donation of £10 from Dr. Bisset Hawkins.

Dr. C. A. Lockhart Robertson has been presented with an address, beautifully illuminated and handsomely bound in morocco, signed by the whole of the officials of the Sussex Lunatic Asylum, Hayward's Heath, to the number of ninety-five, on retiring from the office of Resident Medical Superintendent.

A stupid and heartless hoax was perpetrated a few days since by some miscreant sending to a local newspaper an account of the death of Dr. Thomas Milne, of New Deer, Aberdeenshire. The Aberdeen Journal expresses a hope that the guilty person will be brought to punishment, in which we heartily join.

The next meeting of the Association of Medical Officers of Health will be held on Saturday, April 16, at 7.30 p.m., at the Scottish Corporation Hall, Crane-court, Fleet-street, when a paper will be read by Dr. R. Angus Smith, F.R.S., F.C.S., "On the Examination of Air, with special reference to that of London."

Royal Albert Asylum for Idiots and Imbeciles of the Northern Counties, Lancaster.—The Central Committee have appointed to the office of Medical Superintendent of the Royal Albert Asylum, G. E. Shuttleworth, B.A., M.D., M.R.C.S., Assistant Medical Officer of the Earlswood Asylum for Idiots, Surrey.

Royal Institution of Great Britain.—At the general monthly meeting held on Monday, April 4, 1870, Sir Henry Holland, Bart., President, in the chair, Frederick Braby, Esq., F.G.S., F.C.S., Bernard Cracroft, Esq., Henry Doulton, Esq., William Evans, Esq., Frederick George William Fearon, Esq., John Fowler, Esq., Lieut.-General Frederick William Hamilton, C.B., Mrs. Ellen Margaret Joachim, Thomas Hawksley, M.D., M.R.C.P., W. G. Lettsom, Esq., Miss Anne Egerton Smith, Sebastian Smith, Esq., Charles Sweet, Esq., were elected Members of the Royal Institution. Six persons were proposed for election as Members at the next monthly meeting.

Bristol Medical School.—Award of Prizes.—The annual distribution of prizes took place on Tuesday last. Dr. Burder, having addressed the students, awarded the following prizes:—1st year's prize, Mr. Arthur W. Pritchard. Certificates of honour, Mr. Lionel A. Weatherly and Mr. William R. Cossham. 2nd year's prize, Mr. Alfred E. A. Lawrence; extra prize (of equal value), Mr. W. A. Sturge. 3rd year's prize, Mr. Henry Waldo. Certificate of honour, Mr. William T. Benham. Prize for practical anatomy, Mr. William T. Benham. Certificates of honour, Mr. Henry Waldo (with a book), and Mr. Frederick G. Blake.

A Convenient Deformity.—The execution of the convict Rutterford, who is under sentence of death for the murder of a gamekeeper named Hight, on the estate at Friswell of the Maharajah Dhuleep Singh, is fixed for next Monday, at Bury St. Edmunds Gaol. There are doubts, it is said, as to the possibility of executing him, for he possesses a malformation of the neck; he was severely burnt when he was young, and now the chin is connected with his neck by a band of flesh in a straight line. Dr. Macnab, Surgeon to the gaol, fears that any attempt to hang the unfortunate man would be attended by prolonged suffering, and might cause a very unpleasant scene. Representations to this effect have been made to the Home Secretary, but no reply has yet been received.—*Pall-mall Gazette.*

New Poor-law Inspector.—Dr. John Henry Bridges has been appointed as a Poor-law inspector in the room of Mr. John T. Graves. Dr. Bridges was educated at Oxford, where he graduated in 1859, M.B., B.A.; he is a Fellow of the Royal College of Physicians of London, and was formerly Physician to the Bradford Infirmary. Dr. Bridges has published several works on health and on kindred topics. He has been acting as temporary inspector in the metropolis during the absence of Dr. Markham on sick leave. We understand that Dr. Bridges will continue in the metropolitan district, and that the duties of inspector for the district lately held by Mr. Graves will be undertaken temporarily by Mr. Francis Davy Longe. With Dr. Smith, Dr. Markham, and Dr. Bridges among its number, the staff of Poor-law inspectors appears to be gradually acquiring that leaven of Professional strength for which there has been such an outcry during the past few years. It seems desirable that at least half the number of inspectors should be Medical men, and that, having regard to the special knowledge required for the conduct of official inquiries, etc., the other half should be barristers of some standing.

The Queen's University in Ireland.—On Wednesday and Thursday, 30th and 31st ult., the Right Hon. Sir Maziere Brady, Bart., Dr. Banks, President of the King and Queen's College of Physicians, and Mr. Macnamara, President of the Royal College of Surgeons in Ireland, Visitors of the University, sat to hear an appeal brought by Mr. A. O. Melville from a decision of the Council of the Queen's College, Galway. It appears that on November 23 last Mr. Melville had written to the Visitors, complaining that he was not afforded, at the College, due opportunities of clinical study, that his time was wasted by his having to go to the infirmary and by having to wait for Dr. Browne's clinical lecture, and he requested the Visitors to inquire into the alleged grievance. Before receiving an answer to his application he wrote a letter to the *Lancet* reiterating his statements. By the order of the Vice-Chancellor, Sir Maziere Brady, Mr. Stoney, the secretary of the University, wrote to inform Mr. Melville that the Visitors could not entertain his complaint, as it had not first been brought before the Council of the College. The Council, in consequence of the letters to the *Lancet*, deprived Mr. Melville of his scholarship, and sentenced him to three years' rustication. Against this sentence he now appealed. In the course of the investigation Mr. Porter, Surgeon-in-Ordinary to the Queen, and the Presidents of the Colleges of Physicians and Surgeons, bore testimony to the excellence of the materials for clinical teaching afforded by the cases in Galway Infirmary, as well as of the Surgical instruments and appliances in that Hospital, and of the Pathological Museum of the College. The Visitors condemned the conduct of Mr. Melville in having written to the *Lancet* without having first brought his complaints before the Council. They also thought the terms applied by the Council to his letters to that journal were justified. At the same time they considered that the term of rustication, three years, was disproportionate to the offence, and they accordingly reduced it to one year. Mr. Berwick, President of Queen's College, Galway, stated that he fully concurred in the decision of the Visitors. Mr. Melville thanked the Visitors for the patient hearing they had given him and for their decision.

Composition and Quality of the Metropolitan Waters in March, 1870.—The following are the returns of the Metropolitan Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	19·87	0·106	0·068	0·001	15·0	4·2
West Middlesex .	20·23	0·066	0·100	0·001	15·0	4·2
Southwark & Vauxhall . . .	20·19	0·083	0·091	0·002	15·4	4·4
Chelsea . . .	19·03	0·099	0·091	0·001	15·0	4·1
Lambeth . . .	18·93	0·085	0·129	0·002	14·8	4·1
Other Companies.						
Kent	24·71	0·013	0·194	0·000	19·8	5·6
New River . .	19·53	0·033	0·091	0·000	15·1	4·0
East London . .	21·53	0·048	0·099	0·000	15·6	4·4

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—viz., in that of the Chelsea Company.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 95,363,970 gallons; and the number of houses supplied was 476,654. This is at the rate of 30·1 gals. per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 25·7 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

H. Letheby, M.B.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Osborn.—The paper has been received, and shall appear as soon as possible.

Celsus.—To practise in Germany you must be naturalised, and pass the State examination. To practise in France you must obtain a French diploma. We believe that the same rule applies in Italy.

C. L. O.—Over 212° Fahr.

W. P.—Our correspondent takes a wrong view of the case. The Medical man was quite justified in what he did.

E. Elliss.—1. The provisions of the new Bill are not as yet known. 2. The existing examinations are not likely to be abolished within the time specified.

The Bristol Nurses' Training Institution and Home.—We have received the seventh annual report of this Institution, which seems to be doing its work very inexpensively, unobtrusively, and well. In a large town like Bristol there must be ample work for such a society. The report states that the demand for their nurses is so great that they are unable to supply many of the applicants. Last year, with a small staff, one hundred and ten private cases were attended, and the nurses' earnings amounted to £500. Such an institution, with a little support from the public to enable it to take and instruct a larger number of pupils, would soon become more than self-supporting. The quality of the nurses is guaranteed by the names of Drs. Beddoe, Brittan, H. Goodeve, S. Martyn, and J. Swayne, who are on the Committee of Management.

Query.

"To have a man chased to death in such manner . . . by poison after poison, first roseaker, then arsenick, then mercury sublimate, then sublimate again; it is a thing would astonish man's nature to bear it."—*The Letters and the Life of Francis Bacon*, v. 216.

What is "roseaker?" J. D.

Effects of Chloral on the Eyelids.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—The effect of chloral on the eyelids may be novel and interesting to some of your readers. With your permission I will give the details of a couple of cases. A lady who has taken the medicine in rather large doses —80 and 90 grains in six and eight hours—has each time had a curious inflammation of the lids, upper and lower, such as is seen in urticaria, with great irritation of the margin of the lids and separation of the eyelashes. The last time the irritation has persisted for several days. In the next case the symptoms have been described so graphically by the patient herself that I give her own words—"I found the chloral produce a curious effect on my eyes all day—an extreme heaviness, with heat, redness, and swelling in both upper and lower lids, so that it was an effort to keep them open—and towards evening the lids were painful to the touch. The following day they appear quite bruised." I may add, in other respects, the medicine had decided good effect. A Medical friend writes to me of a cardiac case with loss of sleep, where it was very efficacious—"After taking it every night for a fortnight, he began to have an uncomfortable feeling in his eyes—the lids felt stiff and cold." I am, &c.

April 5. M. D.

New Invention.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—On March 28, 1870, I exhibited at the Medical Society of London a new form of retentive cathether, which possesses the three essential qualities required for general use—viz., 1. It is easy of introduction. 2. It is easy of retention. 3. It is easy of withdrawal. It consists of a French vulcanite catheter, through which a string is passed, emerging at a clean hole an inch and a half from the point, and then, bridging over the usual opening for the urine, is inserted securely at the point. The opening for the urine is punched out one inch from the point, and is on the opposite aspect of the tube to the usual hole. The handle consists of a leathern collar, with a slot in it, a knot in the string, and a plug on it.

1. To introduce the catheter. Fix it on a long stilette, well oil it, and when the instrument is fairly in the bladder, remove the stilette.

2. To retain it. Draw the string at the handle, fix the knot behind the slot, and use plug or not at discretion. The effect of this is to reduplicate the terminal portion (three-fourths of an inch) of the catheter, so that No. 12 in the urethra becomes equivalent to No. 24 in the bladder.

3. To withdraw it. Slip the string out of the slot; the elasticity of the tube restores the end to its original straight position, and withdrawal is painless.

To render paragraphs Nos. 2 and 3 more distinct by an anatomical simile, suppose the end of the catheter to be a finger; then the string is the flexor tendon, and the elasticity of the tube the extensor.

Any Surgeon may now easily make his French catheters self-retentive, or they may be purchased at a small cost of MM. Mayer and Meltzer, 59, Great Portland-street, W. I am, &c.

33, Welbeck-street, W., April 4. Richard Davy.

Dr. Spengler on St. Moritz, in Reply to our own Correspondent.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I find in your paper, No. 1007 of the *Medical Times and Gazette*, an article about St. Moritz and Davos, written by your special correspondent, containing some unfounded attacks, which oblige me to claim from your justice the placing of the following statements in your most honoured paper:—

At the commencement of his third letter, your correspondent says:—"I am not about to enter now upon the general question of the influence of mountain air as a curative agency in cases of tubercular consumption;" and a little further expresses his surprise and disappointment at the extreme meagreness of data concerning this point which were obtainable in St. Moritz and at Davos.

If your correspondent had really not spoken of the physiological influences of mountain climate, and of the therapeutical application of the same in cases of consumptive disease, he would really have done very wisely, as already his expression "tubercular consumption," his statements that those data which he could gather could not convince him of the arrest of genuine cases of "tubercular consumption," prove enough that he does not stand in respect to this question on the newest, scientifically established, pathologico-anatomical point of view, and that, if he has really taken the trouble to read my pamphlet about this, he did not understand the same.

At last, however, your correspondent cannot abstain from surprising us with his views about the question of the mountain climate, as he says:—"As a summer resort, it will always, in my opinion, have much to recommend it. Its pure, dry, bracing air, its charming scenery, its rich flora, the absence of that oppressive heat, even in the hottest weather, which makes the lower valleys almost unendurable, the increased capacity for muscular exertion which the freshness of the air induces—all these attractions will commend the Upper Engadine to those who seek health and not excitement during their summer vacations." He even passes into still deeper thoughts, and thinks "the cases which would most probably be benefited by making the experiment of residing here from October to April are those of laryngeal irritation, of chronic catarrh in young persons, and perhaps some cases of incipient phthisis."

As forgotten Physicians, living in these mountain valleys, we are exceedingly grateful for these excellent lessons. We do allow ourselves, however, this modest question:—Based on whose information has your correspondent arrived at these interesting conclusions, as he does so very much complain of the meagreness of data he could obtain?

At very different conclusions, at a more exact judgment about mountain climate and its curative agency against consumption of the lungs, your correspondent might have arrived, if he really had taken the trouble to get the required information; but it seems that he was rather indifferent thereabout, otherwise he could have got them in abundance in St. Moritz and here by going to the Physicians of the place. That he did not do so in St. Moritz is easily to be understood. He found that it was more profitable to practise Physic, although without permission, in the circle of English families, and so he got himself in a rather unpleasant position in regard to the Medical men of the Upper Engadine.

Here in Davos your correspondent stayed from nine in the evening till seven in the morning, and just at a time when we had a large number of very instructive cases of chronic disease of the chest at his disposal. With the greatest readiness and pleasure I had given him an opportunity to examine those patients, but he did not ask for it. He had some conversation with Mr. Holsbaer, the proprietor of the Curhaus; told him it had been too difficult to get away from St. Moritz, where the English wanted him so much, that he could not stay any longer at Davos; looked through the Curhaus, took my pamphlet "The Davos Valley as Health Resort against Consumption; Climatologico-Physical Sketch by A. Spengler" (Basel; printed by Hugo Richter), and departed.

If any one will form himself a right judgment of a health resort, he should, in the first place, have the fitness to judge about the means it possesses, and about those forms of disease against which they are applied, and then examine the patients and control the results of their residence, as Dr. Hermann Weber, our indefatigable and intelligent pioneer, champion for the curative agency of mountain climate, is in the habit of doing.

Further, your correspondent pretends to have read my pamphlet, but he knows, as is very natural, nothing more to say about it than that it contains in an appended list seventeen cases, which "have been selected for publication," of which thirteen appeared to have remained at Davos from July to September only, and all appeared to have gained during that time a few pounds in weight, from two to twenty. "This," he says further, "is the only fact of any importance to be gathered from this table. Three of the cases are described as catarrh of the apices, one of which was cured, and the other two left better." One cannot help asking after such an explanation of the just-mentioned list, Is really misconception or bad intention here at work?

Passing in silence the malicious way in which your correspondent expresses himself, according to which one could even doubt if these patients had really been here and had really gained in weight, I hope you will allow me to redress the above-given explanation.

My table says clearly this:—Of seventeen patients, thirteen were here from the beginning of July till the end of September, and four patients are mentioned as winter guests. As every one can see from the remarks on the list, five patients had delicate lungs; their residence here was in some way a measure of precaution, as hereditary disposition had already made itself known. Healthy and strong, with normal capacity of lungs, they have left Davos, and till this moment I have the best reports of their state of health. Of the other summer guests mentioned in the list, six left Davos better and two were cured, while of the four winter patients, two got their dismission as thoroughly cured, and two remained back under my treatment.

This as confirmation of the truth, although, in fact, I had not in the least the idea, by appending this list to my pamphlet, to let them pass as fully detailed cases of lung disease. The composition of those I had reserved for a later work. In my pamphlet I would only show what influence the climate of our mountains has on the nutrition of such patients, whose disease had the character of lingering consumption, and therefore I selected —here your correspondent has concluded rightly—these cases.

They are cases which are still in the first stadium, such as are more advanced, and at last those by which the process has already gone so far as to disturb the tissue of the lungs. If your correspondent did not perceive this my intention, he has not yet the right to blame others for it; only it goes with him as with so many others. When a new way of viewing things surpasses their power of comprehension, instead of waiting modestly for the judgment of others, they think it their duty to offend and to raise suspicion against the promoters of those new theories, and so your correspondent says:—"One cannot resist the conviction that the wideawake and enterprising Swiss are endeavouring to turn the 'mountain-air cure' to good account, and to persuade the gullible Englishman to pass his winters as well as his summers in their mountain valleys."

This accusation misses its aim, as not Swiss, but principally German Physicians represent the curative agency of winter residence in our mountains. Mr. Holsbaer, the proprietor of the Curhaus and of two other sanatoria to be opened this spring, is a Dutchman; Dr. Unger, my colleague, is a Saxon; the first came here from Manchester for the sake of his wife's health, the latter from Leipzig to restore his own, and I myself am from Mannheim. If your correspondent had, instead of giving an untrue explanation of the table attached to my pamphlet, only read hastily the pamphlet itself, he would have convinced himself of the development of this place as a health resort, and of the rational application of long experience. The Practitioners of St. Moritz, it is true, are Swiss, but they have made in their splendid mountain valley the same experience as Davos has shown, and declare boldly with me that winter residence is still better for consumptive patients than summer residence, but they protest with me against insinuations of so base a nature as are made through your correspondent.

The question about the curative agency of summer residence in high mountain valleys, where consumption of the lungs is not found, has long, in Germany at least, decided in favour of the same. The opinion in favour of the winter gains more and more. This is proved by nearly a hundred winter guests, who are staying this winter with gratifying results at Davos Platz. If your correspondent is really anxious to discover the truth, let him take his share in the discussion of this, for suffering humanity, so highly important question, with such a scientific earnestness

and such a dignity as the question requires, and as can be demanded by every well educated and active Practitioner. Every one will always find me ready to discuss this question and to refute all arguments based on facts; in future, however, I must refuse to answer general phrases and unworthy attacks.

In the hope that you will kindly give me the opportunity to defend our case before the Medical world of England, by inserting this letter,

I am, &c. Dr. A. Spengler, Curarzt.

Davos-Platz, February 4.

*** It is contrary to the rules of literary courtesy to point a man out by name as "correspondent," if he himself prefers the anonymous. It is not the man, but the facts that signify. That our correspondent was largely employed by his fellow-countrymen at St. Moritz is surely no disparagement to him; it would be hard if the visitors to a health resort were not allowed a Physician of their own choice. It would be a curious piece of protectionism to prevent him.—Eo.

COMMUNICATIONS have been received from—

Mr. C. F. Maunoer; Dr. George Johnston; Mr. J. Chatto; Mr. N. Alcock; Dr. Althaus; Mr. H. Arnott; Dr. G. A. Asbath; Mr. Haynes Walton; Mr. Greoson; Mr. Stuart; Secretary of the Ethnological Society; J. D.; Mr. Henry Richard; Mr. Henry Arnott; Mr. C. Linton; W. P.; Mr. W. Little; Dr. Richard Davy; Mr. E. Elliss; Rip Van Winkle; M. D.; Mr. C. A. Robinson; Dr. Alexander Gibb; Dr. J. Russell; Mr. Robert MacPherson; Mr. P. J. Hayes; Dr. Hermann Weber; Dr. Felce; Dr. Phillips; Dr. G. E. Shuttlewoath; Dr. J. N. Vinen; Mr. H. Osborn; Dr. F. W. P. Jago; Mr. J. H. C. Coles; Dr. J. Gibson Leitch.

BOOKS RECEIVED—

Food Journal, No. 3—Pharmaceutical Journal—Report of the Stafford County Lunatic Asylum—British and Foreign Medico-Chirurgical Review, April—Monthly Microscopical Journal, April—Quarterly Journal of Microscopical Science, April—Edinburgh Medical Journal, April—Quarterly Journal of Science, April—Medical Report of the Yokohama Lock Hospital—Indian Medical Gazette, March—Der Diabetes mellitus, von Dr. J. Seegen—Report of the Wilts County Asylum—First Report of the Royal Sanitary Commission, with the Minutes of Evidence up to August 5, 1869; Dr. French's Report of the Health of Liverpool—Popular Science Review, No. 35—Flint on Diseases of the Heart.

NEWSPAPERS RECEIVED—

Gazette des Hôpitaux—Nature—L'Union Médicale—Gazette Hebdomadaire de Médecine et de Chirurgie—Bristol Daily Post—La Tribune Médicale—Islington Gazette—Medical Press and Circular—Sheffield Daily Telegraph.

APPOINTMENTS FOR THE WEEK.

April 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Mr. Lockyer, "The Sun."

11. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Dr. Sedgwick, "On an Apparatus for the Injection of Perchloride of Iron into the Uterus during Flooding." Mr. John Gay (President), "On Ulceration of the Vermiform Appendix." Dr. J. Thompson Dickson, "On the Pathology of Puerperal Insanity."

12. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Rev. J. C. Atkinson, "On the Danish Element in the Population of Cleveland, Yorkshire." Mr. H. M. Westropp, "On the Ancient Tribal System of Ireland." Dr. Donovan, "On the Brain in the Study of Ethnology."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Mr. F. J. Gant, "On Excision of the Knee-, Hip-, and Elbow-joints for Disease." Succeeded by a Special General Meeting for Confirmation of the Scheme for the Union of the Medical Societies.

13. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Epidemiological Society, 8 p.m. Dr. Gavin Milroy, "On Mixed Outbreaks of Variola, Varioloid, and Varicella."

Hunterian Society, 7½ p.m.: Meeting of Council. 8 p.m.: Open Meeting.

14. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

15. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 2, 1870.

BIRTHS.

Births of Boys, 1247; Girls, 1174; Total, 2421.
Average of 10 corresponding weeks, 1860-69, 2175·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	832	793	1625
Average of the ten years 1860-69	780·5	762·1	1542·6
Average corrected to increased population	...	...	1697
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	7	7	...	17	...	3	2	2
North ...	618210	...	4	24	1	11	4	3	2	5
Central ...	383321	1	8	5	...	6	1	...	2	1
East	571158	2	3	8	...	11	1	2	2	2
South... ...	773175	4	8	34	1	23	...	3	4	3
Total	2803989	8	30	78	2	68	6	11	12	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·148 in.
Mean temperature	37·2
Highest point of thermometer	56·5
Lowest point of thermometer	26·1
Mean dew-point temperature	31·5
General direction of wind	N.E.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 2, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to a Hectare. (1870.)	Births Registered during the week ending April 2.	Deaths Registered during the week ending April 2.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	102	2421	1625	56·5	26·1	37·2	2·89	0·00	0·00
Portsmouth ...	122084	32	89	71	57·1	26·8	37·4	3·00	0·00	0·00
Norwich	81087	27	61	38	55·5	29·0	37·7	3·17	0·00	0·00
Bristol	171382	90	111	109	57·8	24·9	37·6	3·12	0·00	0·00
Wolverhampton ...	72990	53	57	50	57·6	26·2	40·3	4·61	0·00	0·00
Birmingham ...	369604	117	244	162	56·2	25·3	38·9	3·83	0·00	0·00
Leicester	97427	75	78	52	58·7	22·5	39·4	4·11	0·00	0·00
Nottingham ...	88888	110	82	49	55·3	26·5	38·9	3·83	0·02	0·05
Liverpool	517567	250	378	262	55·4	29·7	40·8	4·89	0·01	0·01
Manchester ...	374993	207	299	231	58·0	25·0	39·8	4·34	0·00	0·00
Salford	121580	58	101	62	58·3	25·2	40·7	4·83	0·00	0·00
Bradford	143197	51	132	79	55·5	27·8	40·2	4·55	0·00	0·00
Leeds	259527	30	278	121	55·0	27·0	39·3	4·06	0·01	0·03
Sheffield	247378	27	189	135	54·0	26·7	39·3	4·06	0·05	0·13
Hull	130869	91	102	48	56·0	25·0	38·1	3·39	0·00	0·00
Sunderland ...	94257	52	115	34	...	...	...	...	...	...
Newcastle-on-Tyne	133367	62	149	69	54·0	32·0	40·9	4·94	0·04	0·10
Edinburgh	178970	100	145	105	53·7	33·0	44·1	6·73	0·10	0·25
Glasgow	468189	228	426	314	56·5	28·5	44·1	6·73	0·24	0·61
Dublin (City, etc.*)	321540	82	214	181	60·0	28·0	48·1	8·95	0·13	0·33
Total of 20 Towns in United Kingd'm	7209603	83	5671	3797	60·0	22·5	39·6	4·23	0·03	0·08
Paris—Week ending April 2	1889842	242	...	1262	...	...	...	...	...	...
Vienna—Week ending Mar. 26 ...	605200	162	...	377	...	...	33·1	0·62	...	...
Berlin—Week ending Mar. 31 ...	702437	112	641	469	...	...	35·4	1·88	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·148 in. The barometrical reading increased from 29·92 in. at the beginning of the week to 30·30 in. at noon on Monday, decreased to 30·09 in. on Wednesday afternoon, increased to 30·15 in. on Thursday morning, decreased to 30·03 in. on Friday afternoon, and increased to 30·16 in. by the end of the week.

The general direction of the wind was N.E.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

SIX LECTURES
ON
PRACTICAL HELMINTHOLOGY,
ILLUSTRATING
THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE

Medical College of the Middlesex Hospital

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

LECTURE III.

GENTLEMEN,—In my last discourse I dwelt especially upon the various symptoms to which patients are liable when infested by tapeworms; and you will remember that I laid particular stress on the nervous phenomena more commonly met with. Finally, I offered you an instance where some of the worst concomitants of this kind had remained, long after the parasite had been got rid of. Let me now offer you a case of a somewhat different character; in which, however, the persistent symptoms were again erroneously attributed to the actual presence of tapeworm:—

Case 3.—A. L., a gentleman, resident in the country, has long been treated for tapeworm by Practitioners of distinction; but when I first saw him (March 27, 1869,) he admitted, in the course of a prolonged consultation, that he had not passed any portions of a worm (such as I described to him). Indeed, I almost doubt, if he ever had tapeworm, though he appears to have had other entozoa. Headache, restlessness, with strange abdominal pains were all ascribed to the presence of tapeworm; and it was in vain that I offered proofs of the non-existence of the parasite. Under these circumstances, I naturally recommended this hypochondriacal subject to repair to one of our English spas. Whilst enjoying the change, his general health received considerable benefit; but, unfortunately, he still entertains the idea that he is infested by a tapeworm.

In most of these spurious cases, where the symptoms have not been of very long duration, though in the first instance clearly attributable to a tapeworm, you will find no difficulty in relieving the mind of the patient. It is particularly necessary, however, that you should yourselves be utterly free from doubt as to the true state of affairs. Some patients will willingly undergo a fresh course of treatment, even though you may have been able to satisfy your own mind that such a step is unnecessary, and may have been at some pains to explain your views. Here are several illustrative cases occurring in my practice.

Case 4.—G. W. G., a gentleman, came direct from California to consult me (July 13, 1869), respecting a tapeworm which has troubled him for six years past. For the cure of it he has taken large doses of turpentine and other drugs. The consideration that fully three months had elapsed since he last passed any of the worm (as a result of treatment), coupled with the circumstance that he was not, at the time, passing "segments," at once enabled me to express my belief that he was already relieved of his enemy. The correctness of this opinion was subsequently confirmed by the absolutely negative results obtained after a most vigorous course of treatment—a measure which I found necessary to adopt in order to dispel all doubt and difficulty in the patient's mind.

Case 5.—C. A., a gentleman resident at Edinburgh, wished to go through a course of treatment for tapeworm. As he had not noticed the passage of "joints" for an interval of something like a year, I explained to him (June 15, 1868) that any remedial measures would probably only secure a negative result. Having taken the medicines I prescribed without, of course, passing any tapeworm, this patient had also the good sense to rest satisfied as to the correctness of the opinion I originally offered.

Case 6.—R. A. consulted me (September 11, 1869), in reference to obscure pains in the throat and other parts of the body, which he attributed to the presence of tapeworm. This gentleman's case was not unlike that of the one marked No. 3, the hypochondriacal symptoms being accompanied with anorexia, nausea, and vertigo. However, I was satisfied that this patient had really suffered from tapeworm some time previously; and when I fully explained to him that the depression under which he laboured was entirely due to other causes, he was satisfied to adopt a simple restorative treatment such as I then advised.

Case 7.—R. J. J., a gentleman, residing at the west-end of London (November 22, 1867), contracted tapeworm about six years previously. He had been treated for the disease, and, although he was not aware that he had passed any "segments" for five months past, he was nevertheless convinced that the creature was present internally. After a thorough trial of appropriate remedies, I here also fortunately succeeded in convincing the patient that he laboured under a delusion; and I have the satisfaction of knowing that he has had no return of the disorder.

Case 8.—H. H. W. is an Indian officer, who contracted tapeworm in the Punjaub between three and four years back. He consults me (September 27, 1869), being at the time impressed with the belief (which was also shared by his usual Medical adviser) that he was still afflicted with the parasite. Though suffering from pulmonary disease, much of his debility was attributed to the tapeworm. In this case it became necessary to adopt active remedial measures under circumstances of unusual difficulty; but the treatment succeeded in so far as it enabled me to satisfy my own mind and the patient's that he had been effectually cured by the last course of remedies adopted prior to the date of his asking my advice.

The foregoing cases should, I think, be sufficient to convince you that the knowledge necessary to give a correct opinion in cases of parasitic disease, is not so simple a matter as some would have you suppose. The above constitute only a small proportion of the cases which have come under my attention where entozoa were suspected when there was no legitimate ground for such suspicions. On the other hand, it may be safely averred that cases of parasitic disease are not unfrequently overlooked by those who have not deemed the subject of sufficient importance to require their study. But putting aside for the present these general truths, let us consider what are our resources in cases of undoubted tapeworm. In this connexion I do not know that I can do better than restate what I have elsewhere uttered in very similar terms. "The remedies for tapeworm are male-fern, kousso, kamala, turpentine, panna, areca-nut, pumpkin-seeds, and pomegranate-root bark. The right administration of any one of these drugs is likely to produce the desired result, but many others might be named as having been recommended more or less strongly." Some Practitioners seem to think one vermifuge as good as another, and administer all kinds indiscriminately. I suppose that the principle they go upon is based upon the notion that vermifuges in general act mechanically upon the intestine and its contents, literally scouring the patient's bowels and driving everything before them. Now, to tell the truth, treatment on this pop-gun sort of principle is sometimes temporarily successful, and you may drive out ten or fifteen feet of a tapeworm merely by a vigorous dose of jalap or castor oil. In such cases, however, you must not expect to secure or dislodge the head of the parasite, which will, therefore, certainly grow again. I do not say that in every case where you employ the proper remedial agents that you will invariably succeed; indeed, in cases where you have to deal with the armed varieties of tapeworm, you will rarely obtain the head. Fortunately, as my investigations and experiences have especially shown, the unarmed beef tapeworm is the particular species most commonly encountered in private practice.

TREATMENT OF RANULA BY IODINE.—Of all the methods I have tried, this is by far the most satisfactory. The tumour is seized and secured by a pointed hook, and a large portion of the cyst having been snipped off with a curved pair of scissors, the sac is filled with tincture of iodine, which, after remaining a few minutes, is allowed to escape by the mouth, and its place supplied with oiled lint, which is renewed daily, the cavity being previously well washed out. The subsequent swelling speedily subsides, and is rarely followed by much suppuration.—*Dr. Baillie*, "*Hints in Practice*," *Indian Medical Gazette*, February 1.

BELLADONNA IN INTUSSUSCEPTION AND OBSTINATE CONSTIPATION OF THE BOWELS.—In both these conditions have I found this drug answer remarkably well, administered in half-grain doses, combined with two or three grains of calomel, in form of pill, given every two or three hours until relief occurs. Three or four pills generally suffice, but I have given as many more, and in no instance have seen any ill effects follow.—*Dr. Baillie*, "*Hints in Practice*," *Indian Med. Gaz.*, February 1.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture III.

I.—DISEASES OF INFLAMMATION.

Inflammation of the Skin from Common Causes.

(Continued from page 359.)

Mr. President and Gentlemen,—The classification or arrangement of subject which I have adopted for my present review of the family of cutaneous diseases may be denominated an *objective* classification. It commences with the *inflammations of the skin*, and these it comprises under four heads, represented by as many typical forms—for example, ekzema, erythema, pemphigus, and furunculus. Ekzema, as being at the same time both the most common disease and presenting the greatest variety of lesions, I take first; that disease, together with its allied affections—psoriasis, pityriasis, scabies, leichen, and impetigo—we have already submitted to inspection; and now I pass on to the erythematous affections.

Erythema *is a simple pathological redness of the skin, superficial, more or less circumscribed or diffused, apt to change its place and spread, attended with little or much swelling, a variable amount of pruritus, subsiding sometimes suddenly, sometimes by degrees, and rarely followed by desquamation.*

In this definition we perceive a striking contrast with ekzema—a single lesion—namely, redness in place of several lesions; and only in rare instances such an amount of disturbance of nutrition of the epidermis as to result in exfoliation or desquamation. In popular language an erythema is a *rash*, a corruption of the word "rush," as though it would express a hurrying of blood to the surface—it is, in fact, a *blush*, not a physiological blush disappearing as suddenly as it shall arise, but a pathological blush, more or less enduring and permanent. Pathologically it is a state of distension of the vessels of the skin with blood—in fact, a hyperæmia—and hyperæmia of the skin may be active or passive. At the present day we look upon hyperæmia as being due to a loss of power of the special nerves of the blood-vessels, the vaso-motor nerves, and active or passive is the expression of the degree of loss of power which exists; it may be transient, or temporary, or permanent; it may be the consequence of an irritant; or it may be mechanical, as in the case of obstruction to the general circulation. As might be supposed, there will be a difference of appearance of the part corresponding with these opposite causes, in active hyperæmia the current of the blood may be unimpeded, there will be simply a larger quantity of blood in the vessels, and the part will be bright and arterial in its redness; whereas, in passive hyperæmia, and with an impeded and partially suspended circulation, the colour will subside by degrees to that of venous blood, and become more or less crimson, or purple, or livid.

The erythemata are essentially superficial, as though the peripheral nervous plexuses and peripheral capillary plexuses were principally concerned; and associated with this superficiality of character is a tendency to spread over the surface like a wave, to extend by the circumference, while the action in the centre may, at the same time, be subsiding; to disappear suddenly in one place, and reappear as suddenly in another. I may illustrate these remarks by the mention of erythema circinatum, of erythema iris, of erysipelas, and urticaria. And, in all these phenomena, three factors are principally concerned—namely, the cause, the nerves, and the vessels. But you will perceive that there is another element which must also be taken into account—namely, the tissue of the derma itself, and of the subdermal layer; the irritant cause not only prostrates and exhausts the active power of the vessels, but it also exhausts the controlling power of the cell-organisms, and these latter profusely supplied, and as it were, saturated with blood, absorb its watery element so energetically as to become gorged with the excess, and so give rise to œdematous swellings of remarkable suddenness of origin, and sometimes of considerable bulk. To such a process we must attribute the circumscribed and rapid swellings of erythema tumescens, and the more extensive and diffused œdema of erysipelas.

You will observe that I have a number of new points of pathology to which to call attention in connexion with erythema that did not arise in association with the family of the ekzemata; these being, the quality of the redness, the superficial and discursive character of the inflammation, and the tendency to œdematous accumulation. I may mention one point more, and a very important one. Throughout the ekzematous family, the local phenomena may be said to be of almost primary significance, whereas the lesions associated with the erythemata are absolutely secondary; let me instance urticaria or even erysipelas. The first sign of disorder of health in ekzema is the eruption; in erythema, more or less constitutional disturbance precedes or accompanies the eruption, and is relieved by the bursting forth of the latter.

Erythema offers for our inquiry a considerable variety of manifestation, and looking to the chief and the main features of the affection, we shall discover three prominent differences on which to found a division into as many heads; for example, the rash may be more or less *fixed* or stationary; or it may be transient and *migratory*; or it may be characterised by that other peculiar and remarkable feature of the disease, namely, *tumescence*.

Forms of Erythema.

Fixed.
- *Traumatic or local.*
  - Erythema ab attritu.
  - „ intertrigo.
  - „ læve.
  - „ calorieum.
  - „ c. frigore.
  - „ ab acribus.
  - „ vaccinum.
- *Hæmostatic.*
  - Erythema mechanicum.
  - „ kyanodes.
- *Idiopathic.*
  - Erythema simplex.
- *Hæmatolytic.*
  - Purpura: Simplex. Hæmorrhagica. Urticans. Scnilis.

Migratory.
- Erythema fugax.
- „ circinatum.
- „ gyratum.
- Erythema marginatum.
- „ iris.

Tumescent.
- Erythema tumescens.
- „ papulosum.
- „ tuberosum.
- „ nodosum.

If we take the first of these heads, the simplest and ordinary form of the rash, we shall find its members chiefly distinguishable by the nature of the cause to which they owe their origin. The cause is either *traumatic*, which is synonymous with local; or it is *hæmostatic*, or *idiopathic*, or *hæmatolytic*. The traumatic forms are such as may be produced by pressure and friction; for example, ill-fitting clothing; certain kinds of exertion, such as walking, rowing, and riding; the friction, together of folds of the skin as in children and bulky persons; or of opposed surfaces, as in the instance of the nates, and the thighs and pudendum, or prolonged pressure as in bedridden persons; or the pressure may come from within, as in the case of distension of the skin by œdema. In this latter instance which is most frequently met with in the legs, the integument is smooth and glossy as well as congested, and the affection has received the name of *erythema læve*. Heat and cold give rise to the lighter forms of burn, of scald, of chill, or of frostbite, including the homely chilblain. And *irritants* and *poisons* include chemical agents, bites and stings of insects, and irritation from abrasions, punctures, or slight wounds. One example of the latter kind being the *erythema vaccinum*.

Hæmostatic erythema is seen in its simplest form in relation with obstruction of vessels, as in the instance of varicose veins; and also in that form of interruption, both of circulation and oxygenisation of the blood which is present in kyanosis or morbus cærulens.

Idiopathic erythema is represented by erythema simplex, and includes those simpler but fixed forms of the affection which are due to constitutional causes such as derangement of the digestive functions, of those of assimilation and elimination, or of the uterine functions.

Hæmatolytic erythema—that is to say, a state of hyperæmia accompanied with the escape of blood from the distended capillaries, partly the consequence of an asthenic change in the blood itself and partly of a feeble state of the wall of the vessels—is termed "purpura." Purpura, therefore, is to be

recognised, not by the presence of blood within the vessels, as in the case of ordinary erythema, but by purple stains resulting from the escape of blood into the adjacent tissues, the stains ranging in size from a mere speck or *stigma* to a circular spot as large as a flea-bite or *petechia*, and thence upwards to larger blotches, which sometimes resemble streaks, *vibices*, and sometimes *ecchymoses;* and the test of distinction between common erythema and purpura is the dispersion of the hyperæmia by pressure with the finger in the former and the permanence of the stain in the latter. The forms of the eruption are—purpura simplex, purpura hæmorrhagica, purpura urticans, and purpura senilis. The first, as its name implies, is the ordinary type of the affection; purpura senilis is a passive escape of blood from its vessels accompanying the feebleness of age. The remaining forms are both complicated, purpura hæmorrhagica with hæmorrhage from the mucous membranes, and purpura urticans with a pruriginous attack resembling urticaria.

The Migratory Forms of erythema are either remarkable for their transitory character, as in the instance of *erythema fugax*, or for a tendency to expand from a centre, to spread into the surrounding skin, and to subside in the area while the circumferential border is still invading new ground. This it is which constitutes the annular form of the affection, *erythema circinatum*. The rings may be small or they may be large, they may be mere lines or they may be bands of variable breadth. When a number of such circles meet by their circumference, and are more or less broken, they suggest the term *erythema gyratum*, assigned to them by Fuchs. When they are all dispersed, with the exception of one or more broken lines, and when the original circle is no longer to be traced, the term *erythema marginatum* is especially significant; and when the circle first thrown out from the centre throws out a second circle, and the second a third, and so on, we have the appearance which has been denominated *erythema iris*.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

CLINICAL SURGERY.—No. V.
ON DISEASES OF THE KNEE-JOINT.

By THOMAS BRYANT, F.R.C.S.,
Assistant-Surgeon to Guy's Hospital.

Part V.

ON THE TREATMENT OF DISEASES OF THE KNEE-JOINT, MORE PARTICULARLY IN REFERENCE TO OPERATIVE INTERFERENCE.

(*Continued from page* 360.)

In a general way it may safely be asserted that in no case of inflammatory disease of the knee-joint in which disorganisation has not taken place does the Surgeon entertain the idea of operative interference; for, as long as this change is warded off, so long a reasonable hope exists of a cure being secured, either with a movable or stiff joint, and an useful limb consequently obtained. With our present knowledge, this rule is probably a sound one, and it is generally followed. Exceptional cases may be seen in which it is inapplicable, but these are comparatively rare.

When suppuration has taken place in a knee-joint, the question of operation naturally suggests itself to the Surgeon, for he asks himself whether natural processes are competent to conduct the case to a successful issue; whether the local disease is of such a nature as to be incurable, unassisted by art; whether the general powers of the patient are sufficiently good to bear up against the demands that will necessarily be made upon them in the progress of a natural cure; and last, but not least, whether it is expedient to make the attempt.

All these questions require for their solution much thought and judgment, and a careful weighing of probabilities. The cause of the disease and of the disorganising process is also a point of primary importance.

As a broad rule, when the disease is in the synovial tissue alone, and suppuration has taken place, a cure by natural processes, assisted by art, is generally to be secured, should the power of the patient be good. Pathologically there is no reason why recovery should not take place.

On the other hand, as a broad rule, when the disease has originated in the bone and spread to the synovial membrane, and disorganisation of the joint has taken place, a cure by natural processes is very improbable, and the removal of the diseased part by some operation is generally demanded. Pathologically, good reasons exist why recovery should not take place, and clinically this observation is borne out.

In suppuration of a joint from synovial disease, pulpy or otherwise, whether the result of a so-called rheumatism settling in the knee, of a puerperal synovitis, a traumatic synovitis, a gonorrhœal synovitis, or any other, a cure with anchylosis is by no means uncommon. It is true, in all these cases during their acute stage the danger to life is always great, and it may become a question whether an amputation is not needed to save it, or to give the patient a chance. Operations of amputation, however, undertaken for acute suppurative disease, are mostly fatal, and operations of excision are likewise equally bad. To my own mind I hardly think either of these operations is justifiable under such circumstances, and in this most men are now agreed. What I believe to be a better practice is the making a free incision into the joint—free enough to let out the pus that it contains, and to allow a free escape of all as it forms. The daily washing of the joint with water is also a sound practice. No retention of pus should be allowed under any circumstances.

Case 45.—In the case of a man, aged 27, I had under my care some months back who had suppuration of a knee-joint after the operation of removal of a loose cartilage, the benefit of a free incision into the articulation and the daily washing of the joint was well seen. From the time of the operation everything went on well. Constitutional symptoms improved, surgical fever subsided, and the local disease promised well. Pyæmia, however, unfortunately set in, and, after the lapse of a week, destroyed life. Nevertheless, the man lived long enough to prove the value of the practice I am now advocating. After death all the cartilages were found to have disappeared, and good granulations to have formed on the articular surfaces of the bones, with partial union of the surfaces. The bones were sound—in fact, rapid repair had gone on in the joint.

When suppuration has been set up in a joint from the degeneration of the pulpy synovial disease, the benefit of a free incision into the suppurating tissue is very great. It should always be practised before any other operative measure is undertaken, and a good hope of success attends the practice. In a former paper this point was fairly proved.

When, however, suppuration has occurred in a joint from the extension of inflammatory mischief from the bones, the hope of securing a good result without some operative interference is very slender; for, as a rule, dead bone exists in the joint to keep up the irritation, and as long as it remains a recovery is highly improbable. In many cases, it is true, Nature does much towards this end, but she is rarely competent to perfect the cure without Surgical aid.

In the following cases these points are well seen.

Case 46.—*Disease of the Knee-joint—Suppuration—Removal of Necrosed Bone from the Joint—Recovery with Anchylosis.*

James W., aged 17, came under my care in May, 1866, for disease in his right knee-joint. It had been of one year's duration, and had followed a fall upon the part. Swelling appeared directly after the accident, and was attended with severe constitutional disturbance and local pain. Suppuration also rapidly set in, several large openings making their appearance eight weeks after the accident. When I saw him, the joint was somewhat enlarged from inflammatory thickening of the soft parts, and was clearly undergoing anchylosis. The orifices were discharging. A probe passed into one readily detected dead bone in the joint. In September the man was admitted into Guy's under my care, and on October 13, through a moderate incision made on the inner side of the patella, two flat pieces of bone, which were clearly the articular facet of the tibia, were removed. Rapid recovery and firm anchylosis of the joint followed.

Case 47. —*Disease of Knee-joint as a consequence of Articular Ostitis of Tibia—Removal of Sequestrum from Bone—Recovery with an Anchylosed Joint.*

Henry R., aged 14, came under my care at Guy's Hospital on May 17, 1867, for extensive disease of the shaft of the right humerus and head of the left tibia. It had existed for several years. For about one year the left knee had been enlarged from effusion, but no suppuration had ever taken place in it. When admitted, there was clearly necrosis of the shaft of the humerus, and likewise of the head of the tibia. Dead bone was readily felt in both parts with a probe. In the tibia the bone was clearly near the joint. The left knee was enlarged from expanded bone, and likewise from thickening of the soft

parts around. There was no effusion. There was hardly any movement in the articulation. In November, 1867, I removed a mass of diseased bone from the tibia, and fixed the leg upon a splint. In six months he left the Hospital with a stiff knee and with a sound arm. In January, 1868, I removed a sequestrum from the arm, which included nearly the whole shaft of the humerus, and a good recovery ensued.

Case 48.—*Disease of the Knee-joint as a Result of Articular Ostitis ending in Necrosis—Amputation—Recovery.*

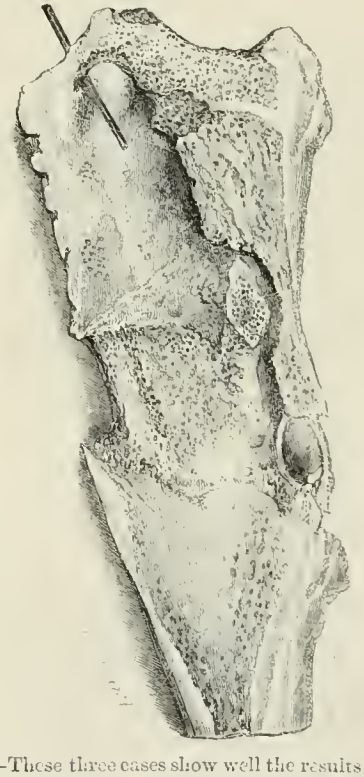
Edward L., aged 14, came under my care at Guy's Hospital on September 8, 1868, for disease in the left knee-joint of seven years' standing. It had been discharging for many years.

On admission, the left knee-joint was completely disorganised and much enlarged; it was also partially anchylosed. Below the joint a sinus existed leading into the head of the tibia, and through which dead bone was felt. The boy's health was very bad, and it was clear nothing but amputation could be entertained. His urine was albuminous.

The operation was performed on September 17, and a good recovery ensued.

On examination of the joint, the head of the tibia was perforated with a channel, which led from the joint to a mass of necrosed bone. The articular facet of the tibia was likewise necrosed. The whole joint was disorganised.

It was clear that the disease in the joint had been secondary to the disease in the bone. The drawing shows well the condition of the tibia.



Remarks.—These three cases show well the results of articular ostitis when passing on to necrosis in the knee-joint, and fairly indicate the kind of practice that should be applied. In the first case related nature had done her utmost towards obtaining a cure, the knee of the patient having been on admission partially anchylosed, and, had it not been for the presence of the necrosed articular facet of the tibia, a complete natural recovery would have taken place. The Surgeon's duty in this case was clearly to remove from the joint what seemed to be the sole obstacle to a natural recovery—the necrosed bone—and the complete success of the treatment justified the step, for the boy ultimately had an admirable limb. In the second case the disease was precisely of the same nature, and natural processes had done their utmost likewise towards the establishment of a cure, but the presence of necrosed bone in this case, as in the last, interfered with the recovery, and prevented its realisation. On the removal of the bone from without the joint, natural processes went on without interruption towards the attainment of their end, and a complete recovery, with anchylosis, was obtained. In the last case the same cause, articular ostitis, and the same result, disorganisation of the joint, were clearly present; but the local disease in the bone was too extensive to give rise to any hopes of good being derived from its removal, and the general condition of the patient too precarious to allow of the attempt. As a consequence, the only operative interference that seemed justifiable was carried out, and the issue of the case was all that could be desired. In disorganisation of a knee-joint, therefore, the result of disease spreading from the bone—of articular ostitis—whether the consequence of an abscess in the epiphysial extremity bursting into the joint, of disease in the epiphysial cartilage between the shaft and epiphysis, or of a sequestrum in one or other of the bones entering into its formation, some operative measure is usually required; and, when the diagnosis of the case is tolerably clear, the practice ought to be decided, for delay cannot be of any use. The disease must be removed. What, then, ought that practice to be? Should it be excision or amputation? Let us refer to facts to help us towards a solution of these points. In amputation of the thigh for chronic disease of the knee-joint, taking subjects of all ages together—from my own table I take 188 cases, and from Dr. MacCormac's 137, the total making 325 cases. Of these 66 died, and 259 recovered, the mortality being 20 per cent., or 1 in 5. On referring to Dr. Hodge's work, I find 178 cases of excision of the knee undertaken solely for chronic disease of the knee; of these, 70 died, and 108 recovered, the mortality of excision being 39 per cent., or 1 in 2½ cases. In this comparison the circumstances are exactly similar. Both operations were undertaken for the same classes of cases of chronic joint disease, and the mortality is exactly double. In my table of amputations,(a) I have carefully guarded against any fallacy on the point, and have only gone to my own statistics, for the accuracy of which I can vouch; and to Mr. Callender's,(b) that are equally indisputable with Dr. MacCormac's;(c) and in the table of excisions I have gone to Dr. Hodge's work, who, to make this point certain, states that, with three exceptions performed for acute inflammation of the articulation, excision of the knee has probably never been undertaken for any other than chronic disease or white swelling. Mr. Swain, the author of the Jacksonian prize essay on Excision, and a warm advocate of the operation, has given us likewise statistics on this subject, and, from his book (pp. 62 and 64) I have extracted the following facts:—Up to 1865 there had been 316 cases of excision of the knee. Of this number 85 died, or 26·8 per cent., 9 of these having died after amputation, which had been deemed necessary in 39 cases of excision. Since 1865, 74 cases are given, 25 of which died from the operation, or 33·7 per cent.; 4 also died out of 11 that underwent subsequent amputation—in all, 29 cases out of the 74 dying, or 39 per cent. Mr. Swain gives us also a select list of cases numbering 82, 15 of which died from the effects of the operation, and 4 others recovered after amputation. We thus have 472 cases of excision of the knee, and 129 deaths, or 27·3 per cent., 13 of these being after amputation. 41 other cases underwent amputation and recovered. Taking the whole number of 472 cases, 302, or 63.9 per cent., recovered after the excision; 41, or 8·7 per cent., recovered after amputation; 129, or 27·3 per cent. died after excision: the mortality from excision being much greater than from amputation in the same class of cases, the proportion being 27 per cent. to 20 per cent. Are the advantages of excision over amputation, therefore, so great as to justify its performance in the majority of cases? Is it to be the rule in practice? It is true that Mr. Swain gives somewhat different results from the same statistics, for he actually numbers amongst the recoveries after excision all cases that subsequently underwent amputation, whether living or dying, of course giving a far too favourable colouring to the operation he is advocating. Mr. Swain also expressed his conviction that the statistics of excision are at present most unreliable, and probably most readers of his otherwise excellent book would be quite ready to admit with him that he had fairly demonstrated the truth of such an assertion. If, however, we look to the results of both operations as performed at different periods of life, a point of comparison of immense importance, although entirely ignored by Mr. Swain and other advocates of excision, the following striking result comes out, and I would wish the advocates of excision to consider well those points and not to pass them by as of no importance. In amputations for chronic disease

(a) *Med. Chir. Trans.* vol. xlii.
(b) *Med. Chir. Trans* vol. xlvii.
(c) *Dub. Quar.*, August, 1868.

of the knee in patients under 20 years of age, out of 69 cases 3 only died or 4·3 per cent., or 1 in 23 cases. In excision for the same class of cases performed at the same period of life, out of 97 cases 27 died or 27·8 per cent., or 1 in 3⅔, the different degrees of mortality of the two operations under 20 years of age being as 4·3 per cent. to 27·8 per cent. Excision being nearly seven times as fatal as amputation during young life; it may thus fairly be asked whether the advantages of excision are so great as to justify its performance in the majority of cases of disease of the knee in young life. In amputations undertaken between 21 and 40 years of age, out of 119 cases 38 died, or 32 per cent., or 1 in 3; in excision undertaken under similar circumstances, out of 74 cases 39 died, or 52·7 per cent., or more than 1 in every 2 cases, the difference between the mortality of the two operations—32 per cent. and 52·7 per cent. respectively—being 20 per cent. against excision. It would thus appear that it is in young adult life that excisions, although more fatal than amputation, are the most justifiable, that in childhood they are far too dangerous, and that in patients past middle age all admit their inapplicability. And yet it must be admitted that excision of the knee-joint is a good operation; that, when successful, a good useful limb is given—a far better limb than can be given after amputation. Nevertheless, the truth must be recognised that the operation is, as hitherto practised, a far more fatal operation than amputation; and yet it may with confidence be asserted that the cases in which amputation has been performed are, as a rule, far more severe than those in which excision has been practised; for it seems true that the advocates of excision are disposed to operate at a somewhat earlier period of disease than the advocates of amputation—that is, the excisors often remove a disease they believe it is expedient to leave to natural processes to cure; whilst other Surgeons only remove a limb when all hope of a natural cure has passed away, and it is a necessity to remove the limb to save life. Are the advantages of excision, therefore, so great as to justify a Surgeon in submitting a patient to an extra risk in order to secure them? As hitherto practised, and as a general rule in Surgery, I have no doubt in answering in the negative. In exceptional cases, the risk may, it is true, be run to secure that end; but excision, as a rule of practice, does not appear to be a sound one. Whether better results would not be secured by an earlier operation is an open question; some cases recently published rather tend to prove this to be the case; for, in excisions undertaken with a patient in good health, and not worn out by suppurative mischief, a good result may fairly be looked for. But is the risk of the operation, when performed under these favourable circumstances, so slight as to justify the Surgeon in throwing aside the hope, and perhaps fair expectations of securing a recovery with natural processes? Is excision of the knee to be an operation of expediency and not of necessity? We want facts to prove this fully; but, as far as present experience goes, it seems to show that, if the operation is to be a successful as well as a general one in Surgery, it should be undertaken at a somewhat earlier period of disease than that at which the question of amputation has to be mooted—that it should be performed at a period of disease before Surgical fever has reduced the powers of the patient; before complete disorganisation of the joint has taken place. In fact, that it should not be practised when an operation is demanded to save the life of a patient — for under such circumstances a better chance is given by amputation — but that it should be practised only when the local disease is found to be steadily progressing, in spite of treatment, and when disorganisation is threatening. I would ask the advocates of excision to help us to a solution of these questions; to recognise the results of experience, so far as they can be obtained, and not to shut their eyes to them when they tell against the operation, or try to explain them away. Let their aim be, as is ours, to point out at what period of disease the operation of excision of the knee should be undertaken; for that is the one point we want now to have settled. As a substitute for amputation undertaken in extreme disease to save life, facts tell against the practice; as an operation of expediency to gain time, the few facts we possess tell in its favour. For my own part, I am disposed to think that, under these circumstances, there seems to be some hope that excision may not only be a successful, but become a justifiable operation, and that it will not necessitate an increased risk to the life of the patient. In doubtful cases amputation is the more desirable operation, for it is the safer; and, as the great object of our Profession is to prolong and save life, other objects ought always to be subsidiary to this our great aim.

ON LUMBAR COLOTOMY.

By C. F. MAUNDER,
Surgeon to the London Hospital.

(*Third Communication.*)

On two former occasions I have ventured to make some remarks upon the propriety of making an artificial anus in the loin for the relief of various diseases of the rectum, both obstructive and unobstructive, malignant, and benign. The first paper was illustrated by four cases in which the operation had been performed; the second by two cases in which certain difficulties in the operation were encountered, but overcome, although some after trouble was anticipated in the second patient (sixth operated upon by myself).

This patient, a country gentleman, 34 years of age, was the subject of malignant disease of the lower part of the rectum. The malady was making rapid progress locally, but the man was comparatively well nourished, and his muscles were well-developed. The difficulty met with at the operation was due to the unusual thickness of the abdominal wall in the loin, and it was feared that there would be a great tendency on the part of the artificial anus to close. The report of the progress of the case by Mr. Dryland, of Kettering, under whose care this gentleman is, and who has most ably seconded my effort to relieve his patient, shows that something was necessary to keep up a satisfactory opening into the colon.

The bulletin on January 8, a fortnight subsequent to the operation, was—"Mr. E. is going on in every way satisfactorily, with the exception of the new passage being very much filled up with muscle which projects from the wound, and not only blocks it up to a considerable extent, but causes much pain and soreness. To-day he has passed some large pieces of fæcal matter quite in the shape of a sausage, and nearly as thick as two fingers." On January 21—"E. is as well as he can be under the circumstances. The muscle still projects from the wound a good deal, and causes him much inconvenience, and the wound appears to be trying to heal."

On January 29 the report was—"Something must be done before long, or we shall have trouble with the wound, which is contracting lengthways, and pushing the muscle further and further out."

From the nature of the reports received from Mr. Dryland, the question to be considered and answered was—What can be done to maintain the patency of the new anus? Muscle sprouted, and the wound had a tendency to close. After reflection, and ascertaining at the time of operation that the kidney was situated high up, and away from the line of my incision, I suggested to Mr. Dryland as follows:—A large marble, secured by a piece of wire, was first to be carried by the finger to the bottom of the wound to protect the bowel. Then a semi-elliptical piece of skin was to be cut away from both sides of the wound, so as to diminish the tendency to superficial cicatrisation; and, lastly, the sprouting muscle was to be destroyed by actual cautery irons, so as to make a free passage to the deeply seated colon.

Writing hurriedly on February 1, Mr. Dryland says:—"I have operated on E. with much success, I believe." And again, on March 10:—"The actual cautery operation on Mr. E. has been a complete success; and although there is still a small piece of muscle protruding from the wound sometimes, yet at other times it is scarcely apparent. There is now a good free opening into the bowel, and the whole of the fæces pass through without pain or difficulty, and in large pieces; in fact, the artificial opening has much the appearance of a veritable anus. Mr. E. comes down dressed every day, and his spirits are very good."

Were I again called upon to perform colotomy in a well-nourished subject, I should probably cut out a piece of the wall of the colon, as well as shave off some muscular tissue in order to establish a free passage.

Dislodging a Calculus impacted in the Urethra.—Removal of a concretion so circumstanced is much facilitated by passing down to the stone a director having its groove charged with oil. The instrument is then moved about, so as not only to dilate the canal, but likewise lubricate it, and then a little manipulation over the bulb forces the stone forward to the meatus, or at least to a little behind it, from whence it can be readily extracted with a scoop.—*Dr. Baillie, "Hints in Practice," Indian Med. Gaz.*, Feb. 1.

REDUCTION IN THE SIZE OF A LARGE TUMOUR OF THE BREAST.

RELIEF OF PAIN BY THE EXTERNAL APPLICATION OF BROMIDE OF POTASSIUM AND DILUTE ACETIC ACID.

By HENRY OSBORN, M.R.C.P. Lond.,
Consulting Physician to the Southampton Dispensary, etc.

Mrs. B., aged 39, mother of five children, two living. Catamenia natural from the time of weaning the last child. In March, 1869, four months after weaning the child, she began to feel severe darting pain in the left breast, and perceived, for the first time, that something was forming in the breast. Instead of consulting her Medical attendant, she applied an ointment to the breast, without producing any relief. In the month of August last she had a sudden discharge of florid blood, amounting to about a teacupful, from a small orifice near the nipple, when I was consulted. On examining the breast, I found the nipple completely drawn in, but I was informed that it had always been in a similar state, and a nipple-shield had to be used for drawing the breast; but during the time of nursing the last child the milk was permitted to run out without applying the child to the breast.

There was a small cicatrix a little above the nipple having a small orifice, through which an ichorous discharge and the hæmorrhage took place.

On grasping the breast, I found a tumour of considerable size, exceedingly hard, tuberculated, and attached to the deep-seated parts. The pain was lancinating, and so severe at times as to disturb her rest at night and to distress her by day. Ordered a lotion of vinegar and water, and prescribed a mixture of bromide and iodide of potassium, which relieved the pain; but as the patient complained of debility, I suspended the mixture and gave quinine. Under the tonic treatment and the suspension of the bromide internally the pain returned, when I determined to try the bromide externally, by adding it to the vinegar lotion, which had produced a little eruption of the skin, and thus rendered the possibility of the bromide being absorbed. Two drachms of bromide of potassium were mixed with six ounces of vinegar, and ordered to be applied twice a day by saturating a piece of flannel with the lotion and covering it with oil silk. On the following day my patient was comparatively free from pain, and in the space of about a fortnight the tumour appeared a little reduced in size, but this was more pronounced after the lapse of about six weeks. The patient being so free from pain, and believing, herself, that the tumour was not so large, began to improve in health and spirits, and to exert herself by the free use of her arm in all domestic duties.

No internal remedy was administered, except an aperient pill occasionally, and during a sudden attack of sciatica, when I ordered two pills of grey powder(a), aloes, and ext. aconite, which removed the sciatica within a week.

Having watched my patient about once a week since last August, I have found a gradual diminution in the size of the tumour, the reduction beginning at the most prominent parts, where the stone or "marble-like" hardness, as the patient termed it, existed. It is necessary to state that no hæmorrhage has taken place since I was first consulted, and the ichorous discharge has been arrested for some months past. It is also necessary to state that I, at first, formed so serious an opinion of the case that I informed the husband that a consultation with a Surgeon was necessary, when he assured me that his wife would never submit to an operation. I therefore had no alternative but to adopt Medicine v. Surgery, and trusting that, by giving publicity to this case, even in its present stage, a further trial will be given of the remedy.

During the last two months I have had another opportunity of trying the bromide in a case of tumour of the breast, pronounced to be cancer by two Physicians, and the woman having lost her mother from cancer, tends to confirm their opinion. In this case I ordered a lotion composed of one ounce of acetic acid (B.P.), two drachms of bromide of potassium, and five ounces of water. This lotion was ordered to be diluted if found to irritate the skin too much; but the patient informed me that the pain, which was so severe, was relieved by using the lotion without its being diluted. I should have stated that it is necessary to use the lotion warm, especially during the winter.

Although only two months have elapsed since the first application of the remedy, I am enabled to state that the tumour is considerably reduced in size, and the patient suffers less inconvenience, etc.

In conclusion, I would suggest that the bromide lotion would be worth a trial in cases of orchitis, acute or chronic, and diluted accordingly.

Southampton.

(a) When the system is under the influence of iodine we are cautious in giving mercurials, and I have found it necessary to use the same caution when under the influence of bromide, whether taken internally or absorbed from without.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

THE LONDON HOSPITAL.

CASE OF CÆSARIAN SECTION.

(Under the care of Dr. HEAD.)

For the following very condensed, and nevertheless very complete, account of a case of great rarity, we are indebted to Mr. Stephen Mackenzie, Resident Accoucheur:—

Mary O., aged 35, after having been delivered of six living children, became the subject of mollities ossium. Three years ago she was delivered with difficulty by craniotomy. On admission was found to be fifty-four inches high. She had a marked angular curvature of the spine, and an extremely rostrated pelvis As it was considered impossible to deliver her "per vaginam," Cæsarian Section was proposed, and agreed to by the patient and her husband.

April 12, 2 p.m.—Chloroform having been administered, Dr. Head proceeded to operate. The abdominal incision was made in the middle line, the uterus opened, and a living female child was extracted quickly, and the placenta directly afterwards. There was some troublesome hæmorrhage from a divided uterine sinus, which was arrested by ice and perchloride of iron. One silk suture was applied to the uterus, and it then contracted. The abdomen was sewn up with silk sutures.

The patient vomited slightly soon after the operation, but her pulse was good. The child only lived four hours; and we regret to add that the woman died also about fourteen hours after the operation. The autopsy fully justified the operation. The case will, we have no doubt, be fully reported.

THE ROYAL LONDON OPHTHALMIC HOSPITAL.

(Notes of cases under the care of Mr. J. W. HULKE.)

Case 1.—*Pleurisy, followed by Headaches—Optic Neuritis.*

A short pale woman, aged 33, mother of four healthy children, came to the Hospital February 27, 1869. Her sight had latterly become so imperfect that she could with difficulty manage to do her housework. Two months previously she had had pleurisy, and, since this, had suffered greatly with headaches. With the right eye she deciphered No. 18 of Jaeger's test types (canon), and with the left eye No. 20 (8-line Roman). Both optic nerves were red, and their tissue was hazy. Four days later the nerves were more opaque, and they had become swollen. A fortnight after this the nerves were less red, but more hazy, and there was a slight increase of the visual acuity. At the end of April all the symptoms had much diminished, and her sight had much improved. She read No. 3½ Snellen's types (No. 8 Jaeger's small pica). She was treated at first with corrosive sublimate, and afterwards with iodide of potassium.

Case 2.—*Atrophy of Optic Nerves consequent on Neuritis Optica Descendens.*

A plump healthy-looking little, girl, aged 6 years, was brought to the Hospital April 20, 1869, quite blind. The pupils were widely dilated and motionless. The optic nerves were white; their surface slightly depressed. The details of the lamina cribrosa were abnormally distinct throughout the whole nerve-disc. Her mother said she had always been well until six months before, when she had a sharp head attack, beginning with giddiness and retching, followed by violent headache. She screamed without ceasing during twelve hours; then she had two fits; after which her left side was palsied, and she lost her sight. In two subsequent similar attacks her neck was twisted towards the left, and her head drawn towards the left shoulder. The mother had had three children—two born dead, and one which was yet alive and healthy.

Case 3.—Headaches, Retching, Blindness—Atrophy of Optic Nerves from Neuritis Descendens.

A man, aged 32, with unusually prominent eyeballs, was brought to the Hospital, September 3, 1869, perfectly blind. His pupils were widely dilated and motionless; the ocular media were clear; both optic nerves were white; the details of the lamina cribrosa were abnormally distinct over the entire area of the nerve-disc. The arteria centralis was reduced to a mere thread, and the vena centralis was small; it was also tortuous. Above and at the temporal side of the right optic nerve a large, dull, opaque grey blotch was visible in the retina. His wife said that four years ago he had an attack of giddiness, and fell backwards. He then began to have violent headaches, and he often retched; his appetite, however, was ravenous. Next he saw double, and his sight gradually failed. The right eye became first blind, and then the left. Perception of light was extinct at the end of nine months from the beginning of his illness, and about this time he also became speechless, but he afterwards recovered his speech. The headaches and retching ceased several months before he was brought to the Hospital.

Case 4. — Retching — Listlessness — Blindness — Neuritis Optica Descendens.

A little girl, aged 7 years, was brought to the Hospital quite blind, September 17, 1868. Her mother said she had been in good health till five months before, when she had a very severe illness beginning with moaning in her sleep, retching, and drowsiness. Lively before, she then lay listlessly about all day. Her sight soon failed. Both optic nerves were swollen and opaque. Within the nerve-disc the vessels were obscured and apparently interrtpted, while beyond it, in the transparent retina, the veins were tortuous and turgid. A month later the nerve-dises were flattened and white, and their contour was ragged. The arteria centralis had become very small; the retinal veins were no longer unduly distended, but they remained tortuous. The atrophy thus marked progressed.

Case 5.—Neuritis Optica Descendens with Cerebral Disease.

A pale, weakly boy, aged 15 years, was brought to the Hospital on October 24, 1868, quite blind. He was choreic, very irritable and obstinate; he often wetted and dirtied his bed; and occasionally had fits of an epileptic nature. These symptoms had lasted about one year. Before this he was considered healthy, but had been always nervous. Five brothers and sisters had died; the nature of their maladies could not be ascertained. The mother was healthy, and the father died at 70 years old. The lad's pupils were dilated and motionless; all the ocular media clear; both optic nerves swollen and opaque. Within the area of the nerve-disc the arteria centralis was quite hidden and the vein much obscured, while in the transparent retina beyond the disc the veins were swollen.

Case 6.—Medullary (?) Cancer of Orbit in an Infant.

An infant, aged 1 year and 9 months, was brought to the Hospital on December 28, 1867. Pale and feeble, it lay listlessly in the mother's arms, and moaned when touched. The right eyeball was considerably projected by a solid but elastic tumour, the right temporal fossa was distended by a similar tumour, and there was yet a third on the right occiput. Both the anterior and posterior triangles of both sides of the neck contained enlarged lymphatic glands. The mother said that she had always been a delicate infant, but had not had any particular illness till three weeks previously, when she became restless at night, and was often sick. Then a lump appeared in the right temple, and after this another at the back of the head. Death shortly followed, but a post-mortem examination could not be obtained.

BIRMINGHAM GENERAL HOSPITAL.

RIGHT HEMIPLEGIA FROM HÆMORRHAGE WITHOUT AFFECTION OF SPEECH—CHARACTERISTIC HISTORY.

(Under the care of Dr. RUSSELL.)

In the *Medical Times and Gazette* of September 18 I reported a case of right hemiplegia (following on corresponding paralysis of the opposite side) in which the faculty of speech was entirely suspended for some weeks. In contrast with this case, I now subjoin another, also of right hemiplegia, in which no affection whatever of speech has occurred. The interest of the latter case lies in the history, which clearly proves it to have been one of hæmorrhage, most probably into the corpus striatum (ingravescent apoplexy).

It is well known that the faculty of language (using the term in its largest signification) suffers in right hemiplegia in different degrees, varying between mere unsteadiness of articulation (ataxy) on the one hand, and on the other complete abolition of the power of giving expression to thought by the simplest signs. Experience seems to prove that, in order for language to suffer in any manner in ordinary right hemiplegia, the disease causing the paralysis must not be confined to the motor tract, but must also involve a portion of the neighbouring convolutions. Hence, as Dr. Hughlings-Jackson has pointed out, loss of speech in hemiplegia is most commonly associated with embolism of a cerebral artery, probably of the middle cerebral, which supplies at once the motor tract and a considerable tract of convolution; and, when temporary paralysis takes place in cases of unilateral epilepsy of the right side, with that condition of arteries (spasm) to which the epileptic fit is due.

Dr. Hughlings-Jackson also expresses an opinion which is supported by much probability, that the different kinds and degrees of speech affection are regulated not only by the amount of brain substance implicated, but also by the distance of the diseased part from the corpus striatum, the point of emission of the orders of the will to the muscles; that the nearer the disease to the corpus striatum the defect is more likely to affect articulation alone, whilst the more remote from that body, mistakes in words will most probably be the abnormity observed—"the defect increasing in complexity and diminishing in speciality the further the disease from that body."

In the case which I last reported articulation was annihilated—the patient was dumb—yet he had full control over all the other modes of language; he wrote with his left hand, thus asking for "beef-tea," and referring to his "mother;" and he used a book to point out the word he desired to utter. According to the accurate observer I have just quoted, when speech is quite lost, writing is lost also, and impairment of writing accompanies impairment of speech; but in the case I am now referring to the apparent anomaly is explained by the fact that left hemiplegia had preceded that of the right side, and was not fully removed; consequently the bilaterally acting muscles were generally paralysed, and an obstacle was thus opposed to articulation, which does not occur in hemiplegia under ordinary circumstances.

In conformity with the rule noticed above, the source of the paralysis (syphilitic disease) most probably affected more than the corpus striatum; but in the following case the evidence is altogether in favour of the cause consisting of hæmorrhage, a disease, when limited in extent, which is likely to be restricted to the corpus striatum alone. It will be observed that though speech was spared, the hemiplegia was severe.

Dr. Welch finds the optic disc healthy—a statement which has interest in connexion with the circumstance that Dr. Hughlings-Jackson has not met with changes in the optic nerve when the cause of the paralysis has been limited entirely to the motor tract.

The case I have to detail is briefly as follows:—

A. D., aged 57, presents at present the ordinary characters of right hemiplegia from disease of the corpus striatum. Although five months have elapsed since the seizure, she has not regained power in the arm, though she can walk tolerably well. On the 22nd of last May she went to bed in usual health; on awaking she felt numbness and pricking in her right fingers. She was able, however, to dress herself, but in two hours she found herself unable to do her sewing; she did not feel quite right, and got a little brandy; she then lay down, but the paralysis steadily increased to the evening, when the use of the arm was entirely lost, and her face was observed to be drawn.

Consciousness was not at all impaired during the access of the paralysis; she has a perfect recollection of all that took place, nor did the faculty of speech suffer at all. At the present time, with very considerable paralysis of the arm, she speaks with natural fluency and correctness.

She is a large pallid woman; her heart sounds are pure; there is a small arcus, but no evidence of arterial disease; her urine is acid and free from albumen.

LITTLEMORE ASYLUM.

Having occasion, in reply to a printed circular from the Lunacy Commissioners, to explore the post-mortem records of this institution (Littlemore Asylum) for the year 1869, I became impressed with the idea that faithfully condensed notes of such records could not prove otherwise than useful publications. They are not published for the purpose of supporting any pathological theory, and for that reason will perhaps prove dry

reading to those who prefer adopting the ideas of others to thinking for themselves. The only other necessary preliminary remark is that apparent omissions must not be supplied from the reader's imagination.

Males.

G. D., admitted in 1857, found dead in bed. *Post-mortem Examination.*—Heart enlarged; kidneys enlarged and of stony hardness; pericardium and pleuræ full of yellow serum; gonty constitution.

H. R., admitted in 1869, general paralysis. *Post-mortem Examination.*—Congestion, softening, and discoloration of brain; pleuritic adhesions; fragile ribs.

C. M., admitted in 1869, epilepsy. *Post-mortem Examination.*—Sero-sanguineous cerebral effusion; brain substance apparently healthy; general venous congestion.

J. G., admitted in 1864, general paralysis. *Post-mortem Examination.*—Cerebral serous effusion; pulmonary emphysema; rigid arteries; cardiac hypertrophy.

J. H., admitted in 1864, a scrofulous consumptive idiot. *Post-mortem Examination.*—Upper lobes of lungs dense and tough; obliteration of lacteal orifices of duodenum.

R. D., admitted in 1857, passive dementia and general paralytic exhaustion. *Post-mortem Examination.*—Brain softened, discoloured, and atrophied; lungs gritty, pale, coarse, and adherent.

W. B., admitted in 1848, partial idiocy with epilepsy and occasional hæmoptysis and anasarca; died comatose. *Post-mortem Examination.*—Brain softened and darkened; upper lobes of lungs studded, cicatrised, and adherent; heart cavities enlarged and full of yellow gelatinous clot.

Females.

A. C., admitted in 1861, died of phthisis with jaundice. *Post-mortem Examination.*—Liver granular, rotten, and adherent, with small scattered abscesses; jelly-like layer over dura mater; lungs gritty, coarse, anæmic in some parts, congested in others, and adherent; heart flabby and small.

S. S., admitted in 1868, general paralysis, with anæmia, diarrhœa, despondency, and hysteria; incomplete dementia and exalted delirium. *Post-mortem Examination.*—General anæmia of viscera; spleen atrophied; liver enlarged, hard, rotten, and granular; fragile bones.

S. B., admitted in 1868, incomplete idiocy, with subsequent paralysis. *Post-mortem Examination.*—Calvaria thick and dense; cerebral sulci almost obliterated; brain substance softened and atrophied; ventricles of brain enlarged and distended with (complementary ?) serous effusion.

H. H., admitted in 1865, general paralysis, with phthisis. *Post-mortem Examination.*—Skull thick; brain substance congested and softened; brain cavities enlarged and full of serum; pulmonary tuberculosis in all its stages; fragile ribs.

C. B., admitted in 1865, general paralysis. *Post-mortem Examination.*—Brain substance congested, softened, and discoloured; brain cavities full of serum; liver much enlarged, friable in some parts, lardaceous in others.

C. B., admitted in 1866, melancholia and imbecility; died of erysipelas and pneumonic congestion. *Post-mortem Examination.*—Brain substance congested, easily broken down, and discoloured; heart flabby, and cavities enlarged; pleuritic adhesions.

SPOTTED fever prevails to an alarming extent in Davies's county, Indiana, and many deaths are occurring. Out of a school of thirty-five scholars at Mt. Zion schoolhouse, in the German Settlement, thirteen of the pupils—all of them girls—died of the disease in two weeks.

CHLORAL IN TETANUS.—At its last meeting M. Verneuil presented a paper to the Académie des Sciences narrating the success of chloral in a case of tetanus, from 10 to 12 grammes of this substance producing relaxation of the muscles almost instantly. He has another case under observation, and everything seems to promise that the chloral will again prove successful in combating the traumatic complication. M. Nélaton observed that we must not conclude from a single case that chloral will cure tetanus. This affection is one of those for which all remedies are sometimes of use without being sovereign. It yields to many of these means in many cases, and resists the same means in many others. No conclusion can be drawn except from numerous cases.—*L'Institut*, March 16. (The *Revue des Cours* asks whether this is not a reply on the part of M. Nélaton to M. Verneuil's recent article in which he reproached him for writing to the *Figaro* on Medical subjects, and never opening his mouth at either of the Academies.)

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Medical Times and Gazette.

SATURDAY, APRIL 16, 1870.

THE GOVERNMENT MEDICAL ACTS AMENDMENT BILL.

THE Bill which was introduced on Friday last into the House of Lords by Earl de Grey we to-day publish *in extenso*; but it will save our readers trouble if we draw attention to its leading provisions. We gathered from the Lord President's speech in introducing the Bill that it is a measure of moderate and reasonable scope, calculated to effect very important and necessary reforms, but not conceived in a spirit of antagonism to those Medical examining bodies, to which are due all the improvements in Medical education which have been made since the passing of the Apothecaries' Act of 1815, and to which may be indirectly, if not directly, ascribed the undoubted advance which the Profession has achieved in social position and influence. A perusal of the Bill has, in the main, confirmed the good opinion of the measure which Earl de Grey's speech produced. The great mistake in the Bill, which, however, we hope to see modified, seems to us the undue amount of power which it gives to the Privy Council in the matters both of Medical education and examination. But of this hereafter.

As we predicted last week, the main feature of the Bill is the unification of examinations in each division of the kingdom. The preparation of a scheme for the formation of a conjoint board of examiners in each of the three kingdoms is to be left to the present licensing bodies, who may submit it, before October 1 next, to the General Medical Council. If the licensing bodies and the General Medical Council have failed to agree upon a scheme and to establish a conjoint board by January 31, 1871, the duty of framing a scheme will fall upon the General Medical Council. In either case, such scheme is to be submitted to her Majesty's Privy Council for confirmation and, if it please the Privy Council, for modification. The conduct of the examinations and the curriculum of study are to be regulated by the General Medical Council, and in these particulars also their regulations are to be submitted to the Privy Council for confirmation, and, at their pleasure, for modification. These are certainly the most important points in the Government measure. As far as the formation of a conjoint board of examiners is concerned, nothing can be fairer than the proposal. If from any cause the licensing bodies are unable to agree, the business cannot devolve on a body more fitted to perform it satisfactorily than the General Medical Council. We should hope, however, that a fair spirit of mutual concession will govern the councils of the existing licensing bodies, and that they will learn that they best consult both their own interest and their dignity by co-operating in a spirit

of moderation and justice, and not by seeking to impose upon other corporations terms which they know cannot possibly be accepted. With regard to that portion of the Bill which refers to the share of her Majesty's Privy Council in these matters, we cannot give it such unqualified approval. If confirmation of the acts of the licensing bodies and the General Medical Council is to be a mere matter of course, as we believe to be practically the case with the regulations of the University of London, which always are submitted for the approval of Government, there can be no great objection to these provisions of the Bill. But if, on the contrary, the Medical Department of the Privy Council, or rather we should say the gentleman at the head of it—and we would be expressly understood not to refer to any person in particular, especially not to the accomplished Surgeon who at present ably fills the office, but to any nominee of an irresponsible minister—if, we say, the Medical adviser of the Privy Council is to have the power of assenting to or dissenting from and, above all, of *modifying* any regulation which the General Medical Council recommends in the education and examinations of the Medical Profession, and his judgment is to be final, we maintain that such a proposal ought not for one moment to be entertained, and that it must entirely counterbalance the good which the Bill will otherwise effect. On this point, we look to the General Medical Council and to the whole Profession to express their opinion clearly and unmistakeably.

Of the other provisions of the Bill we will now only speak in general terms. The licence which is to be granted on passing the examinations of the new board will be one to practise Medicine and Surgery, and it will be the only licence granted in Great Britain and Ireland which is to qualify for registration. It will not necessarily affiliate its possessor to any existing corporation or college, although the Act provides that any of the corporations or universities may confer on the Licentiate a Membership, or its lowest Medical or Surgical degree without further fee or examination; but the clause is permissive only, although we presume it would be commonly acted on. Of this provision, it may be said that, as long as the rights of the Profession through the corporations are preserved—as long as its museums, libraries, and lectures are maintained and developed—no harm is done by making the licence an independent one. But we are by no means certain that a licence which gives no absolute right of Membership in a Royal College of Surgeons, for instance, would be acceptable to the great bulk of the Profession, and we think this is a point which ought thoroughly to be debated both in the General Medical Council and in Parliament before it be finally settled. All other degrees and diplomas will be entered on the Register as honorary distinctions, but not as conferring the right to practise. Very wisely, we think, the Bill does not contain any clause fixing the fees to be paid for examinations and diploma. Pecuniarily cheap admission to the Medical Profession will be no advantage either to the public or to ourselves. The surplus funds arising from examinations, after the payment of the examiners, cannot be better applied than in developing the resources of the corporations for the benefit and improvement of the Profession. Let, for instance, in the case of England, the Hunterian Museum and the libraries of the Royal Colleges of Physicians and Surgeons be maintained and developed; let lectures on chemistry be delivered at Apothecaries' Hall, and on botany at the Chelsea Gardens; and let Professorships in the other branches of our science be supported or founded in connexion with the Royal Colleges, and the Profession will have no cause to be displeased at the distribution of the surplus funds.

Lastly, we notice that the Bill does not contain any provision for altering the present constitution of the General Medical Council. We confess, on the whole, we are glad of it. We do not consider the present constitution of the Council to be unimprovable; but we consider that it is far better than any Council would be which was formed on the principle of the direct representation of the Profession. The Council now may talk a little too much; but what an epidemic *flux de bouche* would possess it then! Could we, on the whole, expect to bring together a body of wiser, more highly educated, or more diligent men, or of men more thoroughly imbued with the desire to promote the interests of our common Profession? We fail, therefore, to see the necessity for subjecting our Profession periodically to all the excitement of an election, with its touting, canvassing, and chicanery, and we are thankful to the Government for not throwing such an apple of discord amongst us. Carefully guarded, indirect representation through the bodies returning members to the Medical Council will probably some day be granted—were this, however, obtained, we doubt whether the constitution of the Council would greatly differ from its present; but be this as it may, it is a point on which the Profession can well afford to wait.

In our next number we shall continue our examination of this most important measure.

DISPENSARIES—FREE AND PROVIDENT.

On mature consideration we are inclined to think that in point of abuse dispensaries rank half-way between general and special Hospitals, being more taken advantage of than general Hospitals, less so than the obnoxious special institutions. As matters now stand, dispensaries had far better be swept away altogether or be transformed into Poor-law or provident institutions. The out-patient departments at our Hospitals have a *raison d'être;* they serve, as we have already shown, as feeders to the wards, and supply teaching materials for our schools; besides, the casualty department in our Hospitals is one of their most useful features. For dispensaries there is no such apology. The only good feature we can see in their character is, that patients unfit to attend are seen at their own homes. Were there attached to the Hospitals a poliklinic or town-clinic system, this also would disappear. Even now the work done by dispensaries is utterly inadequate to the money they cost.

A certain proportion of the Medical men attached to dispensaries are General Practitioners, although some are the younger Physicians and Surgeons of the day keeping their hands in till a Hospital vacancy occurs. Now it is exactly the former class who have to complain of such and similar institutions; why therefore, do we find them in such an anomalous position? The answer is not far to seek. With every dispensary there is connected a certain number of influential people, and an introduction to these local magnates is a matter of consequence to a local Practitioner. Then, again, a considerable proportion of the patients at dispensaries are the servants of people living in the neighbourhood. The master or mistress subscribes, and the servants take it out in physic. These, although unfit subjects for charity (the word in such context becomes preposterous), are welcomed by the dispensary Physician in the hope that, through the kitchen, he may reach the drawing-room. It is these and similar practices which have led to such untoward results, and for them no class is more responsible than that which now suffers most.

But at both Hospitals and dispensaries there is a residuum who come for physic when they want food. However harsh it may sound to say so, this class should be rigorously excluded. There is something in Scripture about asking for bread and giving a stone; the words are exactly applicable to our existing institutions, for what is the good of giving iron, quinine, or ammonia to one who has no bread to eat? It is far better to send such at once to the parish authorities to be fed as well as treated; the result is certainly more satisfactory to all concerned. The more there can be done to separate poor's rates from charity the better for everybody.

Between those who are too well off, and those who are too poor for charitable Medical relief, there exists a third class for whom

the provident system of dispensary is supposed to be specially applicable; and provident dispensaries have been started in various places, notably Northampton, Rugeley, and Leamington. The report of the last-named institution is now before us, and is a fair specimen of its class. The essentials for such a dispensary are a working Medical staff, a lay committee, and a properly selected *clientèle*; the general working expenses are paid by the charitably disposed public, but the payments of members are, after the cost of drugs has been defrayed, divided among the Medical attendants, in accordance with the amount of work each has done, for every member has the power of selecting his own Medical adviser. Of course the weekly payments by members are extremely small (a penny or a halfpenny each), but they amount to a considerable sum by the year's end, one gentleman receiving over £500 for his services at Northampton. When one hears of such an income made in such a way, one is almost tempted to exclaim—Who, then, receives the charity?

Undoubtedly the scheme looks well on paper, and we may admit that it has been found to work in certain places, but we question much if the system be applicable to London—and it is to London that the whole difficulty chiefly applies. Of the three requisites above enumerated, we may take for granted that a supply of Medical men may readily be obtained; but the two others are more difficult to reach. The committee has to select the patients to be admitted to the benefits of the charity, and has to reject all those whose circumstances are above or below the mark. If any one who knows much of London out-patient or dispensary practice will take thought for a moment what this implies, he will be somewhat staggered. How, in London, where no one knows his next-door neighbour, are the incomes to be ascertained, and who is to ascertain them? After all, stripped of its tinsel, the whole scheme looks mighty like the old system of sick clubs, in a slightly new guise, assuming the form of the cloak of charity. In point of fact, the payments are greater than in some sick clubs, which is so much in favour of the Medical man, plus, of course, the expenses of carrying on the dispensary, the result of charity. In other words, the charity ceases to be bestowed on the poor; it is on the man that ought to be an independent Practitioner.

But there is a fatal loophole in the scheme—what might be called the emergency clause. What is to be done in the case of any one suddenly taken ill? Such a contingency appears to be provided for in the Leamington Provident Dispensary by Clause xviii. of their rules, headed "Immediate Attendance." It reads thus:—

"*Any person* labouring under sickness *shall* be admitted a provident member on the payment of an entrance fee of seven shillings and sixpence, in addition to the usual monthly subscriptions from the date of admission."

The italics are ours, but they indicate the weak points in the whole scheme—points which admit the very class we wish excluded to the participation of greater benefits than they now enjoy.

The panacea has not yet been found.

INEBRIATE ASYLUMS IN THE UNITED STATES.

No II.

In our preceding article on this subject, we traced the progress of the Washingtonian Home during the period of Dr. Day's superintendence. On May 1, 1867, he was appointed to a larger sphere of usefulness as superintendent of the New York Inebriate Asylum at Binghamton. The history of this institution is a very singular one. Some fifteen years ago, as we learn from the article in the *Atlantic Monthly*, an English adventurer—apparently one of the *Silent Friend* fraternity—thought that he might secure a golden harvest by starting, on purely philanthropic principles, an institution to which he applied the (as we think somewhat unfortunate) term of inebriate asylum. Binghampton, which he selected as the seat of his labours, is a beautifully situated town in the State of New York, lying at the junction of the Chenago River with the Susquehana, within a few hours' journey (215 miles) from New York by railway, and possessing all the natural qualifications for such an institution. The people of Binghampton, misled by the adventurer's statements, gave a farm of two hundred and fifty acres, to which other farms were added, until the asylum estate contained more than five hundred acres. Subscriptions flowed in unsparingly, and we believe that a grant was yielded by the State. From a bulky pamphlet of nearly two hundred pages, with the singular title-page "Ceremonies, etc., New York State Inebriate Asylum. Binghampton, New York, 1859," now lying before us, it appears that the corner-stone of the building was not laid till September 24, 1858. If by any chance in some future geological epoch this corner-stone should ever be discovered and removed, the antiquarian of the future will be amazed to find beneath it such relics as time may have spared of copies of the sacred scripture, the *Scalpel* and other American Medical journals, and of various newspapers, American and old Japanese coins, a metallic head of Daniel Webster, a specimen of the Atlantic cable, an Indian pipe of peace, and an arrow from a Sioux chief. A somewhat flowery opening address was delivered by Dr. Francis, the author of "Bacchus," who gave the following as the reasons for the establishment of such an institution:—"The enticing draught, whether from the golden goblet or the pewter mug [why not pot?] finds favour with every order of society—the peasant and the ruler, the mechanic, the artist, and he who aims to dignify the walks of Professional life. Moreover, we have the crowning influence of a climate characterised by extremes of temperature, a people of a susceptible and nervous temperament; we have an unbounded freedom of action; parental restraint is scarcely known, and more unfortunate still, we suffer the penalty of unsettled legislation and inoperative and lax laws." This address was followed by music; then came an address by the Rev. Henry Bellows, D.D., in which he expressed the remarkable idea that, if the Almighty would seize the glorious comet that was then apparent in the heavens, and, using it as a pen, would inscribe with its diamond point the chief event of this *annus mirabilis*, it would be the foundation of this institution! After speeches by the Hon. Daniel Dickinson and the Hon. Edward Everett, a poem was recited by Alfred Street, Esq., and the ceremonies, much, we should think, to the delight of a wearied audience, terminated with a benediction by the Rev. N. A. Prince. No institution could surely have commenced its existence under happier auspices, and yet, from the villany of the unprincipled adventurer who started it, and under whose control it remained for some years, it turned out an utter failure. When Dr. Day entered upon his duties as its superintendent in May, 1867, the asylum was without inmates, and almost without friends. Five patients, whom he brought with him from Boston, constituted the whole list of patients; and yet, only twenty months afterwards, in his report for the year 1868 he is able to write, "Since then, those who have come and gone, with more or less happy results, number three hundred and ten, of whom eighty-two are with us to-day; and the roll of present inmates is rapidly increasing."

Sympathising with Mr. Dalrymple as we do in his general views, although not feeling able to support him in his opinion that the legislature should interfere with drunkards, let us commend to him and to his supporters the following extract from Dr. Day's last report:—

"Amongst the various causes which directly tend to swell our roll of patients and *protégés*, none have operated with more immediate and substantial influence than the sudden and vigorous impulse recently imparted to public opinion in this matter of inebriate reform, by the lively agitation of the subject through the medium of magazines, newspapers, and public lectures. By thoughful and well-digested papers, logically conceived and forcibly expressed, those periodicals and journals

which may be justly regarded as the discreet exponents of public opinion, have supported our views, cheered our hearts, and strengthened our hands. The benefits derived from the article in the *Atlantic Monthly* are gratefully acknowledged. It had the effect of bringing to the asylum a number of our most interesting and hopeful cases. From Ohio, from Indiana, from Illinois, from Michigan, Missouri, North Carolina, and Mississippi, we have received patients, who attributed to that paper, or to newspaper notices of it, either their first joyful knowledge of the rescue at hand for them, or confirmation in a previously conceived, but wavering, inclination to avail themselves of the way of escape and the protection we afforded them."

Dr. Day is totally at issue with Mr. Dalrymple as to the expediency of legislative interference.

"To receive within our walls the forced commitments of a court or the common seizures of the police, is at once to impair, if not destroy, the philosophical value of the experiment, and, what is worse, to embarrass the discipline and lower the moral tone of our probationary household."

He must, however, be occasionally troubled with patients of this class, for in the "Rules and Regulations" we find three classes of patients described—viz., *free patients*, who (or whose friends) must give proof that they cannot afford to pay for their support; *paying patients;* and *committed patients*, whose nature is best explained by the following extract from an Act passed in March, 1865;—

"§ 4. Any justice of the Supreme Court, or the county judge of the county in which any inebriate may reside, shall have power to commit such inebriate to the New York State Inebriate Asylum, upon the production and filing of an affidavit or affidavits by two respectable practicing (*sic*) Physicians and two respectable citizens, freeholders of such county, to the effect that such inebriate is lost self-control, unable to from such inebriation to attend to business, or is thereby dangerous to remain at large. But such commitment shall be only until the examination now provided by law shall have been held, and in no case for a longer period than one year."

The patients belonging to the free and paying classes voluntarily submit themselves for a period more or less protracted, from three months to a year, according to the nature of the individual case, to an isolation which the Medical officers study to render agreeable, and a restraint of the mildest available nature; and we should be glad to see some such system as this introduced into this country. Putting the committed class out of the question, we may observe that, as a general rule, the applicants for admission, when they enter the office of the asylum are accompanied generally by a relative or a friend. Some reach the building far gone in intoxication, having indulged in one last farewell debauch, or having drank a bottle of whisky for the purpose of screwing their courage to the sticking-point of entering the asylum. Sometimes the accompanying friend, out of an absurd kind of pity for a poor fellow about to be deprived of his solace, will rather encourage him to drink; and often the relatives of an inebriate can only get him into the institution by keeping him intoxicated until he is under its roof. Frequently men arrive emaciated and worn out from weeks or months of hard drinking, and occasionally a man will be brought in suffering from delirium tremens, who will require restraint and watching for several days. Some enter the office in terror, expecting to be immediately led away by a turnkey and locked up. All come with bodies diseased and minds demoralised; for the presence of alcohol in the system lowers the tone of the whole man, body and soul, strengthening every evil tendency, and weakening every good one.

"The newcomer subscribes to the rules, pays his board three months in advance, and surrenders all the rest of his money. The paying in advance is a good thing; it is like paying your passage on going on board ship; the voyager has no care, and nothing to think of but the proposed object. It is also one more inducement to remain until other motives gain strength."

Some years ago Dr. Day made the important discovery (not, we fear, as yet recognised in this country), that it is easier for a confirmed drunkard to cease at once and totally from alcohol than to diminish his quantity gradually. By total abstinence the patient not only suffers less, but for a shorter time, than by the "tapering off" system(a). The visitor to the Binghampton Asylum gives us some valuable information on this point. A clergyman for more than two years before entering the asylum drank a quart of brandy daily, and felt sure that he would die if he should suddenly cease. He entered the office at 11 a.m., after having drank twelve glasses of brandy, and intended to return to his hotel to enjoy a last debauch; but Dr. Day quietly objected to his return, sent for his trunk, and cut off his brandy at once and totally. For forty-eight hours there was incessant craving for his accustomed stimulant, and he could only obtain sleep by the assistance of bromide of potassium; but on the third day the craving ceased, and he never felt it again. Other patients stated that they suffered a morbid craving for the first two or three weeks; but all agreed that the sudden discontinuance of the stimulant gave them less inconvenience than they had anticipated. Complete recovery, of course, is a slow and long effort of nature, but the improvement in the health, feelings, and appearance of patients after only a month's residence upon that breezy hill is very remarkable. This statement is fully borne out by the history of the visitor's first impression as he entered the beautifully laid-out grounds in which the asylum is situated. On a level space in front of the building he saw fifty or sixty well-dressed, well-looking gentlemen, of various ages, watching a number of young men playing a game at base-ball. In general appearance they were so decidedly superior to the average of mortals that few visitors could fail to remark the fact. "Living up there in that keen pure air, and living in a rational manner, amusing themselves with games of ball, rowing, sailing, gardening, bowling, billiards, and gymnastic exercises, they are brown and robust;" and it did not, for a moment, occur to the visitor that "these serene and healthy-looking men could be the inmates of the asylum." The building, which has all the outward appearance of a spacious well-arranged hotel, is provided with all the means of in-door comfort and recreation. There is a billiard-room, a reading-room, a library, a conservatory, and a croquet-ground, and "the apparatus of cricket is visible in one of the halls." The table is good and well served, and a stranger might be puzzled, after seeing all the arrangements, to know whether he was in a hotel or a college. Every Wednesday evening, after prayers, a kind of temperance meeting is held in the chapel. The inmates take part freely in the discussion which follows an address prepared by Dr. Day or one of themselves. The visitor heard one of these addresses, in which the superintendent enforced his three cardinal points—(1) No hope for an inebriate until he thoroughly distrusts the strength of his own resolution; (2) No hope for an inebriate except in total abstinence, as long as he lives, both in sickness and in health; and (3) Little hope for an inebriate unless he avoids, on system and on principle, the occasion of temptation, the places where liquor is sold, and the persons who will urge it on him. To illustrate the first of these points, he referred to a young man who, at the last meeting, after having been apparently quite cured, was about to return home. This young man delivered an eloquent address urging his companions to adhere to their resolution, and protesting his unalterable resolution never again to taste stimulants. He took his departure in the morning, and in a few hours afterwards he was found by a friend lying in the corner of a bar-

(a) We heard the following anecdote related at a Medical party in Scotland, but cannot vouch for the truth of the story:—A gentleman was travelling in the Isle of X., and, being benighted, sought, and we need not say obtained, hospitality at a refuge for drunkards in the heart of that island. On proceeding on his tour the following morning, his host proposed that, as the path was not clear and there was a chance of a fog, two or three of the inmates should accompany him for a few miles. They proved most pleasant companions; but in the midst of a conversation, one of the speakers suddenly stopped, laid his hand on his stomach, and solemnly observed, "It is full time." There was a general pause, each patient pulled out his flask, took his *nip*, and replaced his treasure in his pocket. On inquiry, the astonished tourist was informed that, during the first month's residence, three *nips* were allowed daily; during the second two *nips* were permitted; and during the third, one; after which perfect abstinence was required.

room, dead drunk, and was returned to Binghampton within twelve hours.

We regret that our space will not allow us to draw more largely on this admirable article, and must conclude with expressing our sincere wish that it should be repriuted in this country in a cheap form, adapted to a wide distribution. Its perusal by our legislators and men of influence would, we believe, rapidly promote the establishment of similar houses in England.

THE WEEK.

TOPICS OF THE DAY.

On Monday a meeting of the Fellows of the Royal College of Physicians of London took place, at which Sir James Alderson was re-elected President of the College. Dr. Burrows was also proposed for the office, and received a considerable amount of support. The majority of Fellows, however, wished to pay the courteous and accomplished gentleman who has so long and so ably presided over them the compliment of re-electing him for a fresh term of office. Sir James Alderson delivered an address on the occasion, which it was unanimously agreed should be printed and circulated amongst the Fellows and Members, an unusual tribute to the oratory of the President.

Very important meetings of the Executive Committee of the General Medical Council took place on Thursday and Friday of last week. The Committee had a conference of nearly two hours' duration with the Lord President of the Privy Council on the subject of the new Medical Registration Bill; and they afterwards came to the unanimous conclusion that the meeting of the General Medical Council had better be deferred until the Bill is ready to be introduced into the House of Commons, when, in their opinion, the whole matter can be best discussed. They, however, append to their resolution a recommendation that the President should address a letter to all the members of the General Council, asking their individual opinions as to the expediency of the meeting of the General Council being so deferred, and that he should be guided in the matter by the general opinion of the members. It will be remembered that a resolution passed by the General Medical Council at its last sitting was to the effect that the members of the Council should be summoned in time to consider the provisions of the new Bill before it passed into committee in either House of Parliament. The Lord President, however, is determined to push the Bill rapidly through the Upper House. It is to be read a second time on May 2, and to go into committee on May 5. It is manifest that there would be great inconvenience in bringing the Council together again immediately, and so long as ample time is afforded for the full discussion of every point of this most important measure, we see there may be good reason for adopting the recommendation of the Executive Committee. Nevertheless, there is no doubt that the General Medical Council must be summoned at an early date. The 1st of June, the date fixed by the Council for receiving the three schemes for conjoint examinations, will, according to present appearances, be here before the English bodies have arrived at a mutual agreement. There can be no doubt, however, that the passing of the Bill will wonderfully tend to diminish the forces of repulsion, and tend to bring into play those of an opposite tendency.

We are very glad to learn that at the same meeting of the Executive Committee of the Council, a letter was received from Dr. Halliday Douglas, the President of the Edinburgh Royal College of Physicians, stating that a conference between the Universities and Medical Corporations of Scotland had been held on the 2nd inst., and that the representatives of those bodies concurred in opinion that a conjoint examining board should be formed on the principles expressed in the resolution passed at the late meeting of the General Medical Council. The President, moreover, states that the Corporations and Universities of Scotland were never opposed to the principles of that resolution, but to a very different proposal which was forwarded to them for their opinion before the last meeting of the Council, and which, he adds, "it is understood that all parties are now agreed in considering objectionable." The Royal College of Surgeons of Ireland also, has, by its Registrar, written a letter to the Executive Committee stating that "the Council of this College warmly approves of, and has endeavoured to promote, a joint examination board for this division of the kingdon." The College indeed seems to have taken the initiative in the matter in Ireland. We have before us a draft scheme agreeing in most particulars with that drawn up by the Committees of the English Royal Colleges, which the Council of the Irish College of Surgeons has transmitted for the consideration of the King and Queen's College of Physicians and of the Irish Apothecaries' Company. The latter body, indeed, are not satisfied with the share either of examinations or proceeds which the Irish College of Surgeons has allotted to them, and have published a draft scheme of their own, which they submit for the consideration of the two Colleges. The Irish Apothecaries' Company, we believe, occupies a different position with regard to the Profession from that of the Society of Apothecaries' of London, inasmuch as the Irish Company has never been intrusted by Act of Parliament with the duty of examining in the science and practice of Medicine. The Irish Company, therefore, does not claim to nominate Examiners in Medicine, but in Midwifery, Therapeutics, Forensic Medicine, and Hygiene, in addition to Pharmacy, Medical Botany, and Chemistry, which latter subjects were allotted to it in the scheme of the Irish College of Surgeons.

The answer given by the Under Secretary of State for India to Sir T. Bazley's inquiry why regimental Surgeons in the Indian service are the only officers serving in India who, when absent on furlough in Europe, are not allowed to receive 50 per cent. of their Indian pay, leads us to hope that the present Government are not quite blind to the injustice of the regulation, and are prepared to redress it. We trust, however, that Sir T. Bazley, to whom the thanks of the Medical officers is due, will not let the question rest until substantial justice has been done. The fact is that Medical officers in India are more likely, for obvious reasons, to be stricken down by sickness in time of peace than combatant, and to deprive them of the allowances made to all other officers when in Europe for the restoration of health, is a piece of unfairness which it would be difficult to stigmatise too strongly. These are the things which justly give Medical men such a distrust of all Government interference in the affairs of their Profession.

The President of the Royal College of Surgeons has fixed Friday, April 22, for the adjourned meeting of Fellows and Members of the College. It is understood that the debate will be continued on the resolution moved at the last meeting by Mr. Nunneley, and the amendment thereto moved by Mr. C. H. Rogers Harrison. The resolution was to the effect that the formation of a single examining and licensing board should not be left in the hands of the existing corporations. Mr. Rogers Harrison moved, as an amendment, that the word "not" should be omitted in the resolution. We trust that the meeting will be unanimous in their determination to support those institutions which embody, *par excellence*, Professional traditions and memories, which have effected all that has hitherto been effected in the improvement of Professional education and status, and with which every name that has given lustre to the calling of Medicine in this country has been more or less intimately associated.

The murderer Rutterford has been respited by Mr. Secretary Bruce, in consequence of a certificate signed by John Kilner, F.R.C.S., Thomas Coe, F.R.C.S., and Dr. Robert Macnab, a Medical Commission appointed to visit Rutterford by Mr. Bevan,

the Visiting Justice of the gaol at Bury St. Edmund's, which states that, in consequence of a cicatrix in the prisoner's neck, he cannot, in the opinion of the Commissioners, be hanged by the ordinary means, "for to secure against the risk of failure, and a prolongation of suffering, it will be necessary to use very considerable and unusual amount of constricting force before the rope can be adjusted in such a manner as to sustain the weight of the prisoner's body." Mr. Bruce states that he has no alternative but to reprieve the convict, as he has no power to give effect to the sentence of death by any means but the ordinary. The cicatrix is understood to be the result of a burn in early life. The old Anglo-Saxon alternative of *fossa* or *furca*—drowning on the gallows—would have met Mr. Bruce's difficulty. If capital punishment is to be continued at all, in Rutterford's case there is an egregious failure of justice, for his crime is reported to have been a murder of the worst type.

The Senatus Academicus of the University of Edinburgh has confirmed the decision of the Professor of Chemistry against the claim of Miss Pechey to be admitted to a Hope Scholarship. We do not think that the Senatus could, in the interests of the University, have come to any other decision. But the supporters of the lady will raise, no doubt, a cry of injustice, which, *primâ facie*, is not without foundation. This, however, we may safely prophecy, will not be the first of the troubles which the admission of female students to study Medicine will bring on the University. Miss Pechey's friends, it is said, will appeal against the decision.

A board of magistrates for the county of Berks have dismissed the case against the small-pox rioters of White Waltham. The defence successfully set up was that, while a local board has power to erect a pest-house in its own jurisdiction, it cannot go out of its own district to do so unless with the concurrence and consent of the sanitary authorities of the place where the Hospital is to be erected.

The members of the late board of guardians of St. Pancras have been completely thrown out by the votes of the ratepayers in the recent election.

Dr. Charlton Bastian states in a letter to the *Times* that he has made experiments which he believes go far towards the settlement of the vexed question as to the possibility of a so-called "spontaneous generation" of living things. He says that he has come to the conclusion that organisms are to be met with in hermetically-sealed vessels from which all air has been removed, and after the contained fluids have been raised to a very high temperature. He will shortly submit to the Royal Society a full account of his experiments. The letter we are quoting is a criticism on Professor Tyndall's arguments for the germ theory of disease, which Dr. Bastian urges are only good on the assumption that the low organisms usually associated with putrefactive stages cannot spring up *de novo* without parentage.

ARMY MEDICAL DEPARTMENT.

We regret to hear that, by telegraphic despatch from India, intelligence has been received of the death of Dr. W. H. Jephson, Deputy-Inspector-General of Hospitals, her Majesty's British Forces, Mecan Meer, Bengal. Dr. B. W. Marlow, Deputy-Inspector-General of Hospitals, in the same service at Secunderabad, in the Madras Presidency, has been obliged, on account of ill health, to return to this country before the expiration of his period of foreign service.

FISH OUT OF WATER.

King's College Hospital, we hear, is out of debt, and the authorities have immediately resolved on building a new wing.

THE ALEXANDER MEMORIAL PRIZE.

The adjudicators of this prize are, we believe, Dr. Beatson, C.B., Inspector-General of Hospitals, Principal Medical Officer at Netley: Dr. C. A. Gordon, C.B., Deputy Inspector-General of Hospitals, Principal Medical Officer at Portsmouth; and Dr. Aitken, Professor of Pathology in the Army Medical School, Netley. The number of competitors is still limited to five, no essays having, within the prescribed period, been received from Medical officers of the army on foreign stations. The result will probably be declared in the latter end of May or early in June.

THE SHARPEY MEMORIAL.

It will be in the recollection of our readers that some time ago a number of the old pupils and friends of Dr. Sharpey, the very distinguished and able Professor of Physiology at University College, determined to offer him some tribute of regard. It was originally intended that a fund should be raised, the interest of which should be devoted during Dr. Sharpey's lifetime to his own use, and should ultimately be applied to the establishment of a permanent "memorial," in the form of a Travelling Studentship, Scholarship, or Fellowship, to be founded in University College, and to have Dr. Sharpey's name. Dr. Sharpey, however, courteously declined to accept any pecuniary benefit from the proposed fund, and it was ultimately determined, with his entire approval, that the memorial should take the shape of a Physiological Scholarship, to be awarded by competition to a student of University College, who shall have duties assigned to him in the laboratory of practical physiology in the College. We are glad to learn that very considerable progress has already been made towards the realisation of the proposal, but we understand that further subscriptions are yet required. We are certain that there must be numbers of pupils of the most successful physiological teacher of our day who only require to be told that a scheme is on foot to do him honour to come forward immediately and fill the subscription list. Dr. Sharpey has presented his most valuable library of physiological and anatomical works to University College, the Council of which, we hear, intend to fit up a new class-room for the reception of the gift, and for the use of the class of practical physiology and histology. We hope that the Sharpey Library and Memorial may yield honour and satisfaction for many years to the very eminent man after whom they are named, and may aid the undying traditions of the College where he has laboured so well in transmitting his memory to a long succession of generations.

MR. TAYLOR AND THE SHEFFIELD HOSPITAL BOARD.

A meeting of the governors of the Sheffield Public Hospital and Dispensary was held last week, at which the case of Mr. Taylor and the Board of the Hospital was fully discussed. Mr. Earnshaw, at considerable length, gave a detail of all the circumstances connected with the case, with which our readers are already familiar. In conclusion, Mr. Earnshaw said:—

"The case, as put into the hands of Mr. Digby Seymour, was made to centre entirely upon the Mary Ann Wragg case, but the judge more than once said it had nothing whatever to do with it. Mr. Seymour, in his opening, pitched into the board without mercy; but, after hearing the evidence, and at the close of his address to the jury, he said, 'Before I sit down, I have a duty to discharge which I must do before the whole Court. In my opening address I spoke very severely about the weekly board's conduct in this Mary Ann Wragg business. I beg to withdraw every word of it. (Hear, hear.) Those gentlemen have acted honourably towards the plaintiff.' Then turning to the jury, he said, 'You are not to give damages to punish these gentlemen. They made a mistake simply, and they ought not to be punished, because they have acted honestly and uprightly. My client has suffered from their mistake, and you must give damages to compensate him for what he has suffered, but you must not give damages to punish those

gentlemen.' Mr. Seymour also said, 'I withdraw all that about the policeman,' but he could not withdraw it from the minds of the jury." (Applause.)

After a long discussion it was eventually decided that no further legal proceedings should be taken, that the weekly board had acted rightly in defending the action, and that the legal expenses of the trial should be defrayed by subscription. A list was opened, and £200 collected. In the course of the proceedings Mr. Burns appeared as the working man's representative, and said a strong feeling existed in their minds in reference to the proceedings that had been taken against Mr. Taylor. Mr. Taylor, to them, was a most valuable servant, and he for one must say that, in his opinion, the weekly board and the Medical staff have acted harshly and ungentlemanly towards him.

PARLIAMENTARY.—REGIMENTAL SURGEONS IN INDIA—THE GOVERNMENT MEDICAL REGISTRATION BILL—THE CONVICT RUTTERFORD.

In the House of Commons, on Thursday, April 7,

Sir T. Bazley asked the Under-Secretary of State for India why, in the consolidated pay of a regimental Surgeon of the Indian Army, was included a less staff salary than that which was granted to the commandant, a wing commandant, or even to the adjutant of a native regiment; also, the reason why regimental Surgeons were the only officers in India who had been deprived of the pecuniary advantage of the new Furlough Regulations of 1868, by the Government of India having ruled that they alone should be prohibited receiving when on furlough in Europe 50 per cent. of the salary of their appointments in India.

Mr. Grant Duff said the reason why the additional or employed salary, which his hon. friend called staff salary, of these officers was comparatively small, was because their unemployed salary had been recently raised, and was very liberal. With regard to the second point, it had attracted the attention of the department, and they were now in communication with the Government of India about it.

On Friday, in the House of Lords,

Earl de Grey, on presenting a Bill for the amendment of the law as to the registration of the Medical Profession, remarked that at present no less than nineteen bodies existed in the three kingdoms which were entitled to confer Medical licences, authorising the placing of their names in the Medical register. There were, moreover, considerable differences in the terms on which they admitted licentiates and in their examinations, and some gave qualifications for Surgery or Medicine only, while the insertion of any name in the register enabled such a person to practise in both branches. It was proposed, therefore, to substitute one examining body in each of the three kingdoms, and to insure a uniform mode of examination. The present licensing bodies, which were entitled to fair consideration on account of the services they had rendered to the Profession, were to propose to the General Medical Council a scheme for the constitution of this one body, and if within a certain time they did not do so, the Council would propose a scheme, which in either case would be submitted to the Privy Council for confirmation. The Council would also have authority to frame regulations for the conduct of the examinations and as to the course of study to be previously pursued, which would also require the confirmation of the Privy Council, thus securing the responsibility of a department of the Government. He hoped this measure would not be unacceptable to the existing corporations or to the Profession at large, and he proposed to fix the second reading for May 2, so as to give ample time for the consideration of it.

The Bill was thereupon read a first time.

In the House of Commons,

Mr. Whalley put a question to the Home Secretary on the case of the convict Rutterford, which Mr. Bruce declined to answer, as an unwarrantable interference with the grave and solemn duty in which he was now engaged in reference to this case.

Sir W. G. Armstrong has announced his intention to take upon himself the cost of the proposed new wing to the Newcastle-upon-Tyne Infirmary—viz., £2500. He has been elected a vice-president by the way of acknowledgement.

THE

LORD PRESIDENT'S MEDICAL ACT (1858) AMENDMENT BILL.

A Bill intituled an Act to amend the Law relating to the Qualification of Practitioners in Medicine and Surgery, and otherwise to amend the Medical Act, 1858.

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

Preliminary.

1. This Act shall be construed as one with the Medical Act (1858)—in this Act referred to as the principal Act—and with the Acts amending the same, mentioned in the first schedule to this Act, and those Acts and this Act may be cited together as "The Medical Acts, 1858 to 1870;" each of those Acts may be cited by the short title in the said schedule mentioned, and this Act may be cited as "The Medical Act, 1870."

2. In this Act the term "British possession" means any colony, plantation, island, territory, or settlement within her Majesty's dominions, and not within the United Kingdom. The term "General Medical Council," means the General Council of Medical Education and Registration of the United Kingdom. The term "Medical authorities" means, as regards each part of the United Kingdom, the authorities in that behalf mentioned in the second schedule to this Act.

Qualification for Registry.

3. After the date fixed for the commencement of examinations by the first Medical examining board appointed under this Act, no person who is not at that date qualified to be registered under the principal Act shall be registered under that Act, unless he has after examination by a Medical examining board appointed under this Act obtained a licence to practise in Medicine and Surgery under this Act.

Medical Examining Board.

4. For the purpose of conducting the said examinations and granting the said licences there shall be established in each part of the United Kingdom—that is to say, England, Scotland, and Ireland respectively—a Medical examining board, by means of a scheme confirmed by the Privy Council in manner provided by this Act.

5. The Medical authorities of each part of the United Kingdom may, before October 1 next, submit to the General Medical Council a scheme for the establishment of the Medical examining board of that part, and the General Medical Council, before January 1 next, may approve such scheme, with or without any alterations made with the consent of the said Medical authorities, and propose the scheme so approved by them to the Privy Council.

6. If in the case of any part of the United Kingdom a Medical examining board has not been established in that part on January 31, 1871, or if at any time there is no examining board for any part of the United Kingdom, the General Medical Council shall themselves forthwith frame and propose to the Privy Council a scheme for the establishment of the Medical examining board for that part of the United Kingdom.

7. The Privy Council shall cause notice of any proposed scheme to be sent as soon as may be to all the Medical authorities of that part of the United Kingdom to which that scheme relates, and during one month after such notices are sent, the Privy Council shall receive and consider any objections and representations made to them respecting the scheme by any Medical authority to whom such notice is required by this section to be sent, or by any three or more members of the General Medical Council. After the expiration of the said month, the Privy Council may make an order confirming the scheme, with or without any modifications therein, as they may think fit. The Privy Council shall give to the General Medical Council, and to all the Medical authorities of that part of the United Kingdom to which the scheme relates, due notice of any modifications they may propose to make in the scheme, and an opportunity to be heard with respect to such modifications. The scheme confirmed by such order shall come into operation on the day in that behalf in the order mentioned, or, if no day is mentioned, on the day of the date of the order, and shall have effect as if it were enacted in this Act.

8. A scheme for amending any previous scheme in force under this Act in any part of the United Kingdom may, from time to time, be submitted by the Medical authorities of that part of the United Kingdom to the General Medical Council,

and, whether so submitted or not, may be proposed by the General Medical Council to the Privy Council, and may be confirmed by the Privy Council, and the provisions of this Act respecting the notice of, and objections and representations respecting, and the confirmation and effect of an original scheme, shall apply in the case of an amending scheme.

9. A scheme for the establishment of a Medical examining board may provide, amongst other matters, for all or any of the following things: that is to say—(1) The number, appointment, duration of office, and qualification of the members of the board, and generally the constitution of the board. (2) The powers and duties of the board and the members thereof. (3) The quorum and proceedings of the board, and the mode of certifying and attesting documents required to be certified or attested by the board. (4) The relations between the General Medical Council and the board. (5) The fees to be paid on admission to the examinations conducted by the board, and the repayment of any part of such fees to unsuccessful candidates. 6. The application of the income derived from such fees in paying the expenses of the examinations (including the remuneration of the members of the board) and the other expenses of the board; and the application of all or any part of the surplus for the support of museums, libraries, or lectureships, under the control of any of the Medical authorities, or in contributions to the public purposes of any of the Medical authorities; and the application of the residue (if any) to any public purposes connected with the Medical Profession, or for the promotion of education in Medicine and Surgery, and the conditions, if any, to be complied with by any such Medical authority, or by any authority under whose control such residue is applied. 7. The date at which the board are to commence their examinations under this Act. 8. The duration of the scheme.

Examinations and Licences.

10. The General Medical Council shall, from time to time, propose to the Privy Council rules (in this Act referred to as examination rules) for regulating the examinations under this Act, and in particular for all or any of the following purposes: that is to say—(1) Determining the conditions of admission of persons to the said examinations, and in particular their age, general knowledge, and course of Professional study. (2) Providing for the admission to such examinations on special terms, of persons who hold Medical diplomas, degrees, or titles granted by any university, college, or body in any British possession, or any foreign country, or who have studied in any British possession or foreign country. (3) Determining the subjects of and method of conducting the examinations, whether practical or theoretical. (4) Providing for the superintendence by the General Medical Council of the examinations either by themselves or by persons appointed by them. (5) Securing the equally strict application of the rules, so that a licence under this Act may be granted on the like terms throughout the whole of the United Kingdom. (6) Altering any rules for the time being in force. The General Medical Council shall prepare the first examination rules at some date not later than one month after the confirmation of the original schemes for establishing Medical examining boards in each part of the United Kingdom, or at such later date as may be allowed by the Privy Council.

11. The Privy Council shall cause notice of any proposed examination rules to be sent as soon as may be to all the Medical examining boards and to all the Medical authorities of each part of the United Kingdom. During one month after the rules are so sent, the Privy Council shall receive and consider any objections and representations made to them respecting such rules by any Medical examining board or any of the Medical authorities, or any three or more members of the General Medical Council. After the expiration of the said month the Privy Council may confirm such rules with or without any modification, as they think fit. The Privy Council shall give to the General Medical Council due notice of any modifications they may propose to make in the rules, and an opportunity to be heard with respect to such modifications.

12. Each Medical examining board shall in the part of the United Kingdom for which they act hold examinations according to the scheme and rules made under the provisions of this Act. Sections eighteen, twenty, twenty-one, twenty-two, and twenty-three of the principal Act (which relate to the powers exercised by the General Medical Council and Privy Council over the Medical authorities with respect to the examinations) shall apply in the like manner as if the Medical examining boards were mentioned in those sections instead of the several colleges and bodies therein mentioned, and where under those sections any order of the Privy Council is made to the effect that any qualification granted by a Medical examining board shall not confer any right to be registered, that Medical examining board shall be dissolved by such order, and a scheme for a new board in its place shall be made under the provisions of this Act.

13. Each Medical examining board shall licence every person who passes the examination of that board in Medicine and Surgery, and not any other person, to practise in Medicine and Surgery, and the person so licensed shall be called a Licentiate in Medicine and Surgery, and shall be entitled to be registered under the principal Act.

Registration.

14. Each Medical examining board shall, as soon as may be after the close of each examination held by them, transmit to the registrar of the branch Medical Council of that part of the United Kingdom for which such board act, a list certified by the board of the persons who having passed such examination have been licensed by the board to practise Medicine and Surgery, and shall state in such list the addresses of such Licentiates, and the registrar shall forthwith enter on the register the name and addres of every Licentiate as contained in such list. The registrar for the branch Medical Council for Scotland or Ireland shall forthwith send to the registrar of the General Medical Council a copy, certified under his hand, of every entry so made. The registrar of the General Council shall cause every entry contained in such copy, and every entry made in the local register for England to be entered in the general register, and the entry in the general register shall bear the date of the entry in the local register, and shall show the part of the United Kingdom in which the licence referred to in such entry was granted.

15. Every person who is registered under the principal Act shall pay such fee, not exceeding five pounds, as the General Medical Council may from time to time fix. No person shall be admitted to the examination of any Medical examining board under this Act, unless he has deposited with the treasurer of the branch Medical Council of that part of the United Kingdom for which such board act the amount for the time being of the fee for registration. Such fee shall be repaid to an unsuccessful candidate, and in other cases shall be applied as a registration fee is applied under the principal Act.

16. If any person registered as a Licentiate under this Act obtains any Medical diploma, degree, or title, granted by any university, college, or body in any part of her Majesty's dominions, or in any foreign country, which diploma, degree, or title appears to the General Medical Council to be granted in respect of a higher degree of knowledge in Medicine or Surgery than is required for obtaining a licence under this Act, such person shall be entitled, subject to such rules, and upon payment of such fee not exceeding five shillings, as the General Medical Council may from time to time make and fix, to have such diploma, degree, or title registered in the register under the principal Act, in addition to his licence; and section twenty-eight of the principle Act shall apply to erasing any such diploma, degree, or title, in like manner as if it were the qualification therein mentioned. The General Medical Council may draw up from time to time a list of diplomas, degrees, and titles which may be registered in pursuance of this section, and may from time to time add to or diminish such list; but no person who has obtained a diploma, degree, or title before the same is added to such list, or the earlier date (if any) fixed by the General Medical Council, shall be entitled to have the same registered under this section; and the removal of any diploma, degree, or title from such list, shall not deprive any person entitled before such removal to have the same registered of his right to have the same registered.

17. With respect to registration, the following provisions shall have effect:—1. Where, under the authority of the Medical Acts, 1858 to 1870, the General Medical Council or any branch Medical Council direct the erasure of the name of any person from any register, the name of that person shall not be again registered in any register except by direction of the Council which directed the erasure, or by order of a court of competent jurisdiction. (2.) If the General Medical Council think fit in any case they may direct any registrar to restore to his register any name erased by him therefrom, and the registrar shall restore the same accordingly: (3.) The name of any person which has been erased from the register at the request of such person, or with his consent, shall be restored to the register on his application, on payment of such fee not exceeding the amount for the time being of the fee for registration as the General Medical

Council may from time to time fix. (4.) Each registrar shall keep his register correct in accordance with the provisions of the Medical Acts, 1858 to 1870, and the general regulations and special directions of the General Medical Council (whether made or given before or after the passing of this Act). (5.) Each registrar shall erase from his register the name of any person deceased. (6.) Each registrar shall from time to time insert in his register any alteration which may come to his knowledge in the address or legal description of any person registered. (7.) In the execution of the aforesaid duties, each registrar shall act on such evidence as in each case appears to him sufficient, subject to any regulations of the General Medical Council. (8.) Each registrar may erase from his register the name of any person who has ceased to practise, but not (save as hereinafter provided) without the consent of such person; and each registrar may send by post to any person registered in his register a registered letter addressed to that person according to his registered address, inquiring whether or not he has ceased to practise; and if the registrar does not, within three months after sending such a letter, receive any answer thereto from the person to whom it is sent, he may, within fourteen days after the expiration of the said period of three months, send by post to that person another registered letter, addressed to him according to his registered address, referring to the first letter, and stating that no answer thereto has been received by the registrar; and if the registrar does not within three months after sending such second letter receive any answer thereto from the person to whom it is sent, that person shall, for the purpose of the present section, be deemed to have ceased to practise, and his name may be erased accordingly.

Qualifications granted by Medical Authorities.

18. After the date fixed for the commencement of the examinations by any Medical examining board under this Act, none of the Medical authorities shall grant any of the qualifications mentioned in Schedule (A) to the principal Act as amended by this Act, or by any of the Acts mentioned in the first schedule to this Act, except to persons registered or qualified to be registered under the principal Act.

19. After the date fixed for the commencement of examinations by any Medical examining board under this Act, none of the Medical authorities shall grant to any person any of the titles of Licentiate mentioned in Schedule (A) to the principal Act, or in any of the Acts mentioned in the first Schedule to this Act, or in any title of Licentiate on the ground of the grantee's qualifications in Medicine or Surgery, or any branch of Medicine or Surgery.

20. Any of the Medical authorities may confer on a Licentiate under this Act without requiring him to pay any fee or pass any further examination in Medicine or Surgery the lowest Medical or Surgical degree granted by such authority, or the membership of such authority, or (in lieu of any licence granted by such authority before the passing of this Act) the title of associate or other title determined with the approval of the Privy Council by such authority, and may give to the person on whom such title is conferred the like rights and privileges, so far as relates to members of that body among themselves, as he would have had if such licence had been conferred on him. Where any scheme under this Act provides that all or any part of the surplus of income derived from fees shall be applied for the support of any museum, library, or lectureship under the control of any of the Medical authorities in any part of the United Kingdom, or in contribution to any public purpose of any of the Medical authorities in any part of the United Kingdom, such Medical authority, if required by the scheme shall, subject to the provisions of the scheme, confer such degree, membership, or title as aforesaid (in this Act referred to as minor Medical titles) upon any Licentiate who has obtained his licence in the same part of the United Kingdom and claims the same, without requiring him to pay any fee or to pass any further examination, and shall, subject to the provisions of the scheme, give to the person on whom the title of associate or other title is conferred, the like rights and privileges as aforesaid. Any of the Medical authorities may send a list of the persons on whom any minor Medical title is conferred as aforesaid to the registrar, who shall thereupon enter in the register in the column (if any) provided for that purpose, the name of such Medical authority opposite to the name of each recipient of such title.

Foreign and Colonial Practitioners.

21. Where any Medical diploma, degree, or title, granted by any university, college, or body, in any British possession, or in any foreign country, is granted in respect of a higher degree of knowledge in Medicine and Surgery than is required for obtaining a licence under this Act, the General Medical Council may from time to time place such diploma, degree, or title upon a list to be kept and published by them, and if at any time any such Medical diploma, degree, or title ceases to be granted in respect of such higher degree of knowledge as aforesaid they may remove the same from such list. All holders of any Medical diploma, degree, or title placed upon such list shall be entitled, with or without examination, and on such terms (but so that the fees do not exceed the ordinary fees) as the General Medical Council may from time to time determine, to be registered under the principal Act. No person who has obtained any such Medical diploma, degree, or title before the same is added to such list, or the earlier date, if any (whether before or after the passing of this Act), fixed by the General Medical Council, shall be entitled to be so registered, and the removal of any diploma, degree, or title from such list shall not deprive any person entitled before such removal to be registered of his right to be so registered. Where the General Medical Council are satisfied of the eminent Professional acquirements and character of any person who for more than ten years has been practising Medicine or Surgery in any British possession or foreign state they may by a special order direct such person to be registered under the principal Act.

Unregistered Persons.

22. If any person who for gain either practises Medicine or Surgery, or any branch of Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries, and is not registered under the Medical Acts 1858 to 1870, takes or uses any of the designations enumerated in Schedule (A) to the principal Act as amended by this Act, or by any of the Acts in the first schedule mentioned, or the designation of Licentiate in Medicine and Surgery or Licentiate in Medicine or in Surgery or in any branch of Medicine or Surgery, Professor of Medicine, Professor of Surgery, Physician, Surgeon, Doctor, or any designation used to distinguish duly-qualified Practitioners of Medicine or Surgery, or any branch of Medicine or Surgery, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding twenty pounds. If any person who for gain either practises Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries, wilfully takes or uses any of the above-mentioned designations to which he is not entitled, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding twenty pounds. The General Medical Council, and also any branch Medical Council, may take proceedings against any person for the contravention of this section, and no prosecution for the contravention of this section shall be instituted by any private person, except with the consent of the General Medical Council or some branch Medical Council. If any person shows that he is not a British subject, and not ordinarily resident in the United Kingdom, and holds a Medical diploma, degree, or title from some university, college, or body in any British possession or foreign country entitled to grant the same, such person shall not be liable to any penalty under this section. Nothing in this section shall impose any penalty on any person engaged solely in the cure or treatment of the diseases or injuries of animals, and not of human beings.

Miscellaneous.

23. No person who is not qualified at the time of the passing of this Act to be registered under the principal Act shall be entitled to be so registered unless he has qualifications to practise both Medicine and Surgery.

24. Where a person has obtained before the passing of this Act a qualification to practise in Medicine or in Surgery, or in some branch of Medicine or in some branch of Surgery, and not in all the branches of Medicine and Surgery, such person may be admitted to the examinations under this Act on such special terms as may be provided in that behalf by any examination rules under this Act.

25. The degree of Bachelor of Surgery, conferred either before or after the passing of this Act by any university legally entitled to confer the same, shall be deemed to be one of the qualifications described in Schedule (A) of the Medical Act.

26. After the expiration of three months from the date of an order confirming a scheme or examination rules under this Act, such order, and the scheme and rules therein referred to, shall be deemed to have been duly made, and the validity

thereof shall not be questioned in any legal proceedings whatever.

27. All notices and documents required by this Act to be sent may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of post; and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid, and properly addressed, and put into the post. Notices and documents may be in writing or in print, or partly in writing and partly in print, and may be sent addressed to the General Medical Council or the Medical authority, or to some officer of such council or authority, at the principal office or building belonging to such council or authority.

28. The fees payable in pursuance of any scheme relating to the constitution of a Medical examining board of any part of the United Kingdom shall be paid to the treasurer of the branch Medical Council of that part, and shall be applied by him under the direction of such branch Medical Council in accordance with the directions of such scheme.

29. The local register, and the general register, and the medical register so far as they relate to Licentiates under this Act, shall be in the form mentioned in the third schedule to this Act, and if necessary the names of Licentiates under this Act shall in those registers be arranged in a separate alphabetical series from the names of other registered persons; and the General Medical Council may add to such form a column for entering the names of the Medical authorities (if any) who confer minor Medical titles on Licentiates under this Act.

30. Any power given by this Act to, and anything authorised or required by this Act to be done by the Medical authorities of any one part of the United Kingdom, may be exercised and done by a majority of the Medical authorities of such part.

31. The Acts mentioned in the fourth schedule to this Act are hereby repealed to the extent and as from the dates in the third column of that schedule mentioned; provided that this repeal shall not affect anything done or suffered or any right acquired or accrued, or any offence committed, before such repeal takes effect, or any remedy or proceeding in respect thereof, or any power of the General Medical Council to make any order in relation thereto.

FIRST SCHEDULE.

THE MEDICAL ACTS.

Year and chapter of Act.	Title.	Short title.
21 & 22 Vict. c. 9 ...	An Act to regulate the Qualifications of Practitioners in Medicine and Surgery.	The Medical Act, 1858.
22 Vict. c. 21	An Act to amend the Medical Act (1858).	The Medical Act, 1859.
23 & 24 Vict. c. 7 ...	An Act to amend the Medical Acts.	The Medical Acts Amendment Act, 1860.
23 & 24 Vict. c. 66 ...	An Act to amend the Medical Act (1858).	The Colleges of Physicians Act, 1860.
25 & 26 Vict. c. 91 ...	An Act to incorporate the General Council of Medical Education and Registration of the United Kingdom, and for other purposes.	The Medical Act, 1862.
31 & 32 Vict. c. 29 ...	An Act to amend the law relating to Medical Practitioners in the Colonies.	The Medical Act Amendment Act, 1868.

SECOND SCHEDULE.

MEDICAL AUTHORITIES.

Medical Authorities in England.

The University of Oxford;
The University of Cambridge;
The University of Durham;
The University of London;
The Royal College of Physicians of London;
The Royal College of Surgeons of England;
The Apothecaries' Society of London;

Medical Authorities in Scotland.

The University of Edinburgh;
The University of Aberdeen;
The University of Glasgow;
The University of Saint Andrews;
The Royal College of Physicians of Edinburgh;
The Royal College of Surgeons of Edinburgh;
The Faculty of Physicians and Surgeons of Glasgow.

Medical Authorities in Ireland.

The University of Dublin;
The Queen's University in Ireland;
The King and Queen's College of Physicians in Ireland;
The Royal College of Surgeons in Ireland;
The Apothecaries' Hall of Ireland.

THIRD SCHEDULE.

Form of Register.

Licentiates in Medicine and Surgery.				Higher titles.
Date of Registration.	Part of United Kingdom in which examined.	Name.	Residence.	

FOURTH SCHEDULE.

Date and Chapter of Act.	Title.	Extent of Repeal.
3 Hen. 8. c. 11 ...	An Act for the appointing of Physicians and Surgeons.	The whole Act.
5 Hen. 8. c. 6 ...	An Act concerning Surgeons to be discharged of quests and other things.	The whole Act.
14 & 15 Hen. 8. c. 5	The privileges and authority of Physicians in London.	So much of section 2 as restricts persons not admitted by the College of Physicians from practising Medicine or Surgery, and section 3.
32 Hen. 8. c. 40 ...	For Physicians and their privilege.	Section 3.
32 Hen. 8. c. 42 ...	For Barbers and Surgeons.	Sections 2 and 3.
34 & 35 Hen. 8. c. 8	A Bill that persons being no common Surgeons may minister medicines, notwithstanding the Statute.	The whole Act.
18 Geo. 2. c. 15 ...	An Act for making the Surgeons of London and the Barbers of London two separate and distinct Corporations.	Section 8 from "and that they and all such," inclusive to end of section, and section 9.
55 Geo. 3. c. 194 ...	An Act for better regulating the practice of Apothecaries throughout England and Wales.	Sections 9 to 24, both inclusive.
21 & 22 Vict. c. 90	The Medical Act	Section 14, and so much of sections 18, 20, 21, 22, and 23 as relates to any of the Medical authorities, the whole of the proviso in section 21, and section 40, as from the passing of this Act, and sections 15, 19, 25, and 30 as from the date after which no person who is not a Licentiate under this Act can be registered under the principal Act, except so far as they relate to persons qualified before that date to be so registered.
22 & 23 Vict. c. 21	An Act to amend the Medical Act (1858).	Sections 2 and 3.
23 & 24 Vict. c. 7...	An Act to amend the Medical Acts.	Section 2.

REVIEWS.

Army Surgeons and their Works. By CHARLES ALEXANDER GORDON, M.D., C.B., Deputy Inspector-General of Hospitals, Army Medical Department. London: H. K. Lewis, 136, Gower-street. 1870.

IN the papers which Dr. Gordon has collected and published in the book now before us, he has presented his brethren in the army Medical service with a decidedly amusing, and by no means uninstructive, history of the department to which they belong, the materials for which, evidently collected at sundry times and in divers places, have been arranged into a continuous narrative to which a quaint dry humour imparts considerable piquancy. It is, however, to be regretted that the numerous official duties of the author should have prevented him from giving the work a more careful final revision for the removal of typographical errors. Dr. Gordon appears to have studied, *con amore*, not only the archæology, so to speak, but the palæontology and mythology of the whole race of Surgeons employed in war. He commences with Chiron, the centaur, who, being celebrated for the skilful appli-

cation of soothing herbs to wounds and bruises, had the early care of Æsculapius entrusted to him, the result of which training was that Æsculapius first appears in history in the character of a naval Surgeon, having accompanied Castor and Pollux in the Argonautic expedition, B.C. 1263, or, according to some authors, B.C. 937. On his return from this expedition, Æsculapius established the precedent, so frequently since followed by naval Surgeons, of setting up in private practice, in which he was so successful as to have interfered with the population of the lower regions to such an extent that Zeus, at the instigation of Pluto, got the Cyclops to forge for him thunderbolts, with one of which he struck Æsculapius dead—which appears to us to have been a very violent proceeding, only partially justifiable on the supposition that in those early days there was no General Medical Council to strike him off the Register!

Coming down to comparatively modern times, Dr. Gordon has exhumed for us the following delicious extract from the *London Gazette* for 1689, giving not only a description of the personal appearance of the Surgeon of what is now the 22nd Regiment, but a statement of the money value attached to him. The Surgeon appears to have *dis*appeared mysteriously, and the hue and cry is raised after him in the following terms:—

"Run away, out of Captain Soame's company, in his Grace the Duke of Norfolk's Regiment of Infantry, Roger Curtis, a barber Surgeon; a little man, with short black hair, a little curled; round visage, fresh coloured; in a light-coloured cloth coat, with gold and silver buttons, and the loops stitched up with gold and silver; red plush breeches, and white hat." The advertisement then proceeds:—"Whoever will give notice to Francis Baker, the agent of the same regiment, in Hatton-gardens, so that he may be secured, shall have *two guineas* reward."

Dr. Gordon traces the various transformations through which the Army Medical Service has passed from the earliest times, through the evil days when Hospital mates, while they remained unpromoted, "were liable to imprisonment in the same ignominious manner as a private, at the pleasure and caprice of the youngest ensign of his corps." "Nay," adds Dr. Gordon, "he was liable to be tried by court martial and flogged like one of the soldiers" down to the present day.

By giving a sketch of the services, writings, and opinions of those worthies of the department—Sir John Pringle, Girdlestone, Brocklesby, Donald Monro, John Bell, John Hunter (of which name there were two), Rollo, Jackson, Guthrie, Hennen, Bancroft, Ballingall, etc., etc.—highly interesting to all members of our Profession, but particularly valuable to those who belong to the Army Medical Service of the present day—Dr. Gordon has published a book which, to our mind, is exactly the sort of thing to wile away the monotony of a voyage or of a long journey up country in India. He also appears to us to have succeeded in his object of recovering back to the Army Medical Department the credit, which is its just due, of many sanitary reforms initiated by its members whose names hitherto are not only unrecorded in connexion with them, but the sole credit claimed by, and accorded to, amateurs and so-called "sanitary reformers."

Artistic Cookery: A Practical System suited for the Use of the Nobility and Gentry, and for Public Entertainments. With 80 engraved plates. By M. Urbain Dubois, Chef de Cuisine of their Majesties the King and Queen of Prussia, author of "Cuisine Classique" and "Cuisine de Tous les Pays." London: Longmans. 1870.

Such is the title of the superb volume in quarto which lies before us. It is evidently the work of a man who has passed his professional life in the kitchens of the most august and regal personages, and who condescends to enlighten the world. The curious thing is that such a man should select English as the medium of communication with the outer word. The truth is, as he himself says in his preface, that England, is now the land of cookery, *par excellence*, a fact which was previously not unknown to some of us. Most people associate the perfection of cookery with Paris, and so it may be among a select few; but there is much more good cookery in England than there is in France. In fact, ever since the time when every Frenchman would insist on having patties and on dining off numerous *plats*—all at a small cost too—French cookery has declined. And then we have the immense advantage of the best raw material going; our beef and mutton are the best in the world, our game will compare with most, no part of the island is too remote for a supply of fresh sea-fish daily. But to give a new tone to an old proverb, if we supply meat we must go elsewhere for cooks; our *chefs* are almost to a man foreigners. So also are the authors of our most esteemed treatises—Francatelli, Gouffé, and now Dubois.

The volume of the latter which is now before us is peculiar; it aims at the eye, as well as at the palate and stomach. It has been M. Dubois' aim to describe not only the most artistic modes of cooking fish, flesh, and we know not what all, but also to depict the most artistic way of placing it on the table. In fact, the plates of various dishes constitute the prime feature of his superb volume, which, if it has a fault, is that it soars above the ruck of mankind. We cannot all be kings, princes, or millionaires, and one is too apt, on looking at the volume, to say within himself—this may be all very well, but it is not for the like of me. Such a conclusion would be unjust, as it would be superficial. On no subject is the author more worthy of attention than on fish, whose natural history he would indeed seem to have studied with avidity, in order the better to cater to the palates of his royal masters. Now, speaking of fish removes generally, and the various ways of cooking them, he says:—"Boiled fish ought to have but one garnish—that is, peeled potatoes, steamed, and served very hot. The potato is the natural companion of the fish, and especially when the fish is boiled, and in this case should never be separated from it." This is surely within the attainment of all, yet how seldom—we might almost say never—are good, hot, smoking potatoes served with that portion of the feast which most lacks their presence! Again, he says:—"A fish which is not cooked long enough is not eatable; if it be too much done it loses its most precious qualities." After which he observes that "fish which have been in ice always require much longer time, and are more difficult to cook"—a remark which cooks in this country, where the use of ice is so extensive, will do well to bear in mind. Large boiled fish, says M. Dubois, require simple, light, delicate, and well-buttered sauces (as a writer M. Dubois is exceedingly fond of adjectives), which, as a rule, we never have in this country of melted butter, shrimp and lobster-sauce. There is no better means of attaining a light and properly-flavoured sauce than by adding to the butter which enters into its composition a proportion of the stock in which the fish has been boiled. This fact M. Dubois repeatedly points out.

Another matter of no little importance is the mode of cooking large fish. As a rule, in England they are cooked whole; but among people who use fish as a principal article of diet rather than as a kind of luxury, as we do, the plan is adopted of dividing the fish into slices before placing it in the kettle. This mode receives M. Dubois' warm commendation. We cannot say if that be the sole reason; but we can speak to the superiority of salmon freshly caught and so treated over salmon as it makes it way to our tables in London. The fish stock should invariably form part of the sauce with which salmon is served.

All through the book M. Dubois strongly insists on the employment of edible substances for ornamenting hâtelets—that is, the skewers used to hold everything in place; for he points out how awkward it is for some *gourmet* to be attracted by what looks a fine imposing truffle, and to find it inedible. In certain of his more imposing cold pieces, M. Dubois would seem, however, to use a good deal in the way of stands, supports, and what not, which would be liable to mislead the unwary and uninitiated.

It would be out of our province to enter into all the details of this elaborate volume; we can only heartily commend it to the consideration of all. There is an Eastern form of felicitation which says, "May you live a thousand years;" we rather think we can cap that by saying to our readers, may M. Urbain Dubois become your cook's oracle.

NEW BOOKS, WITH SHORT CRITIQUES.

The Edinburgh Medical Journal for April

*** Contains, among other valuable matter, a most excellent paper by Dr. Lauchlan Aitken, on "Pelvic Peritonitis and Pelvic Cellulitis," which we strongly recommend to our readers who are interested in, what we fear we must yet call, the ill-understood class of diseases peculiar to women, especially in the puerperal state.

What shall we Teach? or, Physiology in Schools, &c. By Edwin Lankester, M.D., F.R.S.

*** An able and instructive argument in advocacy of instruction in the laws of life as a branch of general education.

FOREIGN AND PROVINCIAL CORRESPONDENCE.

FRANCE.

In order to gather some additional information on Paris prostitution, and the means resorted to for the prevention of venereal diseases, I paid a visit to Dr. Clerc, one of the most active attendants of the St. Lazare Hospital. Certainly the Medical officers of that great prison should be *au courant* with this question; but I must say I have learnt nothing new, nothing more than what has been communicated by M. Léon Le Fort.

The Paris Surgeons, who have much to do with the treatment of venereal diseases, seem pretty well decided to look upon prostitution (intrepreted *vendre l'amour*) as a necessary evil, against which we cannot interfere as long as the woman who prostitutes herself is not diseased. Many hold that a woman has the privilege to sell her charms to whom she pleases, and that the Medical police only exists for the purpose of seeing that disease is not communicated to the purchaser. For this purpose, for the protection of the public health, men are appointed, whose duty it is to seize upon clandestine prostitutes, to carry them to the nearest station for Medical examination, so that, if found infected, they may be sent to St. Lazare for treatment. To show that prostitution in Paris is a commerce, like any other, over which the Government must watch, the mushroom trade was cited as a comparison. Here, too, agents are appointed for the purpose of seizing upon the venomous species; but in spite of this precaution, bad qualities are sold every now and then.

The officers *de moeurs* are but thirty in number for all Paris —a number altogether insufficient, I think. The average number of women sent to St. Lazare daily—thanks to the vigilance of these agents—is something like forty, showing that the officers are either very thorough in their duty, or else diseased women are very plentiful. There are two distinct sections at the St. Lazare Hospital: the carded women (*fille à carte*) are kept apart from the clandestine. M. Clerc is of opinion that the present system is a good one, and works as well as possible without too much interfering with personal liberty. Prostitution cannot be lessened by the authorities; it can only keep an eye over it, and see that it is carried on without infection. Nothing is so easy as to have a woman arrested for having communicated disease; and in the French army the soldier is forced to give the residence of the woman, or he is punished, and, if he gives a wrong address, he is equally punished. The master of a house who suspects his *bonne* of prostitution need but give her name to the Bureau de Moeurs, and she is immediately looked after. It seems really difficult to imagine what else could be done without adopting the measures proposed by M. Le Fort, but which to many persons seem rather severe.

I learn from high authority that the Faculty is on the eve of an important change, as regards the examinations for the Doctorate. The great dissatisfaction generally expressed by students against the third examination, especially as to its position, was probably the first cause for suggesting this change. It is no pleasant matter, indeed, after having devoted a long time to anatomy, physiology, histology, and dissections, which constitute the subjects of the first examination for the Doctorate, and to internal and external pathology, pathological anatomy, operative Surgery, and Surgical apparatus, of which is composed the second, to be finally called upon for an examination on natural history, physics, chemistry, and pharmacology.

The little which, as a general rule, is known of these accessory branches while in college is rapidly forgotten and replaced by other and more important studies. Really the student is in no humour to spend an extra six months or a year in the very midst of his Medical studies, in acquiring that which, from the moment the examination has been passed, will be forgotten, and for which in truth he will have but little use as a general Practitioner. This, the third examination, is therefore to be displaced, and to come first.

But other changes are intended. The present form of study obliges the student to undergo at the end of each year, for the first three years of his course, an examination called *fin d'année*. These examinations, of which the first treats of physics, chemistry, natural history, and the outlines of anatomy and physology; the second of anatomy and physiology complete; the third of internal and external pathology—are more nominal than serious. The candidate must show considerable ignorance not to obtain the modest note of *passable*, the last of the number, but just suffieient to push him through.

After these three years have elapsed, and the three examinations of *fin d'année* luckily over, the student is obliged to wait still one more year before he is permitted to present himself for the "Doctorate," for which the number of examinations is five, besides a printed thesis.

Now, the modifications which are to be introduced are the following:—In the first place, the so-called *fin d'année* examinations will be abolished; the period of study for the Doctorate is to last five years, with one examination each year. This will give the student ample time to follow the different Professors and courses of the respective branches on which he is to be examined. The so-much-complained-of third, as already stated, will be placed first, thereby approximating it as much as is possible to the "Bachelor examinations," for which the same branches are taught. The change is a good one in every respect.

BIRMINGHAM.

Birmingham, April.

THE PRESENT SYSTEM OF OUTDOOR MEDICAL RELIEF AT BIRMINGHAM.

A fair trial has been given, during the past twelve months, to the new Medical arrangements which the guardians thought proper to make a year since, and which consisted in a reduction of the Medical staff and making the Medical districts co-equal with the relief districts. From the report which was read at the first meeting of the new board, on Wednesday, April 6, we are bound to infer that the altered system of outdoor Medical relief has not been attended with the bad results which were predicted of it, and that the guardians were justified in the steps which they thought proper to take. The report speaks in the highest terms of commendation of the manner in which the Medical officers have performed their responsible duties during the past year, not a single complaint of neglect or want of confidence or skill having been made against any one of them. The guardians are unanimous in the expression of their belief that the poor, in a Medical aspect, have never been better attended to than they have under the new arrangements. The Medical officers are of one mind in stating that they are quite able and willing to do the work of their respective districts, but they complain of insufficiency of salary and of annual election.

In some of the districts the midwifery cases are very numerous, as many as 127 having been attended by one of the officers in the twelve months. Now, as these cases, at the best of times, are tedious, and interfere, more or less, with the regular duties of the Medical officers, we advise the guardians to appoint midwives to attend the ordinary cases of labour—of course under the supervision of the officers. This arrangement, we believe, would work satisfactorily, and relieve the officers to a considerable extent.

We are glad to see that the Medical relief of Birmingham has attracted the attention of Parliament, and, from the remarks which were made by Mr. Goschen, we may expect that, in one particular at least—permanency of appointment—the prayer of the Medical officers will be urged with legislative force upon the consideration of the guardians.

GENERAL CORRESPONDENCE.

THE FORTHCOMING ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

Letter from Mr. Barnard Holt.

[To the Editor of the Medical Times and Gazette.]

Sir,—I think it desirable I should at once inform you that, as other Surgeons of position and eminence who are my seniors intend becoming candidates for the Council of the Royal College of Surgeons, it is not my attention to offer myself on the present occasion. I am, &c. Barnard Holt.

14, Savile-row, W., April 13.

ON THE USE OF THE SO-CALLED "CROTONISED ETHER" IN THE TREATMENT OF TYMPANITIS AND FÆCAL OBSTRUCTIONS.

Letter from Dr. Rubio, of Barbacoas.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is natural to suppose that, in a tropical country such

as this, where the inhabitants lead an indolent and easy life, both on account of the overwhelming and exhausting climate and the abundance of crude and indigestible vegetable food, as also from the lazy and natural disposition of the people, there must be frequent sufferings on the side of the digestive functions. It is common, therefore, to meet colics with great quantities of gases in the abdominal cavities, and a large accumulation of fæcal matters in the intestines, whose presence causes, to a certain extent, a paralysis of the natural peristaltic movements, and the consequent perfect or partial obstruction to the free course of the fæces. As I have had to deal with many cases of this kind, they being an every-day occurrence in the country, I hope I may be allowed to point out the only medicine that I have used for some time in the treatment of these disorders, and I am happy to say that it has never failed either in my hands or in those of my Professional friends to whom I have made it known.

The accumulation of gases and fæces in the intestines is at times, as every Professional gentleman knows, one of the most troublesome and perplexing disorders that can come under our hands, and one that requires an active treatment not only from the danger of the present symptoms, but from the urgent necessity that there is of guarding off others that may come on which are equally destructive. The medicine that I am about to speak of has the great advantage of its easy administration in whatever state the case may be, and, besides, it does away with the necessity of having recourse to mechanical means of relief.

Allow me to cite the following case, which was the one that suggested to me the medicine, urged by necessity :—

Some time in the year 1866 I happened to be in the port of Fumaco. One morning, about half-past eleven, I was called to see a lady who, as I was told at the time, was suffering from pasmo (tetanus)—everything is pasmo among this people. The history of the case is this. It was Lent time. The patient, a lady, 66 years old, stout, tall, fleshy, and of a sanguineous constitution, of a sedentary and easy life, and very regular at her prayers, to which and to go to mass she consecrated all her time, took a fancy to fast the forty days of Lent. Let me tell you how fasting is observed in this and similar places, and probably in the rest of South America, so far as I have seen. To fast among this people is to breakfast late—that is to say, not to take the regular morning meal, but at noon; and as long as they take their breakfast at twelve in the day and eat no meat nor cheese, they think themselves authorised to fill up their alimentary canal with whatever they can, no matter as to the nature of the food, nor the quantity taken. It is true they take no dinner, but, with the name of collation, they will store in their stomach a bowl of prepared chocolate, and a regular allowance of bread at six in the afternoon. The consequence is that sometimes indigestion or various dyspeptic affections of one sort or another, and, at times, colics, flatulence, or fæcal obstructions, will supervene, and endanger the life of the zealous Catholic. And if, as it is generally the case, there is an habitual costiveness or torpor of the bowels, the mischief is greater.

So it happened in the present case. The lady in question, as I have said before, had been fasting for a number of days; she had not had a passage for four days. She was of costive habits, and she had been tympanitic and in pain since the previous afternoon—two or three hours after her common Lent repast.

The old women in the house had done all that they could possibly do to relieve the lady's ailments, thinking that she was with pasmo. They had applied a host of medicines, both internal and external. When I first entered the bed-room it was dark, and so full of people that it was with difficulty that I approached the bed, which had a strong smell of fried garlic in sweet oil, with which they had just smeared all the patient's body. Garlic is a favourite medicine for pasmo among this people. I had a regular struggle to force the greater part of the women out of the room, and to be allowed to open the doors and windows to permit the free entrance of fresh air, and to have sufficient light to see my patient. There she was, lying on a disordered and stinking bed. She was in great sufferings, with an anxious countenance, an enormously distended and painful abdomen, cold extremities, and a small and quick pulse. The patient was restless and exhausted. She had, now and then, hiccough, nausea, and a difficult and oppressive respiration; her knees drawn up against the abdomen; a copious perspiration; and in a state near to agony.

Her officious nurses had given her since the commencement of the attack—the afternoon previous—about three or four ounces of castor oil, two ounces of Epsom salts, some six or eight cups of chamomile tea, with sweet oil and laudanum. They had applied her some eight or ten injections of as many herbs as they could lay their hands on, some with castor oil, and others with almond oil and soap; and lastly they had injected one with turpentine and assafœtida, which had no more effect than the others had—that is, to be kept inside the bowel. Besides all this, my poor patient suffered a great number of fomentations and embrocations to the abdomen, and also all over her body, and, by the way of complement, all sorts of suppositories.

The moment the old lady saw me she stretched out her hands, begging me to give her some relief, that she might confess and die with tranquillity. After a few moments' reflection, and in an embarrassed position, as I had neither a medicine-chest nor a pocket case of instruments at hand, I made up my mind to do for her whatever I could, and I went out to a provision store where I had seen a few drugs (there is no drug-shop in Fumaco). I mixed in a phial ʒj. of croton oil, with ʒj. of sulphuric ether. I gave to the old lady twenty drops of this mixture in an ounce of cold water, with sugar. An hour afterwards I repeated the dose, and three hours afterwards from the first dose I had the satisfaction to see her much better. She had had three copious stools, had expelled large quantities of gas, and was comfortable. I gave her that night five grains of Dover's powder, and next day she was as well as ever, although a little weak.

Since that time the "crotonised ether," as I call it, is a favourite medicine not only with me, but with many other Doctors of my acquaintance to whom I have made it known. I have used it with great benefit to dissipate habitual costiveness and the flatulent propensities of old age and of feeble and hysterical patients, in doses of five, eight, to fifteen or twenty drops, according to circumstances.

I have found also the "crotonised ether" useful and really good to relieve that tympanitic and oppressed state of the bowel with fæcal accumulations, which is so apt to come on in the course of the various forms of typhoid fever, and in which state other purgatives are not only unsafe, but counter-indicated. In similar states of yellow fever it acts like a charm.

I am, &c. Felix G. Rubio, M.D.

Barbacoas, October 15, 1869.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 15, 1870.

Richard Quain, M.D., President, in the Chair.

A report on Mr. B. Squire's case of Ichthyosis, by Drs. Tilbury Fox and Hilton Fagge, was read. They said the prominences were mostly of epidermal scales.

Dr. Bristowe reported on the specimens of concretions from the vermiform appendix referred to him. They mostly consisted of indigestible vegetable matter.

Drs. Murchison and Bristowe reported on Dr. Payne's specimen of Pulmonary Obstruction. The evidence appeared to be in favour of thrombosis rather than of embolism. There was no source of emboli, and they found the very small arteries blocked even to the interlobular.

Dr. Payne exhibited two specimens of Tumours from the Liver, believed to be Syphilitic, and read notes of a third case. The tumours were hard, dry, white masses, which were surrounded by fibrous tissue forming a kind of capsule. They were quite different from any form of cancer, tubercle, or lymphatic growths. The structure was found on microscopical examination to be almost amorphous, the masses being composed of granular matter with some indistinct fibrillation. The capsule was composed of dense connective tissue, and there was in all cases some extension of connective tissue growth into the neighbouring parts. The first case was that of a man who died from ascites, the result of increasing obstruction of the liver, and who presented during life all the symptoms of ordinary cirrhosis. In his case the liver was generally granular and hard. There was unquestionable evidence of constitutional syphilis. In the second case the patient died of albuminous nephritis, his kidneys being well-marked specimens of the large fatty kidney. There were no signs of obstruction of the liver during life, and its general structure was found to be unaffected. There was no history of syphilis. In the third case there was more contraction and puckering of the liver than in the other two, but the appearance of the tumours was equally character-

istic. The patient had died from the effects of an accident, complicated with disease of the kidneys. No history of syphilis was obtained. There were no essential differences in the appearance of all these tumours, which were precisely what have been described by Dittrich, Wilks, and many other pathologists as syphilitic growths. The peculiarities of their minute structure were regarded (in accordance with the views of Virchow) as depending upon the formation and early decay of a fibrous structure, the homogeneous and amorphous character of the central parts being considered as evidence of degeneration rather than of incomplete organisation.

Mr. Arnott felt inclined to agree with Dr. Payne as to the vascularity in some very early syphilitic deposits. The appearances were, in fact, not always the same. Thus, Cornil and Ranvier described the structure as mostly nuclear, with no fine alveolar stroma, as in lymphoma. In one he had seen it consisted almost entirely of indifferent granulation material; in another there was a well-marked alveolar stroma, as in Hunterian chancre.—Referred to Dr. Fagge and Mr. Arnott.

Mr. Morris showed a specimen of Syphilitic Liver from a patient who had been in the care of Mr. De Morgan. The child had been healthy till 11, when it was seized with ophthalmia; at 12 and 13 the tonsils sloughed; and two years ago ozæna came on. The ulceration of the nose increased, other ailments followed, and death ensued. The peritoneal fluid was rather yellow, and contained lymph, which was also deposited on the surface of the intestine. The liver was puckered, and contained gummy nodules, the origin of which was uncertain, but which were supposed to depend on congenital syphilis.—Referred to same committee.

Mr. Nunn exhibited a specimen of Molluscum Contagiosum. This consisted of two elements, cellular and fibro-nuclear. He considered it due to contact with the secretion of secondary syphilis where the skin was tender, as in the groin. He noticed that the tubercle, when it lost its top, was like a wart, and he looked upon it as being intra-follicular. Beale said they came from the hair follicles. He thought the contact of inflammatory matter with the skin might explain the existence of venereal warts originating in the advanced stage of gonorrhœa.

Mr. Nunn also showed a specimen of Secondary Cancer of the Lung, which was peculiar as to growth and structure.

Mr. Hulke thought Mr. Nunn's notions as to the origin of molluscum contagiosum peculiar. He saw many at the Ophthalmic Hospital; they were mostly in children, on the face and eyelids. There was nothing in them to bear out Nunn's theory.

Dr. Bristowe had also seen a good many examples of the disease, but they had no relation to syphilis. He had seen several in the same family; if they had been syphilitic there would have been other traces of syphilis.

Dr. Payne had seen a little girl with repeated growths on the thighs, apparently from a vaginal discharge. Others existed on the forehead and behind the ears. It was conceivable that inoculation may have been effected by the fingers. In reply to Dr. Fagge, Dr. Payne said the microscopical structure was peculiar. There were very large nuclei attached to epithelial cells.

Mr. Nunn said he did not contend that they were the result of syphilis purely, but of the matter of subacute inflammation, the corpuscles of which being transplanted gave rise to molluscum contagiosum.

Dr. Moxon reported a case of Syphilitic Deposit in the Heart, masses of fibre being deposited in the muscle, near the septum, and on the anterior wall. The left lobe of the liver was quite shrunk and almost gone. The diaphragm was bacony, nearly two inches thick. There were nodes on the tibia.—Referred to Dr. Fagge and Mr. Arnott.

Dr. Moxon also showed a specimen of ulcerative endocarditis. The woman had been recently delivered, and had been terribly neglected. She was purpuric when admitted. The disease existed in rare perfection. In the lung there were pyæmic abscesses. Also a third specimen of post-mortem perforation of the œsophagus, the stomach being entire.

Dr. Dickinson thought the opening looked somewhat artificial, as if accidentally made; the mucous membrane seemed more divided than the deep layer.

Dr. Moxon said the features were quite peculiar; the opening was rounded, its edges discoloured, and there were rice grains outside it in the pleura. Referred to Dr. Payne and Mr. De Morgan.

Dr. C. T. Williams exhibited a specimen of Disease of the Aortic Valves. The aorta was atheromatous, and its valves incompetent. One valve hung down like a tongue into the ventricle. It was attached lower down than the others. Its upper border was smooth, long, retroverted. In life there had been certain signs, as cough and shortness of breath; the pulse was that of aortic regurgitation, The urine was slightly albuminous. There was a diastolic murmur widely heard, and of a musical tone, probably from the smoothness of the valve.

Mr. Holmes, for Mr. Williams, of Norwich, exhibited a cast of an Enormous Calculus removed from the body of Sir Thomas Adams, a President of St. Thomas's Hospital, who lived 160 years ago, and was a great friend of Charles II. He lived till 81. After death a calculus weighing 25 oz. was removed from his body and given to St. Thomas's Hospital. It consisted of uric acid and urate of lime, which showed that the bladder was healthy, as there were no phosphates. The object was to verify the specimen.

Mr. De Morgan said that some years ago, when at Canterbury, he saw two enormous calculi which had been removed from the body of a man who had died of fever. The calculi were overlapping each other. There had been no complaint during life.

Mr. Holmes showed a specimen illustrating the effects of Potassa Fusa on Diseased Bone as recommended by Mr. Fitzpatrick. The patient was a boy with a bad ankle-joint, which was almost cured and anchylosed, but sinuses remained. He was unwilling to have recourse to any operative procedure, so tried the potassa cum calce. After two or three applications a large cavity was formed; then he had recourse to another and more extensive application, and left in a portion of the substance. Shortly pyæmia set in, and the boy died. The diseased bone was very imperfectly removed. The mechanism of the pyæmia was not altogether clear.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 2.

Dr. Graily Hewitt, President, in the Chair.

Arthur Farre, M.D., F.R.S., and Charles West, M.D., were elected Honorary Fellows of the Society. The following gentlemen were elected Fellows of the Society:—Joseph Randle Buck, L.R.C.P., Inkberrow, Worcestershire; F. C. Dodsworth, junior, M.R.C.S., Turnham-green; M. G. Evans, M.D., Narberth, Pembrokeshire; J. Moore Fisher, M.D. Edin., Norfolk-street, Strand; William Jones, M.R.C.S., Neath, Glamorganshire; E. R. Ray, M.R.C.S., Dulwich; Henry F. Scott, L.R.C.P. Lond., Croydon; John Whitehead, M.D., Holloway.

Mr. Oswald showed a case of Fœtal Monstrosity. The posterior portion of the cranium was deficient, and this part of the head had adhered to the uterus, thus giving rise to some difficulty in delivery.

Dr. Heywood Smith showed a Malformed Heart from a child that had lived for six days. It had exhibited the usual symptoms of cyanosis, and after death it was found that one ventricle only existed.

Dr. Playfair showed a specimen of Carcinoma of the body of the Uterus, from a patient who had been under the care of Dr. Priestley, in King's College Hospital. The prominent symptoms had been profuse and irregular hæmorrhages, alternating with abundant watery discharges of an intense fœtor. The uterus was freely movable, and the cervix apparently healthy. Death took place with symptoms of sudden collapse. On post-mortem examination, it was found that perforation of the anterior wall of the uterus had taken place, a ragged aperture about the size of a shilling existing in front of the right Fallopian tube.

Mr. Matthews, the Surgical instrument-maker, of Portugal-street, exhibited specimens of a guarded perforator invented by him.

The Baron Paul von Seydewitz, M.D., read a paper on "The Chloral Treatment of Eclampsia." After a brief account of the therapeutical uses of chloral, and of the opinions entertained by various writers as to its properties, the author detailed two cases of eclampsia in which it had been used. The first was that of a woman, 35 years of age, who was admitted into the Bürger Hospital, at Bâle, in November, 1869, suffering from endocarditis subsequent to delivery. Some time afterwards violent epileptic fits came on, and recurred with great frequency. A variety of treatment was adopted without success. Eventually chloral was administered, with the effect of at once arresting the fits, which did not recur, and the patient was discharged cured. The second was a boy 12½ years of age, a patient in the same Hospital, the details of which

case had been furnished by Dr. Rudolf Massini, of Bâle. He was the subject of Bright's disease, complicated with mitral insufficiency and uræmia. Violent eclampsia came on, as many as twelve convulsive attacks occurring between 11 p.m. and 9 a.m. on the following morning. Chloroform inhalations were used without checking the convulsions. In the intervals between the attacks he was perfectly unconscious and unable to swallow. Chloral was then injected hypodermically, with the effect of greatly diminishing the strength and frequency of the fits. After two more injections they entirely ceased, and the patient made a good recovery.

Mr. Spencer Wells hoped that when chloral was given its effects on the temperature of the body would be noted. He had seen it fall from 104° to 99°, after four 20-grain doses given at intervals of two hours. In a case of furious maniacal excitement he had seen last week with Dr. Monro, one 30-grain dose was followed by almost immediate calm and afterwards by sleep.

Dr. Playfair related the particulars of a case of threatened puerperal mania in which the chloral had proved of great service. The patient had become maniacal after a previous labour. A week after her present confinement, the same symptoms which had preceded her former attack showed themselves, restlessness and inability to sleep. A 30-grain dose of chloral at bedtime produced a long quiet sleep, and the same dose was repeated every night for a week. He had no doubt that the attack had by this means been averted.

Dr. Rogers had principally used the chloral as an anodyne and hypnotic. He had last evening prescribed it successfully for a child attacked with spasmodic twitchings of the left arm and leg accompanied with pain, due, he believed, to irritation of the brain from disease of the right ear. It certainly often causes a feeling of nausea, and in one case, now under treatment, where its use has been continued for two months to cause sleep, almost invariably the first dose is rejected; but, after waiting a few minutes, a repetition of the dose is retained with beneficial results.

The discussion on Dr. Braxton Hicks's paper on Puerperal Diseases was then commenced.

Dr. Wynn Williams, after complimenting the author on the great practical utility of the paper, went on to observe that few could for a moment doubt that the parturient female, if exposed to the influence of the scarlatina poison, might become affected with the disease, which would run its ordinary course modified and rendered more fatal by the peculiar condition of the patient. As to the second class of cases, he was rather sceptical as to their being affected with the scarlet fever itself, there being no symptom of poisoning by scarlatina, and the parties having been exposed to its influence did not satisfy him that they had imbibed the scarlet fever poison *per se*. Now it is well known that, during the prevalence of scarlet fever, the atmosphere is not only impregnated with impure air, but also with toxic septic emanations from the putrid throats of the patients, it may be in the form of vibrios with the septic poison attached. Should these emanations be brought into contact with the discharges of the parturient female, they would act as a kind of ferment and speedily cause them to become putrid also, thus giving rise not to scarlatina but septicæmia. With regard to treatment, if a patient is suffering from offensive discharges from the vagina, she must be treated locally, and, if necessary, this must be washed out with disinfecting fluid. For this purpose Dr. Hicks uses Condy's fluid; he (Dr. Wynn Williams) much prefers a solution of iodine, as by its volatility, increased by the heat of the body, it is more likely to be brought into contact with any septic poison lurking, it may be, in the folds of the mucous membrane. The same observations will apply to the other classes enumerated by Dr. Hicks, erysipelas, diphtheria, etc. That the parturient female, as well as the non-parturient, may be attacked with such diseases, none can deny; but, in the absence of any special symptoms indicating the nature of the disease, he would be much more inclined to attribute the malady to the effects of the peculiar condition of the atmosphere, loaded as it is known to be with putrid or septic emanations. When epidemics of these diseases are rife, bring any putrid emanation into contact with the discharges of the parturient female, and it would act as a ferment and produce septic poisoning.

Dr. Barnes was glad to see that Dr. Hicks had concentrated attention upon the causes of puerperal fever, postponing the question of treatment. Puerperal fever was pre-eminently a disease that called for the application of sanitary laws with a view to prevention. This disease still destroyed more lying-in women than any other probably in England, certainly on the Continent, where it killed so many women in lying-in Hospitals. The classification of causes pursued by Dr. Hicks resembled that adopted by himself of dividing puerperal fever into two great classes of autogenetic and heterogenetic. His own experience entirely coincided with Dr. Hicks's as to the frequency of scarlatina among lying-in women. It was propagated by foul linen, by sewage emanations, by direct convection. Dr. Hicks had noticed the frequency of puerperal fever in new houses. Dr. Barnes's former experience as a Medical officer of health enabled him to explain this. Builders dug out the gravel, sold it, and filled in with the foulest putrefiable rubbish. This was a prolific source of fever. Where scarlet fever broke out on the second or third day after delivery, he had seen reason to infer that the poison was inoculated at the time of labour. But in many cases the mother was subject to the influences of the poison before labour. During pregnancy, especially if she had had scarlatina before, she shared in the power which most of us had of throwing off the poison. It was only when the excretory organs were overpowered by the double work of dealing with the products of gestation and the poison, that the system broke down, and puerperal fever was produced. If he understood Dr. Williams rightly, he thought that the scarlatinal poison entering the lying-in woman worked mischief, not as scarlatina, but as something else. He had seen many conclusive proofs that the disease was always scarlatina modified by the puerperal state. The sore throat was often absent, the rash sometimes. The lying-in Hospital was a propagating house for every form of puerperal fever. The forms chiefly prevalent in Hospitals were scarlatina, erysipelas, and hospital gangrene. Considering the vast predominance of heterogenetic puerperal fever, the question arose whether there existed an essential puerperal fever arising strictly out of the puerperal state, that could give rise to an epidemic. This he was inclined to doubt. The autogenetic forms proper—those, for example, arising from the decomposition of retained placenta—did not appear to possess active powers of propagation. But we were rarely in a position in practice to distinguish the contagious from the non-contagious forms. The proofs of contagion were but too common. There were the frequent series of cases in the practice of one man, while neighbouring Practitioners were free; and he had had occasion to notice the sad fact that puerperal fever was unusually common among the wives of Medical men.

Dr. Snow Beck was glad to see that great advance had taken place, since the former discussions, in the diagnosis of the diseases met with during the puerperal period. It is now recognised that epidemic diseases affecting the puerperal patient retain their specific characters, although the usual symptoms by which they are recognised may be somewhat masked. He had long been convinced that there was no disease peculiar to the puerperal period that could be called puerperal fever. But there was another class of diseases which were not epidemic, and not infectious, and which were most important to be recognised, as they were very fatal in their effects, and yet remarkably amenable to treatment. These arose from the injurious impregnation of the system from offensive or other discharges, and were known as septicæmia. This not infrequently arose from the retention of coagula or portions of placenta within the cavity of the uterus. To admit of this, the uterus must be imperfectly contracted; and this condition also allowed the large uterine sinuses to remain open, and permit a ready absorption of offensive discharges. In these hitherto hopeless cases the treatment was singularly efficacious, and consisted in washing out the uterine cavity and all the passages with disinfecting solutions, and giving the various sulphites internally. It was, perhaps, yet to be determined what solution was the best, but it was a great step to know that this practice, which was at one time looked upon with so much apprehension, could be employed with little risk, and was followed by such decidedly beneficial results. A similar practice was equally efficacious in arresting the progress of phlegmasia dolens, which in the majority of cases arose from coagulation of blood in the veins, caused by the absorption of offensive discharge from the uterus. When these facts were more generally recognised, the supposed injurious effects of lying-in Hospitals, of overcrowding, etc., would cease to have much influence.

Dr. Taylor admitted that the scarlatinal poison was a frequent source of fever in puerperal women, but there were many other causes besides this. It would be desirable to know if a previous attack of scarlet fever rendered lying-in women less liable to an attack of puerperal fever.

Dr. Rogers thought very highly of Dr. Hicks's paper, but could not agree in the view that the term "puerperal fever" should be abolished. He thought the term should be retained

for those forms of septic poison arising from within, as from the absorption of putrid discharges or from the accoucheur having been recently engaged in handling morbid specimens or dissecting. The symptoms produced by such causes are markedly distinct from peritonitis.

The PRESIDENT concurred most fully in the views advocated in Dr. Hicks's paper. His own experience had led him to regard this disease as one produced in several ways; properly speaking, it was not an affection of an essential and special nature like measles or variola. He believed that the proportion of cases in which puerperal fever was the subject of self-poison was rather considerable; and further, that in such cases the disease was not seldom communicated.

Dr. BRAXTON HICKS, in thanking the Society for the kind manner in which they had received his paper, said that it was intended as a contribution to our knowledge rather than as a complete paper. There were many blanks to fill up which he hoped others would assist him in filling in. In one point, in particular, it was very important to gain information—viz., how frequently the parturient woman is exposed to the various contagions, and how frequently she suffers in consequence. He thought a committee of the Society would much forward our knowledge here. In answer to Dr. Wynn Williams he said that in the paper he had pointed out the various stages of the diseases—that first we had to contend with the primary poison; then, if the patient lived, with the tendency to imperfect reparation of the parts concerned in labour, metritis, peritonitis, etc.; and then with secondary affections, such as pyæmia and embolism. In answer to Dr. Taylor, he said that it was a certain fact that the patient was often infected by her Medical man, but the frequency of the occurrence was a point on which we wanted information. The relative care different Medical men took, such as in not going straight from one patient to another, doubtless influenced this. The poison of scarlatina was very readily dispersed, and the adult was generally protected by a former attack. In answer to Dr. Rogers, he had no means of knowing how long a woman ran risk of contagion after it had ceased to appear in the house. He had seen many women sacrifice themselves by attending their children, some without warning of the danger, and others in spite of warning

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners on the 11th inst., and, when eligible, will be admitted to the pass examination :—

Adams, John, of St. Bartholomew's Hospital.
Benham, Henry J., of University College.
Bonser, J. Hanbury, of St. Thomas's Hospital.
Brailey, William A., of Guy's Hospital.
Brewer, R. E. Wormald, of St. Bartholomew's Hospital.
Brittin, F. G. Morris, of the London School.
Burn, G. Wilson, of St. Bartholomew's Hospital.
Dunn, W. Allison, of St. Bartholomew's Hospital.
Dutt, Russick Laul, of Calcutta and University College.
Evans, Lewis, of the Glasgow School.
Frost, E. Spurr, of Pennsylvania.
Hale, C. D. Bowdich, of St. George's Hospital.
Hammond, Robert E., of the Manchester School.
Hepworth, William H., of the Toronto School.
Lewtas, John, of the Liverpool School.
Llewellin, George J., of Guy's Hospital.
Phillips, E. J. Montague, of the Liverpool School.
Price, Hugh P. J., of the Manchester School.
Rouse, Ezekiel, of the Edinburgh School.
Roy, Gopaul Chunder, of Calcutta.
Smithard, C. Lawson, of the Manchester School.
Spencer, Edward R., of University College.
Stocker, Charles J. W., of the London Hospital.
Stone, Charles H. Augustus, of Guy's Hospital.
Taylor, C. Lamb, of University College.
Turnell, Arthur P., of University College.
Wilkins, George, of the Toronto School.
Wilson, Samuel, of the Newcastle School.
Woodburn, W. Harrison, of the Glasgow School.
Woodhouse, R. Hall, of the Middlesex Hospital.

The following gentlemen passed on the 12th inst., viz. :—

Bowes, J. Ireland, of Guy's Hospital.
Chittenden, C. P. D., of Charing-cross Hospital.
Coltart, W. Wilson, of St. George's Hospital.
Davies, Arthur E., of University College.
Davies, E. Knox, of Middlesex Hospital.
Dawson, Thomas, of Guy's Hospital.
Finzi, Leon M., of University College.
Godfray, Ambaux, of St. Bartholomew's Hospital.
Graham, George W., of Guy's Hospital.
Harris, J. Delpratt, of St. Bartholomew's Hospital.
Jackson, G. E. C., of Charing-cross Hospital.
Jackson, James, of St. Thomas's Hospital.
Jay, W. Eugene, of University College.
Lee, Alfred R., of University College.
Murrell, Clement F. F., of St. Bartholomew's Hospital.
Parkhouse, Henry, of Charing-cross Hospital.
Parnell, Gerald C., of St. Bartholomew's Hospital.
Pilkington, W. Binns, of University College.
Ransom, F. Parlett, of King's College.
Rogers, E. C., of Guy's Hospital.
Ryott, M. Barrowley, of King's College.
Scale, George J., of Middlesex Hospital.
Stuart, H. Wood, of Guy's Hospital.
Taylor, John W., of Charing-cross Hospital.
Thrupp, James G., of St. George's Hospital.
Thomas, Howell J., of the London Hospital.
Willmott, J. J. Eardley, of St. Bartholomew's Hospital.

The following passed on the 13th inst., viz. :—

Baldock, Alfred, of St. Bartholomew's Hospital.
Bellingham, Joseph, of the Birmingham School.
Blackburn, Arthur, of University College.
Boadle, R. Maxwell, of St. Bartholomew's Hospital.
Chislett, H. Oakley, of the London Hospital.
Cottle, E. Wyndham, of St. George's Hospital.
Curtis, Arthur, of University College.
Eady, George J., of King's College.
Hacon, Walter E., of Guy's Hospital.
Holmested, P. Wakeham, of the London Hospital.
Jeakes, Thomas J., of King's College.
Jones, Henry W., of the Glasgow School.
Langdale, H. Marmaduke, of Guy's Hospital.
Lidderdale, James, of St. Mary's Hospital.
Maisey, Frederick T., of Guy's Hospital.
Maybury, H. Mansell, of St. Thomas's Hospital.
Measures, John W., of St. Thomas's Hospital.
Middlemiss, George, of the Glasgow School.
Philpot, Joseph H., of King's College.
Steele, Sidney T., of St. Bartholomew's Hospital.
Taylor, Herbert, of St. Bartholomew's Hospital.
Tudge, J. M'Dougall, of Guy's Hospital.
Wheeler, D. M. B., of Guy's Hospital.
Williams, B. Harvey, of Guy's Hospital.
Withers, Robert, of the London Hospital.
Worthey, Gilbert W., of St. Thomas's Hospital.

It is stated that 26 candidates out of the 109 examined failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their anatomical and physiological studies for three months.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, April 7, 1870 :—

Cable, George Hughes, Poole, Dorset.
Gravel, David Lloyd, Ruthin, North Wales.
Harvey, Thomas, Stonehouse, Devon.
Perkins, Chas. Edward Steel, Exeter.
Ray, Wm. Josh. Richd., West-square, Southwark.
Roper, William Robert, Cambridge.

As an Assistant in Compounding and Dispensing Medicines :

Squire, Frank Robert, Horncastle.

The following gentlemen also on the same day passed their First Professional Examination :—

Atkinson, John Charles, King's College.
Wagstaff, Thos. Henry, Middlesex Hospital.
White, Edmund, St. Mary's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

MILLER, JAMES WILLIAM, M.D. Ed. and L.R.C.S. Ed.—Surgeon to the Dundee Prison, *vice* Duncan, resigned.

PLOWMAN, R., L.R.C.P. Lond., M.R.C.S.E.—Surgeon to the Coventry and Warwickshire Hospital.

WILTSHIRE, Dr. ALFRED.—Physician for out-patients to the Samaritan Free Hospital for Women and Children, *vice* Dr. Sidney Hayward, resigned.

NAVAL AND MILITARY APPOINTMENTS.

DR. JOHN T. CADNY, Staff Surgeon to the *Himalaya*.

13TH FOOT.—Staff Surgeon Charles Christopher Piper, to be Surgeon, *vice* Patrick Kilgour, M.B., deceased. Staff Assistant-Surgeon James Watson to be Assistant-Surgeon, *vice* Charles Christopher Piper, promoted.

86TH FOOT.—Staff Surgeon John Vernon Seddall, M.D., to be Surgeon, *vice* Henry Titterton, M.D., appointed to the Staff.

104TH FOOT.—Staff Assistant-Surgeon Jeremiah O'Grady, to be Assistant-Surgeon, *vice* Robert Nasmyth Macpherson, appointed to the Staff.

MEDICAL DEPARTMENT.—Surgeon Henry Titterton, M.D., from 86th Foot, to be Staff Surgeon, *vice* John Vernon Seddall, M.D., appointed to the 86th Foot. Assistant-Surgeon Charles Christopher Piper, from 13th Foot, to be Staff Surgeon. Assistant-Surgeon Robert Nasmyth Macpherson, from 104th Foot, to be Staff Assistant-Surgeon, *vice* Jeremiah James O'Grady, appointed to the 104th Foot.

BIRTHS.

COOPER.—On April 8, at 8, Harley-place, Bow, the wife of the late J. P. Cooper, Surgeon, of a daughter.

HARTREE.—On April 8, at 27, Grosvenor-street, the wife of J. P. Hartree, M.B. Cantab., of a son.

LEVICK.—On April 7, at West Ham, Essex, the wife of George Levick, M.R.C.S.E., L.S.A., of a daughter.

MORRIS.—On April 6, at 13, Somers-place, Hyde Park-square, W., the wife of James Morris, M.D. Lond., Fellow of University College, of a daughter.

LOVEJOY.—On April 7, at 8, Portman-street, Portman-square, W., the wife of Dr. W. H. Lovejoy, of a son, who survived his birth only a few hours.

RAWLENS.—On April 5, at Francis-terrace, Highgate-road, the wife of Henry Armstrong Rawlens, M.R.C.S., of a daughter.

STUART.—On March 12, at 11, Kyd-street, Calcutta, the wife of Kenneth Bruce Stuart, M.D., F.R.C.S.E., of a son.

MARRIAGES.

M'CALLUM—TRACY.—On March 3, at Sivas, Asia Minor, Edward Henry M'Callum, Inspector of Ottoman Telegraphs, youngest son of the late Mr. James M'Callum, of Woolwich, to Rebecca Dana, second daughter of Stephen Tracy, M.D., of Andover, Massachusetts, U.S.A.

SIDDALL—BINNS.—On February 5, at Yokohama, J. B. Siddall, M.D., British Legation, to Mary Elizabeth, second daughter of Charles Binns, Esq., The Hall, Clay Cross.

WHITE—PULLIN.—On April 6, at St. Mary's Church, Atherstone, James Atkins White, M.R.C.S., Pendleton, Manchester, to Sarah Anne, only surviving daughter of John Pullin, of Atherstone, Warwickshire.

DEATHS.

BADHAM, ANNA, widow of the Rev. Charles David Badham, M.D., late of East Bergholt, Suffolk, at Tenby, after a few days' illness, on April 3, in her 62nd year.

HARRIS, JOHN PITT, M.D., LL.D., at Elham, near Canterbury, on April 6, aged 37.

HODDER, EMMA JANE, the wife of F. W. L. Hodder, Staff Assistant-Surgeon, at Toronto, Canada, on March 7, aged 22.

JEAFFRESON, SAMUEL JOHN, M.D., F.R.C.P., of Leamington, at Cannes, South of France, on April 2, in his 60th year.

WILLETT, MARY ANNE OXLEY, widow of John Willett, M.D., late of Bishop's Lavington, Wilts, at Southampton, on April 7, aged 49.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

ASYLUM FOR IDIOTS, EARLSWOOD, REDHILL, SURREY.—Assistant Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before the 28th inst.

BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before April 16.

CARNARVONSHIRE AND ANGLESEY INFIRMARY.—House-Surgeon; must be duly qualified and registered. Applications and testimonials to the Secretary, at the Infirmary, Bangor, on or before the 20th inst.

CORK SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL.—Medical Officer for the Intern Department, and Surgeon for the Extern Department. Candidates must hold the licences of the King's and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland. Applications and testimonials to the Board of Trustees on or before May 12. Election on the 13th.

HANWELL LUNATIC ASYLUM.—Additional Assistant Medical Officer; must have both Medical and Surgical qualifications and be registered, and not more than 35 years of age. Applications and testimonials to R. W. Partridge, Clerk to the Visitors, on or before the 21st inst. Applications must be made on a printed form, which may be obtained on application.

HUNGERFORD UNION.—Medical Officer for the Lambourn District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. H. E. Astley, Clerk, Hungerford, on or before April 26. Election on May 4.

KENSINGTON DISPENSARY.—Resident Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before April 16.

NORTH LONDON CONSUMPTION HOSPITAL.—Physician; must be a Graduate in Medicine of one of the Universities in the United Kingdom, and be M. or F.R.C.P. Applications and testimonials to W. Hornebrook, Esq., Secretary, 216, Tottenham-court-road, on or before April 18.

RETFORD GENERAL DISPENSARY.—House-Surgeon and Apothecary; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Dispensary Committee on or before May 1. The duties will commence at the end of June.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, EUSTON-ROAD.—Honorary Physician; must be M.R.C.P.L., or be a Graduate in Medicine of one of the Universities of Great Britain or Ireland, and not be engaged in the practice of pharmacy. Applications and testimonials to the Hon. Sec., S. S. Wigg, Esq., 33, Gordon-square, on or before April 30.

TEIGNMOUTH, DAWLISH, AND NEWTON INFIRMARY.—House-Surgeon. Candidates must be duly qualified, and members of the Church of England. Applications and testimonials to the Chairman of the Committee on or before April 18.

WEST RIDING ASYLUM, WAKEFIELD.—Dispenser. Applications and testimonials to Dr. Browne on or before April 23.

UNIVERSITY OF CAMBRIDGE.—H. H. Cunningham, late of the Charterhouse School, has been elected to the National Science Scholarship at Clare College.

COLLEGIATE MEETING.—Notice has been given that the adjourned meeting of the Fellows and Members of the Royal College of Surgeons "to discuss and consider the present position of the College with respect to probable legislation and the formation of a single examining board for each division of the United Kingdom," will be held on Friday, the 22nd inst., when the President will take the chair at 3 o'clock precisely.

COLLEGIATE EXAMINATIONS.—The following were the questions submitted to the candidates at the Anatomical and Physiological Examinations for the diploma of Membership of the Royal College of Surgeons on the 2nd inst., when 108 gentlemen presented themselves, and only 18 were referred:—1. Describe the position of the lenticular ganglion; mention the nerves with which it is connected, the branches which are derived from it, and their course and distribution. 2. Mention the average quantity of urine passed by an adult in twenty-four hours; state its specific gravity, and its chemical composition in health. 3. State the position of the cœliac axis, name its branches, and describe their course and distribution. 4. Name the nerves of the larynx, and describe their origin, course, distribution, and functions. 5. Name the muscles connected with the lower jaw, and describe the attachment of each to that bone. 6. Describe the physical and chemical qualities of the blood in the right and left side of the heart. On the 8th inst. another lot of 109 candidates underwent their written examinations, when the following questions were submitted to them, viz.:—1. Describe the arch of the aorta, and its relations to contiguous structures. Name the vessels which arise from it, and describe their course as far the upper opening of the chest. State the principal irregularities which occasionally occur in the origin and course of these vessels. 2. Describe the structure of the placenta, and the mode of its attachment to the uterus. Describe the circulation of blood through the placenta between the mother and the fœtus. 3. Describe the shape and structure of the trachea, bronchial tubes, and air-cells. 4. How is the heat of the fœtus maintained *in utero?* and how is it produced and maintained after birth? 5. Describe the position, shape, and attachments of the deltoid muscle. Name the different structures which are exposed on reflecting the deltoid from its attachments to the scapula and clavicle. 6. State the origin and insertion of the internal pterygoid muscles, and their precise action in mastication. Candidates were required to answer on each occasion four out of the six questions. On Saturday the final or Pass Examinations for diplomas of Membership will be commenced.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.—The quarterly meeting of this Association will be held at the Freemason's Tavern, Great Queen-street, Lincoln's-inn-fields, on Wednesday, April 27, at half past 7 p.m. precisely, when important matters relating to the establishment of Dispensaries in the metropolis, provincial Medical relief, and Dr. Brady's Bill for the superannuation of Poor-law Medical officers, will be brought before the meeting for consideration. As the subjects to be discussed will be found to be unusually interesting, it is hoped that the Profession generally will attend.

HEALTH OF SCOTLAND.—2,759 deaths were registered in the eight principal towns during March, 1,371 being those of males, and 1,388 those of females. This number, after allowing for increase of population, is 36 above the March average of the last ten years, but is 459 below the number registered in March last year. Of the 2,759 deaths, 1,050, or 38 per cent., were of children under 5 years of age. In Edinburgh, 28 per cent. of the persons who died were children under 5 years of age; in Aberdeen, 31; in Paisley, 34; in Dundee and in Perth, 36; in Glasgow and in Leith, 41; and in Greenock, 46 per cent.

VACCINATIONS IN THE ITALIAN ARMY.—According to a report by Dr. Baroffio, these amounted in 1868 to the large number of 57,000. The mortality from variola in the Sardinian Army was, until 1863, 7 per cent.; it then descended to 4 per cent., and is now 3½ per cent. The report shows the practice acts as a true prophylactic during the prevalence of epidemics, and that the vaccinations succeed as well in the winter season. The vaccination of the soldiers from arm to has never been attended by any of the complications concerning which so much exaggeration has of late prevailed.—*Gaz. Med. Ital.-Lombard.*, March 26.

A SPANISH DOCTOR'S BILL.—An extraordinary Doctor's bill has been sent to Mr. Thomas Charlton, of North Shields. Mr. Charlton is the owner of several large ships, and the master of one of them fell ill of a fever at Carthagena. He had to be brought on shore to lodgings. For attendance upon

lum while in the ship and fifteen days ashore at lodgings the Spanish Medical man charges the owner of the vessel £800, with £50 for his assistant; £150 is charged for the fifteen days' lodgings, and the whole amount for attendance on the sick captain, a good deal less than a month, is £1300. As the owner is held liable for all sick persons landed from his vessel, the little bill has been sent in to Mr. Charlton. He has brought the subject under the attention of the North Shields Shipowners' Society, and it is being referred to the Foreign Office.

HORSE-FLESH as food for man, in Paris, increased to 2758 animals, or 1,003,200 lbs. last year, being 337 animals, or 134,800 lbs. more than in 1868.

A PAPER, by Dr. Isidore Kopernicky and Dr. J. Barnard Davis, F.R.S., was read at the Anthropological Society of London, on Tuesday, March 15, "On the Strange Peculiarities observed by a Religious Sect of Moscovites, called Scoptsi." This curious Christian sect of a well-defined race was fully described in the paper by Dr. Barnard Davis from data supplied him by Dr. Kopernicky, of Bucharest, and it was accompanied by an anatomical preparation, which clearly demonstrated the character and amount of mutilation practised by the Scoptsi. That practice is based upon the twelfth verse of the nineteenth chapter of St. Matthew, and it has been carried out with such resolution and to so large an extent, that the Russian Government has been compelled to interfere and to punish with extreme severity all members proved to belong to that community. Hence the Scoptsi are forced to conduct their worship and to carry out their peculiar rites in the most secret manner; nevertheless, they contrive to amass great wealth, and as a consequence they possess considerable influence in districts in which they reside. Accident alone brought under the notice of Dr. Kopernicky the case of the individual whose body furnished the preparation laid before the Society. The paper, after entering at length into the modes of conducting the religious worship of the Scoptsi, their estimated numbers, their physical characteristics and other details, viewed the subject in its psychical aspect. Dr. Kopernicky was of opinion that this aberration in Christianity could not be explained otherwise than by the psychological peculiarity of the race of Moscovites in which it prevails. He indorsed the well-known views of the Rev. Dunbar Heath upon the difference which exists between the Semitic and "Aryan" races in their appreciation of the doctrines of Christianity, and held it to be an anthropological fact that the ideas and religious creeds, sound or absurd, moral or immoral, which are produced, or develope themselves among a certain race, depend greatly upon the character of the psychological sentiments natural to that race. That was the reason why Christianity was so readily accepted, and has taken such root among the Aryan peoples, and why, on the contrary, the Koran has had most success and most persistence among the Semites. An animated discussion ensued, in which the Rev. Dunbar Heath, Mr. Moncure Conway, Mr. Ralston, Dr. Spencer Cobbold, and others, took part.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Mr. Hayes, Dublin.—We shall be happy to publish the case. Please send on the block.

Dr. de Hurtzen.—We fear we cannot give you the information required as to Liebig's extract of meat. Please send translations.

L. H. A.—1. It must depend upon the rules of the Infirmary. 2. This also must depend on the rules of the Institution. Most probably the licence of the London Apothecaries' Society would be accepted.

A Fellow, Clifton, will see that his wish has been complied with in another page of this number.

Amicus, Fowey, is thanked for his interesting communication through a mutual friend.

C. H.—Messrs. Erichsen and Holden are Fellows of the College by examination.

A Radical, Southampton, will find the desired information in our advertising columns of this day.

Erratum.—In *Medical Times and Gazette*, April 9, page 392 line 27 from top, *for* "emphysema" *read* "empyema."

DUSTBINS AND DISEASE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—At the meeting of the Medical Officers of Health, in the paper by Mr. Liddle—reported in your columns last week—it is proposed to include amongst other nuisances "houses not provided with proper dustbins." Now, would it not be well to state what is meant by *proper* dustbins? The ordinary receptacles for dust are not at all fit and proper, either in a sanitary or an economical point of view; the ashes from firegrates are usually plentifully mixed with cinders by lazy servants, and, worse than this, the animal and vegetable scraps from the kitchen find their way into the dustbin. I should not trouble you if I had not a plan to propose, which appears to me a most important improvement upon the common method of keeping the ash-pit, it is to have an iron grating in the form of a lid attached by hinges to the top of the bin and secured by a padlock, to prevent its being opened excepting for the removal of the dust at stated intervals; the wire grating should be close enough to prevent anything but the cinder-ash going through, so that cabbage leaves and stalks, fishbones, and everything likely to become offensive and injurious to health can thus be excluded. The way in which these receptacles are usually crammed with decaying matter, and the *effluvia* arising from them, render them absolute "fever-nests;" so that, before the warm weather sets in, it will be well for the local boards, everywhere, to bestir themselves and put the Nuisances Removal Act into operation whenever action is called for in the interests of the health and safety of the community.

April 11. I am, &c. SANITAS.

TREATMENT OF ACUTE MANIA.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Doubtless most, if not all, of your readers have perused Dr. Gardiner Hill's case embodied in a letter which appears in your journal of the 9th inst. True, many Practitioners may simply remember the paragraph bearing upon the successful action of the "Hydrate of Chloral as a Hypnotic," but are we to understand that a gentleman so specially engaged in the practice of psychological Medicine puts this case before the eyes of his Profession generally as typical of his system of treatment? If so, I think the verdict will haply be given against him. The points to which I would call especial attention are these:—"The patient's well-developed *physique* was evidenced by her muscular power." She was in the prime of life, "age about 40;" "in a highly excited condition, in an eminent degree dangerous to herself and others." We are told, in a word, that it was a clear "case of acute mania." We are to judge of the powerful strength of the woman by the fact of "deal boards having to be nailed across the windows," and that three persons were not sufficient without "additional aid" to prevent her "proceeding to acts that rebuked all control." In this condition are prescribed "beef-tea between meals, porter at dinner, and whisky at bedtime, with a mixture of ammonia, ether, and decoction of bark three times a day." No improvement taking place (!) after three days, "port wine, and a grain of acetate of morphia, with Hoffman's ether," are substituted at night. When will our Profession speak out authoritatively against routine stimulation? I may be pronounced meddlesome, or cynical, or what you will, but, believing that fair and open criticism is the province of every Practitioner, beg to subscribe myself, Yours, &c. D. MCVEAGH.

Coventry, April 12.

A LACK OF HONORARY DEGREES.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—We London educated Practitioners have a serious grievance, and must ask for your powerful assistance. I have no wish to be guilty of egotism, but will merely mention my own case as one instance among a host of others. I studied during four years at a large London Hospital, living with and having the benefit of the instruction of one of the lecturers, and have during the last ten years been fully engaged in general practice, I now wish for some honorary degree in Medicine, either the Membership of the London College of Physicians or a University degree. The first I cannot proceed to, because the College will not permit its Members to dispense medicines to their own patients, and country Practitioners must as a rule do that. With regard to the second, I have written to the University of Edinburgh and the two of Dublin, offering to pass their examinations, but have received replies stating that it is impossible without residence—*id est* studying in their particular schools. I cannot possibly afford time for that; therefore, although I am willing to pass a stringent examination, including a clinical one in the wards of an Hospital, I shall be driven to get on the Continent what I am, I may fairly say, unreasonably prevented from taking at home.

Pray urge either the College of Physicians to relax their rules—"graduates of Oxford and Cambridge can, I believe, dispense"—or the Universities to throw open their examinations to those who can prove they have gone through as good a course of study as their own, "for surely one can learn the Profession as well in London as elsewhere." Trusting at all events that you will afford space for these few lines,

I am, &c. ROBERT M. INMAN, L.R.C.P.I., &c., &c.

Redbourn, Herts, March 21.

THE INFLUENCE OF THE SYMPATHETIC ON SECRETION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In the lectures of Claude Bernard which appeared in your journal of 1861, to which I have just had occasion to refer, I find so puzzling a change of opinion on certain very important points that I am anxious to know whether since their publication he has arrived at a settled conviction as to the correctness of the opinions decidedly expressed in the earlier lectures of the course, and whether he has cleared up the difficulties which presented themselves to him as he drew near the close of his lectures. He then arrived at the conclusion that an entirely fresh series of experiments was absolutely necessary. Can you tell me whether they have been performed, and with what result? I beg to refer you to Lecture XX., August 17, 1861. The main point is this—the influence of the sympathetic on secretion. At one time he insisted on the important influence of the former on the latter. But in this lecture he expresses the opinion that it is extremely doubtful. To which conclusion have subsequent investigations pointed? Has M. Bernard published any work since 1861, and, if so, could you refer me to it? In any case, if you could briefly express in your excellent journal the present position of the question, it would be very useful, I do not doubt, to others as well as myself. I am, &c.

April 4. RIP VAN WINKLE.

ERRATA IN DR. BALLOT'S ARTICLE ON BUTTERMILK.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—On reading my article on buttermilk, I find several faults, some unhappily rather serious. I will enumerate them in order.

Page 331, col. 2, line 19 from bottom, the sentence, "you would have expected to see it entered on the diet list," should read "you would have expected to see it soon entered on the *death* list." Line 3 from bottom, instead of the word "reprinted," read "of which mention is made in," as the article there alluded to was not reprinted in Schmidt's *Jahrbücher*.

Page 332, note (a), line 8, instead of "Dr. von Hoht," read "Dr. von Hohl."

Page 333, col. 1, line 6, where "quinine" is mentioned with amylene, dextrine, etc., as isomeric substances, instead of "quinine," read "gum"! Col. 2, line 34, omit the words "and bottle." The paragraph beginning at line 43, "When diarrhœa occurs," etc., should read as follows:—"When diarrhœa occurs, the buttermilk food is not to be set aside. Instead of wheat-flour, rice-flour may be added to the buttermilk; or buttermilk food and rice-water may be given half and half." Line 11 from bottom, "a scientific Doctor"—the person, in question was not a Doctor of Medicine, but, as we express it in Latin, "Phil. Natur. Doctor," Doctor of Science.

Page 334, line 9, for "this year," read "last year," *i.e.*, 1869.

I am, &c. A. M. Ballot.

Rotterdam, March 31.

COMMUNICATIONS have been received from—

Mr. T. Charters White; Surgeon-Major Yates; Dr. J. Rogers; Mr. R. Plowman; Mr. W. J. Nixon; Dr. J. W. Miller; Dr. G. E. Day; Dr. Thursfield; Messrs. John King and Co.; Mr. C. F. Maunder; Mr. J. Chatto; Dr. Ballot; Dr. Henry Osborn; Mr. T. Bryant; Dr. Cobbold; Professor Erasmus Wilson; Mr. H. Arnott; Mr. T. M. Stone; Dr. Buzzard; Sanitas; L. H. A.; Dr. Wiltshire; Mr. D. McVeagh; Dr. Day; The Medical Officer of the Privy Council.

BOOKS RECEIVED—

Le Climat de Pau, Sous le Rapport Hygiénique et Médical, par le Dr. Ed. Carrière—Salomons on Diseases of the Eye—Report of the Cumberland and Westmoreland Lunatic Asylum—Dr. Seguin's Remarks and Facts concerning Idiocy—What Shall We Teach? or, Physiology in Schools, by Dr. Edwin Lankester—British Policy in India, with Special Reference to the Nawab Nazim of Bengal, by an Englishman—Report of the Leamington Provident Dispensary—Dr. Tanner on the Diseases of Infancy and Childhood—Moore's Diagnosis of Indian Fevers—Biology *versus* Theology; or, Christ and the Christian Idea, viewed from a Biological Standpoint. By Julian.—Dr. Wickham Legg's Guide to the Examination of the Urine, 2nd edition—Practical Suggestions, by R. Rawlinson, Esq., C. B., Government Engineer, in Reference to Sewerage, Drainage, and Water-supply of Lunatic Asylums—New York Medical Journal, April—Quain on Some Defects in General Education—Professor Rolleston on Forms of Animal Life—The Rhine Saline Baths at Rheinfelden—Supplement to the Monthly and Quarterly Returns of the Births, Deaths, and Marriages registered in Scotland during the Year 1869.

NEWSPAPERS RECEIVED—

Nature—Oxford University Gazette, No. 8—Croydon Chronicle—Medical Press and Circular—Bristol Daily Post.

APPOINTMENTS FOR THE WEEK.

April 16. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Association of Medical Officers of Health, 7½ p.m. Meeting.

18. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

19. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Dr. Kelly, "Malformed Heart; Mitral Disease." Dr. C. T. Williams, "Disease of Mitral and Aortic Valves." Dr. Cayley, "Kidney from Case of Scarlatinal Dropsy without Albuminuria." Dr. Fagge, "Abscess of Liver; Cancer of Kidney; Varix of Pulmonary Vein." Dr. Peacock, "Aneurisms of Aorta; Perforation of Appendix Vermiformis." Dr. J. T. Dickson, "Brittle Bones in a Subject of General Paralysis." Dr. Morell Mackenzie, "Aneurisms of Aorta involving Recurrent Laryngeal Nerve." Mr. C. Heath, "Aneurism for which the Carotid and Subclavian Arteries have been Ligatured." Mr. Maunder, "Larynx after Croup; Myeloid Tumour of Jaw." Mr. Fairlie Clarke, "Opacity of the Cornea."

20. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Society of Arts, 8 p.m. Meeting.

21. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 8 p.m. Meeting.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

22. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Dr. Anstie, "Cases of Local Paralysis treated by Electricity." Dr. Buzzard, "Case of supposed Lepra Anæsthetica." Report upon Dr. Buzzard's Case by Dr. Hilton Fagge and Mr. Callender. Mr. T. Smith, "Idiopathic Necrosis of Skull." Mr. Kesteven, "Case of Epileptiform Stupor treated by Bromide of Potassium."

Quekett Microscopical Club, 8 p.m. Mr. N. E. Green, "On Ciliary Action in the Infusoria."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 9, 1870.

BIRTHS.

Births of Boys, 1207; Girls, 1151; Total, 2358.
Average of 10 corresponding weeks, 1860-69, 2109·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	859	772	1631
Average of the ten years 1860-69	746·3	707·4	1453·7
Average corrected to increased population	...	...	1599
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	6	7	...	19	...	3	3	3
North ...	618210	3	3	15	3	7	1	8	1	9
Central ...	383321	...	11	9	...	4	2	...	1	...
East	571158	3	3	12	...	10	2	3	3	2
South	773175	1	11	28	...	21	1	4	6	2
Total	2804989	8	34	71	3	61	6	18	14	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·901 in.
Mean temperature	45·5
Highest point of thermometer	65·5
Lowest point of thermometer	26·0
Mean dew-point temperature	36·2
General direction of wind	E. & S.S.W.
Whole amount of rain in the week	0·07

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 9, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending April 9.	Deaths Registered during the week ending April 9.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2358	1631	65·5	26·0	45·5	7·50	0·07	0·18
Portsmouth ...	122084	12·8	83	65	61·4	29 4	43·9	6·61	0·10	0·25
Norwich	81087	1·09	58	34	64·2	29·0	46·2	7·89	0·04	0·10
Bristol	171382	36·6	119	101	61·7	26·9	44·0	6·67	0·09	0·23
Wolverhampton ...	72990	21·5	42	37	65·3	31·5	46·1	7·84	0·18	0·45
Birmingham ...	369604	47·2	228	162	63·0	29·7	45·5	7·50	0·03	0·08
Leicester	97427	30·4	74	43	66·2	26·0	45·0	7·22	0·24	0·61
Nottingham ...	88888	44·5	50	51	61·3	27·4	44·6	7·11	0·01	0·03
Liverpool	517567	101·3	362	296	59·5	34·6	47·0	8·33	0·42	1·07
Manchester ...	374993	83·6	253	219	64·3	30·0	46·5	8·06	0·49	1·25
Salford	121580	23·5	84	65	62·7	31·1	46·3	7·95	0·47	1·20
Bradford	143197	21·7	101	85	58·6	33·5	46·1	7·84	0·00	0·00
Leeds	259527	12·0	138	120	62·0	31·0	45·7	7·61	0·00	0·00
Sheffield	247378	10·8	179	130	63·8	32·6	46·2	7·89	0·36	0·91
Hull	130869	36·7	77	60	62·0	24·0	42·8	6·01	0·12	0·30
Sunderland ...	94257	30·5	39	35	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	81	65	58·0	36·0	46·4	8·00	0·08	0·20
Edinburgh	178970	40·4	156	101	57·7	33·0	43·9	6·61	0·20	0·51
Glasgow	468189	92·5	360	302	56·3	30·5	43·9	6·61	0·27	0·69
Dublin (City, etc.*)	321540	33·0	145	157	61·5	29·0	46·5	8·06	0·42	1·07
Total of 20 Towns in United Kingd'm	7209603	33·8	4987	3759	66·2	24·0	45·4	7·44	0·19	0·48
Paris—Week ending April 9	1889842	242	...	1201	...	...	...	...	...	...
Vienna—Week ending April 2 ...	605200	167	...	397	...	...	37·6	3·12	...	...
Berlin—Week ending April 7 ...	702437	112	598	478	...	...	46·2	7·88	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·901 in. The barometrical reading increased from 30·16 in. at the beginning of the week to 30·36 in. on Monday morning, decreased to 29·31 in. on Saturday at noon, and was 29·37 in. at the end of the week.

The general direction of the wind was E. and S.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
Lecturer on Clinical Medicine in the University of Berlin.

I.—Cardiac Neuralgia (Angina Pectoris).

(*Continued from page* 382.)

I should like to refer to another experimental physiological fact in favour of the theory that the ganglia of the heart may be affected in consequence of a diminished blood supply, such as would result from disease of the aorta and narrowing of the coronary arteries. Bezold (a) observed that changes occurred in the action of the heart of the rabbit when he closed the large coronary arteries or several of their branches by means of bull's-nose forceps, after having previously cut the vagi, the sympathetic nerves of the neck, and the spinal cord in the neck. In the first ten or fifteen seconds no perceptible change could be seen, but then the heart's beats became slower and irregular, half or three quarters of a minute intervening (alternation of rapid and slow contraction), and after a minute or a minute and a half, the ventricles altogether failed to act. When the obstruction was removed pulsation began again, and soon became perfectly regular.

Through the vagus also may certain changes in the action of the heart, in some cases of angina pectoris, be explained. In most instances, it is true, the condition of the pulse negatives the assumption of irritation of vagus; it is frequent and small. In order to accommodate the theory to this effect, one would be obliged to assume some transient parctic condition of the vagus. But, as above mentioned, cases of pectoral angina are met with in which the pulse is diminished in frequency. Eichwald describes a remarkable instance of hysteria, the paroxysms of which were always accompanied by stenocardiac attacks, during the latter part of which the pulse was retarded in frequency, and the impulse of heart increased in power. The pulse was full and hard, but at the same time was slow, with long intervals; if the paroxysm continued a little longer the pulse became irregular, intermittent, and sometimes for minutes imperceptible. The heart's action was of similar character in two other cases of angina pectoris—in the one case affecting a hysterical woman, in the other an individual exhausted by pneumonia. In these cases the paroxysm was brought on by intense mental excitement; Eichwald is therefore of opinion that in such cases—*i.e.*, in hysteria—there exists a state of irritability of the vagus. In positive favour of this opinion is the circumstance that other symptoms are observed to occur within the district supplied by the vagus, as dysphagia and dysphonia; and that the alteration in action of the heart in this kind of pectoral angina closely resembles the experimental results obtained by irritation of the vagus—*e.g.*, if the irritation be slight, the heart's impulse becomes retarded, but stronger, as in the early stages of a stenocardiac attack; but if the irritation be more intense, as in the more violent attacks, the heart's action becomes slower, and even more or less ceases. The paroxysms of pain are likewise explicable on the theory of vagus irritation, inasmuch as the sensibility of the heart principally depends, as was shown above, on the ramifications of the vagus.

Pathological changes in the vagus have not been demonstrated in cases of angina pectoris, but a most remarkable case in some respects resembling angina pectoris has been placed on record by Heine,(b) in which amongst other changes some alterations affecting the vagus were also found. The patient had the remarkable symptom that the heart would often cease to beat for several seconds, generally during four or five beats of the pulse; during this interval the patient had an indescribable feeling of anxiety similar to that which accompanies the pain in angina pectoris. Such attacks have been repeatedly observed by Skoda in his clinic. This patient died, and at the post-mortem, which was made by Rokitansky, the right phrenic nerve was found to be involved in a firm dark blue mass consisting of calcareous concretions; of the pale greyish filaments constituting the cardiac plexus, the nervus cardiacus magnus, which originates in the plexus between the aorta descendens and the pulmonary artery, was found to be surrounded by a black nodule of the size of a hazel nut, and the nerve was thickened previous to its entrance into that nodule; the branches of the left vagus which run along the front of the left bronchus to the pulmonary plexus were similarly stretched by an underlying nodular lymphatic gland of a dark blue colour. In spite of the permanently acting anatomical changes in the cardiac plexus and the pressure on the branches of the vagus, which existed in this case, the disturbance in the action of the heart occurred paroxysmally, and during the intervals the patient felt perfectly well.

Two similar cases, in which periodic interruption of the heart's action coexistent with a feeling of extreme anxiety were noticeable, have been recorded by Landois(c) from the observations of Canstatt.

Now, there are also certain cases of angina-pectoris which occur in connexion with diseases in the abdomen, and which may be considered, from a physiological point of view, as reflected neuroses of the vagus. We know that, by irritation of the vagus in the abdominal cavity, arrest of the heart in its diastole may be produced(d) in just the same way as by direct irritation of the nerve. It seems, therefore, that fibres of the sympathetic enter the spinal cord by means of the communicating branches, and run along to the cervical region of the cord, the irritation of which is communicated to the centre of the vagus there situated. This is evident from the fact that irritation of the sympathetic has no effect on the heart after section of both vagi, or destruction of the medulla oblongata.

In reference to the possible participation of the vagus in the cardiac disturbances accompanying a stenocardiac attack, we have still to mention the *nervus depressor*, a branch of the vagus, discovered three years ago by Ludwig and Cyon, and so named in accordance with its physiological function. Important, however, as this nerve seems to be to the circulation, judging from the experiments made concerning it, yet its function has not yet been so well ascertained as to enable us to apply it pathologically. The depressor nerve, which has been constantly found in rabbits arising from the trunk of the vagus, or from the superior laryngeal nerve, causes decreased pressure of the blood when its central end is irritated. This decrease is caused by a diminished tone in the vaso-motor nerves, since diminution in the pressure of the blood by irritation of the depressor nerve occurs even when all the other nerves going to the heart have been previously cut; whilst, on the other hand, the diminution of blood pressure is very slight when the principal vaso-motor nerves of the body—the nervi splanchnici—have been divided previously to irritation of the depressor nerve. By this nerve considerable decrease in the pressure of the blood may be caused. We have here a remarkable arrangement, that, by irritation of a sensitive cardiac nerve, paralysis of vaso-motor nerves should be caused by reflection—*i.e.*, that enlargement of the calibre of the vessels should occur. The nerve under consideration seems to have power to act as a regulator of the pressure of blood; if the nerve be irritated by an abundant supply of blood to the heart, decreased tone in the vaso-motor nerves takes place (by reflection)—*i.e.*, a decrease in pressure of blood, the vessels being dilated, and the heart is then better able to empty its blood into the peripheric channels.

(*To be continued.*)

Berlin Registration Returns for 1869. — The births amounted to 30,101—*i.e.*, 15,471 boys (2394 of the number illegitimate), and 14,630 girls (2212 illegitimate). Twins occurred in 352 instances, and triplets in six instances. There were also 795 boys and 624 girls born dead. The other deaths amounted to 22,672—viz., 14,193 (7483 males and 6710 females) before the age of 15, and 8479 (4625 males and 3854 females) above that age. By excess of births and of immigration the population increased during the year by 37,445 persons. *Berlin Klin. Woch.*, March 14.

(a) v. Bezold, "Ueber den Einfluss, welche die Verschliessung der Coronar-arterien auf den Herzschlag ausübt."—*Centralblatt für die medicinische Wissenschaft*, 1867, No. xxiii. See also Suschtschinsky. "Ueber den Einfluss, des erhöbten und verminderten Blutdrücks und der verminderten Ernährung des Herzens (Verschluss der Arteriæ Coronariæ Magnæ), auf die Erregbarkpeit der peripherischen Endigungen des Nervus Vagus im Herzen,' in v. Bezold's Untersuchungen aus dem physiologischen laboratorien in Würzburg," 1867, II. Heft; and *Centralblatt*, 1868, No. iii., P. 33.

(b) Joseph Heine, "Ueber die Organische Ursache der Herzbewegung."—Müller's *Archives für Physiologie*, 1841, p. 236.

(c) L. Landois, "Der symptomencomplex Angina Pectoris physiologisch analysirt nebst Grundlienien einer rationellen therapie."—*Correspondenzblatt für Psychiatrie*, 1866.

(d) Goldz, "Vagus und Herz"—Virchow's *Archives*, vol. xxvi., pp. 1—33. J. Bernstein, "Herzstillstand durch Sympathicusreizung"—*Centralblatt für die med. Wissenschaft*, 1863, No. iii., p. 817; "Vagus und Sympathicus"—*Centralblatt*, 1864, No. xvi., p. 241; "Untersuchungen über den Mechanismus des regulatorischen Herznervensystemes"—Reichert und du Bois Raymond's *Archives*, pp. 614—616.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 383.)

The Effect of Cataract on Sight.—One or two opaque dots in the lens, or small striæ, may not interfere in any appreciable manner with vision. I have proved this by careful tests again and again. Early beginnings of opacity may be detected with the ophthalmoscope in the one eye, the other being cataractous or sound, before the persons so afflicted being aware that the eye is diseased.

When the opacity is sufficient to produce visual influence, the earliest effect is considerable indistinctness of distant objects, with mistiness of sight. Objects look as though they were viewed through a mist or fog, or a bit of glass that had been breathed on. This arises from absorption of the light in consequence of altorations in the lens tissue. Added to these, is impairment of the adjusting power, arising out of loss of lens elasticity. As the disease progresses, vision declines in proportion, and near objects are indistinct. Diffuse light is now avoided. Twilight light, or a dull light, or subdued, is preferred, because, with the expanded pupil therefrom, more rays pass through the lens. A patient shades his eye with his hand, and receives comfort from neutral tinted glasses, with dark sides attached, such as goggles. Sometimes there is that amount of intolerance to light, that associated disease may be justly inferred. Having watched many cases with reference to this, I can say that it has not arisen from any co-existing inflammatory state of the interior of the eye. After the cataract has been removed, and sight restored, this symptom has been lost. Of the nature of the complication, therefore, I am unaware. It may exist alike in the early cataract or in the fully formed. I have seen an infant 18 months old, with congenital cataract in one eye, who always closed that eye to exclude bright light.

Objects may be doubled or multiplied, and seen in fantastic forms. The moon is often mentioned, as showing such changes well. This arises from the different parts of the lens yet remaining transparent or nearly so. The refraction, as to where the image will fall, whether to a focus or the retina, or behind it, will depend on density of that portion of the lens yet transparent. Out of this may arise irregular astigmatism. With such marked lens changes, and alteration in curve, there may be phenomena, so complex and so confused, as at first to be with difficulty interpreted. A late patient of mine who had fully formed hard cataract in one eye, and incipient in the other, was in the habit, when in London, of going out to be amused with the multiplication and refraction of the street lights; the pyrotechnic effect was beautiful. Looking at the long train of lamps in Piccadilly was the greatest treat. A perfectly successful operation on each eye, proved that this peculiarity was due to the cataract alone.

Later in the disease, as the opacity proceeds, the flame of a candle is so obscured that its position only is discernible. Almost every cataract patient complains of muscæ; some have them very large and in showers. They matter nothing. Flashes, stars, fiery circles, bright metallic light, white spectra like silver, have nothing to do with the cataract, but are caused by other disease of the eye, and which generally spoils the eye, rendering it unfit for any operation.

Every Surgeon must at times be astonished at the slight disturbance to vision with cataract far advanced, when the natural diffused light is cut off, and the object looked at is well illuminated, particularly when the morbid changes are chiefly confined to the nucleus of the lens in elderly people, and to the centre of it in young.

In congenital cataract, occupying nearly the greater portion of the area of the pupil, there may be yet vision enough to enable some occupations in life to be followed, and education may be little interfered with.

It remains only for me to speak of what is usually described as acquired near-sightedness in cataract. This is not in reality myopia, in the true sense of the term. The exact state is quickly told. The patient loses the power of seeing distant objects, and is unable to define anything, however large, a few yards from him, but to his surprise he finds, if he have been presbyopic from age, or hypermetropic, that he no longer requires his convex glasses, because he can read within a few inches from his eyes. With this return of his near visual point, there is always a want of acuteness of vision, minute objects cannot be seen. This is a great puzzle. I saw a gentleman, aged 55, with nuclear opacity of one eye. He had been slightly hypermetropic. I saw him seven years later; the whole of the lens was opaque, the centre being the denser. There was, too, slight general capsular opacity. When I examined his eye with the ophthalmoscope no reflex could be obtained, and there seemed to be fully formed cataract.

I remarked that there was very little vision now remaining. He said I was mistaken, and asked me to give him a book. I covered the sound eye, and at the distance of eight inches he read No. 3 of Snelling's test type. The eye quickly fatigued, however. This was of course exceptional. I have met with three such cases.

The effect of cholesterine crystals has been mentioned among the complications of cataract.

Cataractous patients scarcely ever derive any benefit from convex glasses.

Cause of Cataract.—Although cataract may exist at all periods of life, no age being exempt, from that of the child in the womb, to that beyond the natural limits of man's existence, it appears to belong, as an idiopathic affection, more properly to infancy, when it is mostly capsulo-lenticular; and to advanced years, when it is usually lenticular. Of the exact nature of the change that produces the opacity, and the processes that regulate it, we know nothing, and our ignorance is generally told in the expression, that it is due to defective nutrition.

Experience teaches that cataract may follow certain states or circumstances which may be regarded as causes. Thus a wound of the capsule alone, may in a few hours cause both lens and capsule to be opaque.

Inflammation of the interior of the eye, specially of the anterior portion of the choroid, in which the ciliary region is much involved, may produce the same effect.

That cataract is common in young adults who have diabetes, and that it appears late in the affection is fully proved. There is not any peculiarity about such cataracts, except that they are always pushed forward by some changes in the eye posteriorly, and bulge the iris, this has been erroneously attributed to increase in the volume of the cataract, and that the cortex is whiter, than in the slower forming cataract of adult life.

I have seen cataract appear quickly after fever, in a young man much emaciated.

I recommend to my readers a *brochure* on the "Synthesis of Cataract," by an English physiologist, Dr. B. W. Richardson, who has conducted a very valuable series of experiments, in which it is shown that saccharine materials and saline, injected under the skin of some of the lower animals, produce cataract.

Lenticular cataract, which is seen after the forty-fifth year of age, cannot generally be accounted for. It appears without any palpable cause. Pathology and physiology do not yet afford any elucidation, and all the theories which have been advanced concerning it, some of which are very ingenious, are untenable. It must be remarked that we meet with it often in a complicated state, co-existing with other diseases, in the eye, either of an active type, or of a low.

Some Surgeons say that the difference between the senile changes in the lens, and hard cataract, is merely one of degree, and that therefore it cannot be said where such cataract actually begins. It is impossible to subscribe to this. Age merely never causes cataract, and the pathological cataractous atrophy of soft cataract, where there is no senile change, is precisely the same as that which occurs in hard cataract.

It is likely that complications often exist and escape notice, because we are not able to detect them. Perhaps all idiopathic cataracts, are the result of complicated disturbance, in the ocular circulation.

The healthier the eye, the slower does the cataract form.

Lenticular cataract, occurring before adult age, that is, soft cataract, is equally obscure in origin, but it is more frequently complicated than the hard. In the congenital form, it is not uncommon to have some other congenital defect of the eye. It is met with in disease of the brain and its membranes, and most frequently in hydrocephalus.

Opacity of the capsule, also, often cannot be accounted for; yet it would seem, more commonly than that of the lens, to be owing to contiguous inflammation, from the changes of thickness and density, that it frequently undergoes. In traumatic cataract, the capsule is nearly always opaque; and the anterior capsule and the posterior are affected. Except in congenital

cataract, the capsule is rarely found opaque, without there being evidence of some degree of inflammation in the eyeball, and the capsular changes are generally in proportion to the severity of the accompanying vascular action. Moreover, it is seldom altered in the uncomplicated cataract of the aged; or if changed, but slightly, often partially, and then only the anterior capsule is affected.

Hereditary influence has long been recognised. The surest evidence of this, is the development of double cataract at birth, or in childhood, one of the parents having been affected in one of these ways. Several children in the same family have been so diseased. In some instances, as the children have had cataract later in life, but always at the same age, the hereditary influence has been claimed.

Treatment. This involves the curing of cataract, the arrest of it, and the removal.

First as to the curing. It is supposed rather than proved, that the superficial portion of the lens and the capsule, may become cloudy in some forms of inflammation of the eye-ball, and recover their clearness. Such repair is not impossible.

In true cataract, or lens-element atrophy, I disbelieve in any cure by restoration. Assertions to the contrary have been made, but there is no reliable evidence as to their truth. A kind of amelioration is described as occurring in partial cataracts, by the absorption or removal of the damaged lens fibres. Such rare exceptions could have been seen but by very few men. The absorption is said to be the most likely in cataract of the superficial layers, especially in striated opacity of the middle portion of the posterior cortical stratum, and that it occurs most readily in young persons. The absorption is always incomplete, and the diminution of the opaque region is attended with corresponding diminution, and change of form, in the lens. It is in this way that vision which has been much impaired, or even lost, may be improved to a considerable extent, or partially restored, and remain stationary, if the rest of the lens does not become cataractous.

Some observers speak of disseminated opacities, occurring in irido-choroiditis, becoming removed. They attribute their locality to the hexagonal lens cells. Others state, that slight lens haze, in connexion with diabetic cataract, may disappear if the diabetes is arrested.

Next as to the arresting. This is the most difficult of the two questions. Cataract may stop at any period of its development, or proceed so very slowly that a credulous patient may readily believe in an arrest.

Some Surgeons believe that they have caused a check by general treatment, others by local applications, others by frequently tapping the cornea and letting out the aqueous fluid. I am among the great multitude of men engaged in ophthalmic practice, who doubt whether we possess any means of checking the progress of an uncomplicated lenticular cataract; at the same time, I must confess my belief in the probability of staying the disease when it is yet incipient, if it be complicated, and the palpable result of chronic inflammatory affection of the posterior part of the eyeball, provided the inflammatory cause can be absolutely checked. I am myself satisfied of having obtained such results. Acting under this belief, I invariably seek for inflammatory complications in every patient who consults me with incipient cataract, and finding such, treat it according to existing indications. In all cases too, whether palpably complicated or not, I endeavour to induce the patient to avoid means, so far as the eye is concerned, that may call into activity any other existing disease, by abstaining from exercising acute vision at short distances, and especially by insufficient light, so that the strain of supporting high adjustment shall never occur.

Constitutional implications may have an effect in quickly developing cataract, especially those states of system arising from mal-nutrition. Acting on this supposition, I should expect, or hope to retard the cataract, if I could restore the patient to better health, and most certainly I would try. When there is no trace of complication in slow developing cataract, I do not forbid the patient to use his eyes in any way which is not generally injurious to eyesight. I should not prevent him from reading and writing in moderation even by artificial light, nor from following any of his usual habits of life, which do not impair health.

(*To be continued.*)

THE Halford Testimonial Fund at Melbourne is progressing most favourably. The list of the committee embraces many of the most influential names in the colony.

ORIGINAL COMMUNICATIONS.

CASES IN WHICH THE PHENOMENA OF CHOREA AND EPILEPSY WERE REMARKABLY INTERMINGLED,

IN UNION

WITH MENTAL DERANGEMENT OF A PECULIAR CHARACTER.

By JAMES RUSSELL, M.D., F.R.C.P.,
Physician to the Birmingham General Hospital.

(*Continued from page* 363.)

Case 2.—E. W., aged 20, admitted September 16, 1868. She was admitted for heart disease, and presented a combined pre- and post-systolic mitral bruit. She had suffered from rheumatic fever six years previously. Her urine was free from albumen. Her cardiac symptoms rapidly improved, but other symptoms of a very different character then assumed prominence. She complained of severe pain over the apex of the heart and also in the inter-scapular region. This pain was at first supposed to be of the ordinary form of muscular pain, until the occurrence of an epileptic fit on the 29th drew our attention more closely to her ailments. We then discovered that the pain occurred in paroxysms of half an hour's duration, quite suddenly, and with such intensity as to render it difficult to keep the patient in bed. At the same time her face became flushed and perspiration broke out over her face and hands. At the close of the attack she generally slept. We also ascertained that she had been subject to frequently recurring fits of vertigo ever since the rheumatic fever, and to fits of severe pain in the front of the head; the attacks of vertigo and of pain subsiding as rapidly as they came.

On the next day (September 30), after the epileptic fit mentioned above, a second fit occurred leaving considerable mental disorder and severe headache, both of which lasted for three entire days and then ceased with remarkable abruptness. The pulse was 74, the pupils medium and active. Then the pain in the chest returned. On October 6 she was again disordered in her mind as she had been a week before. She was drowsy and abstracted, performed automatic acts, picking the bed-clothes, smoothing her night dress, brushing dust from our coats as we sat by her. She talked of us as though we were absent, and seemed to give vent to thoughts which were lying idly in her mind and had no reference to passing events. Pulse was 88, small and feeble. Pupils were of medium size and contractile. She again recovered quite suddenly next morning, and then was attacked with pain in her side.

From October 8 to the 30th she had numerous fits beginning with twitching and flushing of the right side of the face, then affecting the whole body with tonic spasm. Slight right ptosis and slight weakness of the right corrugator, or of the right angle of the mouth, followed one or two. In the intervals the chest pain recurred. On the morning of October 31 the nurse informed us that she had been obliged to feed the patient, as "she shook about as though she had the dance;" but at my visit an hour or two after nothing of this was to be seen. Later in the day, however, the left trapezius was observed in constant movement, and also her tongue and lips, preventing her from talking; deglutition too was difficult, it was effected with an effort reminding one of a person with a sore throat; the choreic movement extended in a slight degree to the body, and the face was then affected in the same manner, but with a symmetry in the bilateral movement not usual in the ordinary form of chorea. The pupils were contracted and little dilatable; her intellect was entire.

Meantime the fits and attacks of pain continued; the choreic movements subsided gradually; but they returned quite suddenly whilst the patient was at chapel on November 26. The movements remained fixed to the left side for four days; on the fifth day the right side participated, then they became considerable and dysphagia again manifested itself. On the following morning I found her sleeping with a handkerchief round the left wrist binding it to the bed in order to keep it quiet. The choreic movements continued on the right side—that last attacked—for five days only, the dysphagia ceasing with them; but they remained for at least a month on the left side, presenting the ordinary features of unilateral chorea. Still the epileptic fits continued to recur, and now she usually bit her tongue.

I had repeatedly noticed a very copious perspiration over the

left hand, and I learned both from the nurse and from the patient that whenever the movements occurred with more severity than usual the sweat poured off her left hand, the right hand being only moist.

Her eyes were twice examined ophthalmoscopically by our House-Physician, Dr. Welch, and by Mr. Denne, the House-Surgeon of the Eye Hospital. On each occasion they were found to be healthy.

She left the Hospital at the end of 1868 in the condition described above. I did not hear of her again until a month ago, when she again presented herself on account of rheumatic pains. She had not had any of the foregoing attacks for nine months.

Case 3.—E. H., aged 8. Her father died of "consumption" with laryngeal complication. Her mother is now losing her hair, and has had one miscarriage, but I can get no other evidence of syphilis. There is a decided rheumatic history in her mother's family. Three of the patient's brothers and sisters died young of wasting and of convulsions with bronchitis; four are living. The eldest, aged 11, the second, aged 10, and my patient have all healthy corneæ and healthy front teeth. The second child has just had an epileptic fit, having previously suffered from attacks of spasm in the left hand and arm. The fourth child (the next below my patient) has clear corneæ, front teeth of the first dentition, but presents a loud aortic bruit. I could not learn whether or not she had had rheumatism.

Ellen (my patient) had no fits during dentition. She was a precocious child. Repeated examination proves her heart to be healthy at the present time. Two years before her admission she suffered from left unilateral chorea, and the arm has remained weak ever since. She was admitted on May 26, 1868. Three days previously she had complained of toothache and headache; she was then seized with "snatching all over her," and became insensible. A second fit occurred on the day of admission. She was a fresh-coloured, lively, and very intelligent child. Her urine was free from albumen.

For the first three days of her residence in Hospital she continued to have one or two attacks each day. These attacks consisted of a single start, given at regular intervals of about ten seconds, affecting first her lower extremities, then extending by degrees over her entire body. The colour of her face did not change, tears rolled down her cheeks, and she uttered a plaintive cry, but she obeyed directions. The attacks left her after a quarter of an hour, pallid and inclined to sleep.

A month afterwards one or two attacks of fainting were described to us in which the face was flushed and the child was believed to be insensible; they passed off with violent sobbing and tears.

On July 12 (six weeks after admission) some want of power to control her movements was discovered; the child was restless and threw her arms about; then well-marked choreic movements developed themselves on both sides of the body in the course of one day (17th); she had also become very excitable, laughing very readily, but never crying. The epileptic attacks continued to recur at intervals of two or three days, generally the twitching, sometimes the "fainting" with complete muscular relaxation; but on July 28 an attack was attended with frothing and staring, the face was pallid, then became flushed; the body was first limp, then rigid, and tears rolled down her face. The choreic movements continued up to the period of her leaving the Hospital on September 24, 1868, with varying degrees of severity, being at times very marked, sometimes less severe; her articulation was also now so much impaired that she seldom attempted to speak. The left arm was very feeble, and hung almost useless by the side. This had not been observed since her admission. Her intellect had become dull.

On September 30, and for ten days afterwards, a remarkable irregularity in the beat of the heart was noted, a succession of very feeble beats being followed by a corresponding sequence of strong ones.

My friend Mr. A. Bracey, Surgeon to the Eye Hospital, thrice examined her eyes; at the first examination some hyperæmia of the disc was observed, but a month afterwards only slight vascularity remained, and again in another six weeks there was entire absence of hyperæmia, increase of pigment being the only change.

She left the Hospital on September 24, 1868. For a time she regained her former intelligence, but her fits have assumed more and more of an ordinary epileptic character, though her left arm partly regained power.

The last note made respecting her was on August 30, 1869, nearly a year after she left the Hospital. The fits were severe; paralysis had returned in the left arm, which hung useless; the hand almost without power to grasp. She had, also, slight general choreic movement, which prevents her from walking well. Her memory had become somewhat impaired, and she had lost her former bright intelligent expression. The sounds of the heart are pure, though feeble. Her pupils were small. Mr. Bracey again examined her eyes; he found the fundus healthy; the veins of the right optic disc were much bent.

THE ADMINISTRATION OF ANÆSTHETICS.

By A. ERNEST SANSOM, M.D. Lond., M.R.C.P.,
Physician to the Royal Hospital for Diseases of the Chest, and to the North-Eastern Hospital for Children.

The public as well as the Professional mind seems at the present time to be passing through one of those phases of terrorism which, induced by the news of a death during the administration of chloroform, occur from time to time. It is in vain to adduce the argument that, considering the vast number of times in which an anæsthetic is administered with comfort and safety, the danger is, proportionately, exceedingly small. If but one in ten thousand die, it is right that that one death awaken all our powers to avert the danger from those who come after.

It is a right time that we should take a retrospective glance, and attain an estimate of the present position of anæsthetic agents and their administration.

In the first place, we are not, as formerly, confined to the use of one agent. To ether succeeded chloroform, to chloroform amylene, tetrachloride of carbon, bichloride of methylene, nitrous oxide, besides many other agents less widely known, and various mixtures and superadditions of one anæsthetic and another. Chloroform, the most widely employed, takes almost all the blame of the disasters. To my mind, we are too much disposed to look upon the production of a state of insensibility, for the performance of a Surgical operation, as the administration of an agent rather than the induction of a state or condition. It is not the administration of chloroform, but the induction of anæsthesia, which is required. We have a power of selection now, which was not possessed in times past; a fatal case points less to the failure of an agent than to the imperfection of a system.

The first rule for guidance is—

A. The choice of an anæsthetic agent should be regulated by the condition of the patient and the requirements of the case.

If it be desired to relieve pain, as in headache or the slighter forms of neuralgia, I know no better agent than tetrachloride of carbon, whatever be the condition of the patient. If an operation of short duration is to be performed, the administration of nitrous oxide is probably the most indicated. This has the properties of quick action, induction of deep insensibility with rapid recovery. The use of this agent requires, however, apparatus and time for arrangement; it cannot be a measure for the many and for the moment. Yet, largely used as it is by dentists, it takes away from the general dangers of anæsthesia, by withdrawing from the greater risks of the other anæsthetics, a large class which was proved to be in aforetime peculiarly prone to danger. Certain conditions should, however, in my opinion, preclude the administration of nitrous oxide; these are pulmonary congestion, cardiac affections, and cerebral affections. When an operation of uncertain or of long duration is to be performed, the chief agents are ether, bichloride of methylene, and chloroform. Our data as to bichloride of methylene are, I think, as yet, insufficient. As we have seen lately, one death has resulted from its use. In a case in which I administered it for a dental operation, signs of syncope occurred, and I was obliged to substitute chloroform. The great question is, Does bichloride of methylene sustain the heart's action during profound anæsthesia with greater power than chloroform? To this question a wide practical experience (which, from *à priori* evidence, the agent greatly deserves) only can reply.

The agents which remain to be considered are ether and chloroform. Concerning the comparative action of these, I think we are justified in concluding that, while the latter is by far the more practicable agent, ether can induce a profound anæsthesia with less depression of heart's action than chloroform. If complete muscular relaxation be required, as for the reduction of dislocation, etc., it is better to use ether. For the great majority of cases the chief agent remains chloroform. The contra-indications to its use are the existence of prominent

signs of fatty degeneration of the heart (valvular disease is no contra-indication), *delirium tremens*, and habitual intemperance. In the first of these conditions it will be a question whether any anæsthetic at all shall be administered. Argument may fairly urge that the shock of an operation will be a danger to the feeble heart. On the other hand, there is the undoubted fact that chloroform can induce cardiac debility. The dictum that "a case for operation is a case for chloroform," can be at once set aside as a finality which would arrest all one's efforts to import greater safety into the practice of anæsthesia. Fortunately we have a method of relieving pain which can, as M. Claude Bernard has shown, go hand in hand with the operation of a volatile anæsthetic—the subcutaneous injection of morphia. Supposing, therefore, a patient having undoubted signs of cardiac degeneration be the necessary subject of an operation, I think no better plan could be counselled than the subcutaneous injection of morphia, followed, if necessary, by the inhalation of ether. In cases where the patient is the subject of habitual intemperance, the subcutaneous injection of morphia also is indicated. With this preparation chloroform may with care be administered instead of ether, which has a longer stage of excitement. Having made choice of an anæsthetic, another rule presents itself to us.

B. Especial care should be taken at the early stages of the administration of an anæsthetic, whatever that anæsthetic may be.

There is no doubt that the emotional disturbances which occur at such a time may induce dangerous and even fatal effects. Sudden death at the moment of commencement of an operation when no anæsthetic whatever has been employed, are far from uncommon. Such instances have occurred in the practice of Stanley, Desault, Civiale, Roux, Chopart, Cazenave, Gargangeot, and others, and have been recorded by many observers. Giraldès goes so far as to say that "the accidents which have been observed do not much surpass in number the cases of sudden death which have occurred without apparent cause during or soon after operations." From collateral evidence, however, we know that this, though a partial, is not a complete explanation of chloroform dangers. It is a significant fact that nearly half of the cases which have proved fatal (50 in 190) succumbed before the full effect of chloroform was induced. This leads to the consideration of a word, which I confess I do not like, that has been adduced to explain the catastrophes—idiosyncrasy. What does it mean? A condition of system inimical to chloroform *quâ* chloroform? It cannot be so, for we see that emotional syncope may occur without the anæsthetic element. Just as some people faint at slight causes—the scratch of a finger, the sight of blood, or an emotional effort—so some fatally faint at the commencement of an operation. Moreover, some of those who have suddenly died in the early stages of chloroform administration have previously inhaled with impunity. It follows that every effort should be made that the emotional disturbances should be calmed, and that the early stages of an administration should be conducted with care and caution. This eliminates one of the elements of the so-called idiosyncrasy inimical to chloroform. It is a condition of sympathetic susceptibility induced by any external agency. It will not, however, explain those deaths which occur in the more profound stages. We are led to a third rule—

C. In the administration of chloroform due regard should be paid to its well-established physiological properties. This may almost seem a truism. Yet I think that nearly all who have made this subject a special study will agree with me that the toxic action of chloroform is ignored in the common method of administration. No one can from experiment or from observation of the records doubt for a moment that chloroform does possess a toxic action; and just as with all other such agents its danger is dependent upon its dose. The most competent authorities agree that too strong atmospheres of chloroform are dangerous. For the purpose of inducing and maintaining anæsthesia a proportion of no more than four per cent. of chloroform vapour in atmospheric air is necessary; above six per cent. is dangerous. Strong atmospheres of chloroform administered to the human subject are dangerous in two ways—First, by their tendency, acting on the branches of the *par vagum* distributed to the lung, and thus by reflex action upon the heart, to cause shock or cardiac syncope.(a) This may occur at the early stages of anæsthesia or any period prior to complete loss of consciousness. Secondly, by direct paralysis of the cardiac and vaso-motor nerves. This can occur only in profound anæsthesia, though it also may be rapidly induced. When pure chloroform is sprinkled upon a piece of lint or a napkin, what percentage of the vapour is it possible for a patient to inspire? I have been at some pains to investigate this, and it may cause some surprise to those who have not practically inquired into the point to be assured that it is possible for a patient at a temperature of from 60° to 64° Fahr., when a drachm of chloroform is sprinkled upon lint, to inspire an atmosphere containing more than thirteen per cent. of the vapour.(b)

Of course a happy chance so regulates the matter that a patient does not usually inhale this proportion, and a skilled administrator will take care that he does not; but the possibility of the danger remains. How often in the details of the fatal cases it is recorded in some such fashion as this, "More chloroform was poured upon the lint, the patient inhaled and fell back, etc., etc." Why? because he suddenly inhaled a deadly dose.

Granted that a due dilution of chloroform is a necessary thing, how shall we obtain it? There is a widely spread objection against inhalers; they are not at hand at the moment they are wanted. I think they can be dispensed with if the chloroform employed be diluted with an equal bulk of absolute alcohol. By such a measure as this I have ascertained that, partly by the admixture of the chloroform vapour with the vapour of alcohol, but chiefly by the retarding power which the latter exerts upon the volatilisation of the chloroform, the percentage in the resultant atmosphere is reduced just one half. The above considerations eliminate another element of so-called idiosyncrasy. The effect of a sudden inspiration of a strong chloroform atmosphere is just as much toxic as the swallowing of an overdose of prussic acid. But it may now be urged that in some cases wherein you have exercised all care, and while you are administering only a proper dose of chloroform vapour, from some cause (perhaps connected with the operation) the heart may show signs of failing. We are led to what I think may be established as a rule.

D. In the course of the induction or during the maintenance of anæsthesia one agent may be advantageously substituted for another. Practically, in animals as well as in man, I have found that if in the course of chloroform administration there has been the least sign of circulatory debility ether substituted for the chloroform renews the power whilst maintaining the anæsthesia.(c) This is confirmed by my friend, Mr. Geo. Cowell, in a letter to these columns. In observations upon animals I have found that the substitution of any one anæsthetic for any other stimulates the heart.

Practical Rules.—Selection of cases having been made according to the principles before mentioned, I would suggest the following as rules for guidance:—

1. The administrator intrusted with the induction of anæsthesia should be provided with the following armamentarium:—A case of three stoppered bottles, one containing the mixture of chloroform and absolute alcohol, another pure chloroform, a third absolute ether. A soft handkerchief or porous material through the fibres of which, when covering the face, respiration can readily take place. A hypodermic syringe with suitable morphia solution.

2. The patient should have abstained from food as far as possible on the day of inhalation. Nothing whatever should have been taken for four hours.

3. The patient being, if possible, in the recumbent position, the administrator should place the handkerchief over the nose and mouth, so as loosely to cover them with a single fold, and note that respiration is unimpeded. The mixture of chloroform and alcohol should then be dropped on the fold, a few minims at first, and, after two or three inspirations, twenty or thirty, which should be renewed as often as evaporation renders necessary. This should be continued until the desired stage of anæsthesia is arrived at.

4. Ether may now be substituted if it is thought desirable, the fold of lint being moistened therewith.

5. In some rare cases it may be necessary (but only after tolerance has been induced by the administration of the dilution) to use some of the pure chloroform.

6. In case of any alarming symptom artificial respiration should be immediately practised.

(a) On this point see an exhaustive review of the whole subject of anæsthesia in the *American Journal of the Medical Sciences* for January, 1867, and Brown-Séquard's Lectures on the Physiology and Pathology of the Nervous System, p. 160.

(b) See tables appended to my paper read at the British Medical Association at Oxford, and reprinted from *British Journal of Dental Science* for September, 1868, and "On the Pain of Parturition and Anæsthetics in Obstetric Practice" in *Transactions* of Obstetrical Society of London, vol. x. p. 161.

(c) See observations by Dr. Greenhalgh, Obst. *Trans.* vol. viii. p. 52.

ON THE CONTAGIOUSNESS OF YELLOW FEVER.

By Dr. JOHN L. PATERSON.

The following episode, occurring in the course of the great epidemic of yellow fever that ravaged the seaport towns of Brazil from the end of 1849 to 1860, may still possess interest enough to warrant its preservation in the pages of the *Medical Times and Gazette*, complete as it is in itself, and comprising as it does in a nutshell, some of those questions that long and bitterly divided Medical opinion in regard to the natural history of that disease. So pertinently indeed does it appear, to my mind, to bear on these questions, that, were their issue still *sub judice*, I should almost have been tempted to rest their solution on it alone, strictly conformable as it is, moreover, to other evidence that keeps constantly cropping up, in less connected masses, but over a wider field, were I not every day reminded how the keenest arrows of our orthodoxy glance harmlessly from other minds.

The yellow fever made its appearance in Brazil first in Bahia in the month of November, 1849. In the course of from six to eight months it had spread, and gradually burned itself out all over the town and suburbs, lingering, as was natural, from the constant influx of fresh arrivals, longest in the shipping.

The last death on board of any English vessel from this first outbreak occurred on August 22, 1850. In the first week of September there was yet a death on board of a Sardinian vessel. From that date till the month of March, 1852, when the disease was reimported into the harbour, there was a complete exemption from the epidemic, as far as Bahia was concerned, alike on shore and in the shipping, no single case occurring during all those eighteen months, with the exception of those about to be related as constituting the episode in question.

In the end of April and in the beginning of May, 1851, there arrived from Rio de Janeiro, where the epidemic then raged with great intensity, two vessels—the barque *Gipsy* and the brig *Wanderer*—each having on board men suffering from the disease, and each having lost men from it on the passage. On their arrival I went on board, and learned that the master of the *Gipsy* had already had the disease in the West Indies. The master of the *Wanderer*, a namesake of my own, I had already treated for the disease in the preceding voyage, he being at that time mate of the vessel, his father, then master, dying of the complaint under my care. An apprentice was still on board who had then also had the disease.

I explained to each of the masters that every one on board, with the exception of those three persons, would almost to a certainty contract the disease; that in order to prevent its spreading to the other vessels in port, I would request their consignees to give them every possible despatch, and I hoped that they, for their parts, would avoid all unnecessary communication with other vessels, and would keep their men strictly on board, using hired boats for any unavoidable communication with the shore. The vessels lay about half a mile off, and at a considerable distance from the rest of the shipping. I also cautioned them against shipping any new hands, to supply the place of those who had already or might yet die of the complaint, till, at all events, they were ready for sea. The wife of the master of the *Gipsy* was on board, and landed the same day of my first visit on board. I am not quite sure what was the exact number of the crews; but believe the *Gipsy* started from Rio de Janeiro with eighteen, and the *Wanderer* with fourteen.

And now for the result. The three men I had exempted from the disease, though in constant attendance on the others, never had a symptom of it. All the others, with the exception of one man on board the *Gipsy*, passed through the complaint with the usual mortality of one in three, more or less. Not only so, my instructions as to shipping new hands were not carried out, and during the stay of the vessels in port, five new men were taken on board, and within a few days all the five had contracted the disease, three dying of it. With the precautions taken, the disease fortunately never spread to the rest of the shipping.

On June 16, the wife of the master of the *Gipsy*, who had landed six weeks before, and gone to live a mile or so in the country, never again having been on board or had any communication with the vessel except through her husband, who, himself, during the whole time in perfect health, slept on shore, but passed the day on board his vessel, was seized with the complaint, and very narrowly escaped with her life.

Thirteen men out of the two crews were treated in the British Hospital, of which I was then in charge. The last remaining one of the thirteen died on June 2. The ward stood with all the windows wide open night and day, and after his death all the bedding used by the fever patients was burned, the place thoroughly gutted, and whitewashed. No case of any other disease was admitted into the Hospital during the existence of the fellow fever there, nor for many weeks after, with one exception.

On June 5, three days after the last death, a sailor, from the barque *Indian*, suffering from some trivial disease, and probably more for the purpose of shirking work, insisted, against all my entreaties, on being admitted into the Hospital, to which, he asserted, he had a right. I unfortunately yielded. On the 20th of the same month he died of black vomit.

Is any comment necessary, or even possible, on these cases beyond their own simple tale?

Guernsey.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

ANEURISM OF THE PROFUNDA ARTERY CURED BY COMPRESSION.

(Under the care of Mr. ERICHSEN.)

We are indebted to Mr. Horace Turner, the House-Surgeon, for notes of the following cases:—

Thomas T., a builder, was admitted into University College Hospital March 11, 1870, with this history:—After following his occupation for many years in good health, about four weeks ago he began to feel some pain in the right thigh, about midway between the knee and hip. This pain was increased by movement, and was of a shooting, lancinating character. It gradually became more intense, but was always relieved by flexion of the thigh on the pelvis, at the same time bending the knee and lying on the side. The pain was also more or less constant, being worse at some times than at others. There was no swelling noticed until a fortnight after the pain was felt, and with the appearance of the swelling the pain nearly left him. At first the enlargement involved the whole thigh uniformly, but it gradually subsided from below upwards, until localised, as at present—viz., in the anterior and upper third of the thigh, where (March 14) it measures $20\frac{5}{8}$ inches in circumference.

Present Condition.—The tumour is deeply seated, separating the muscles on the front of the thigh, the adductors being pushed inwards and the extensors outwards. It is elastic, tolerably firm and imperfectly movable. It does not pulsate as a whole, and is not diminished by compressing the femoral artery at Poupart's ligament. This artery may be seen and felt to pulsate over the inner side of the tumour, as can also another anastomosing branch of some size, coursing along the outer side of the tumour. The femoral vessels appear to be pushed out of their normal position by this new swelling, and there are, in addition, signs of pressure on the veins at the upper part of the thigh, as the whole of the right lower limb is somewhat œdematous. No thrill is felt in the tumour, nor is any bruit heard. The skin over the swelling and in its neighbourhood is pale, smooth, and rather tense (this tension being rather lessened a few days after admission). No throbbing nor undue heat of the part is felt by the patient. Pulsation is distinctly felt in the popliteal and in the dorsal artery of the foot. Sleeps well, and has good appetite.

Dr. Wilson Fox examined the patient and noted signs of extensive aortic disease, and probably mitral also. A distinct aortic regurgitant murmur. Corrigan's pulse well marked; some emphysema and slight bronchitis; arcus senilis well marked. Patient ordered to keep as quiet as possible, and to take ℞ tinct. fer. perchl. ♏ xx., aqua f.℥j. t.d.

On March 16 Mr. Erichsen noticed a distinct thrill on the inner side of the tumour which was not present before, and a loud blowing bruit was also audible. The iron treatment was discontinued, a Carte's tourniquet applied, and the patient put upon the following diet:—Bread 6 oz. meat 2 oz. for breakfast, 2 oz. for dinner, and 2 oz. for supper. Milk one pint, to be sipped slowly, and ice to be sucked at intervals during the day.

Much difficulty being experienced in keeping the tourniquet

fairly adjusted, and the man complaining of the pain, Mr. Erichsen ordered on the following evening 40 grains of hydrate of chloral immediately, and 30 more grains to be given in the night if necessary. A dresser sat up during the night to attend to the instrument, and the man soon falling into a profound slumber from which he was seldom aroused, even by the readjustment of the tourniquet, good pressure was constantly kept up during twelve hours. Next morning (18th) at 9·30, Mr. Erichsen noticed that the pulsation of the tumour was much diminished, whilst the bruit was neither so loud nor so harsh. The thrill was also less distinct, and the whole tumour firmer, the circumference measuring 20¾ inches. The patient complained much of pain and soreness at the point of pressure. Digital pressure was therefore substituted for the tourniquet, and kept up without intermission by relays of students until 10 o'clock in the evening, the pulsation gradually decreasing, until it was by 10 o'clock completely suppressed. The tourniquet was now reapplied, and 40 grains of chloral given, the patient being very restless. After this he occasionally dozed, though still restless, and every now and then muttering in a rambling manner. He soon became more quiet, however, and again a dresser sat up with him during the night, and kept up a constant and effectual compression with the tourniquet, with the exception of one short interval.

At 9·30 next morning (19th) Mr. Erichsen could detect neither bruit nor pulsation in the tumour, the circumference of which remained the same, and partial compression was ordered for the rest of the day. At 10 p.m. the tourniquet was removed, the tumour still with no pulsation nor bruit, and feeling much firmer. Circumference, 19¾ inches. Some slight pain complained of in knee and in the tumour itself. The whole limb was enveloped in an elastic bandage, and the man kept perfectly quiet.

From this date the circumference of the thigh at the seat of the tumour steadily decreased, all else remaining in a satisfactory state until, by March 31, the notes taken by the dresser, Mr. Alfred H. Carter, showed that the circumference of the limb was very notably less, the tumour felt perfectly solid; appetite good; the man slept well, and complained of no pain.

ANEURISM OF THE COMMON FEMORAL ARTERY —DELIGATION OF EXTERNAL ILIAC ARTERY— RECOVERY.

(Under the care of Mr. ERICHSEN.)

Thomas W., aged 37, a cab-driver, was admitted October 25, 1869, with an aneurism the size of a hen's egg in the right groin. About two months previously patient had noticed a slight swelling in the right groin, but did not pay any attention to it, as it gave him but little inconvenience. Three weeks ago, however, he received a blow from the corner of a truck upon this swelling, which gave him much pain, and ever since then the swelling has rapidly increased, and now it is about the size of a hen's egg. There is so much pain in the aneurism, with coughing, that the patient is forced to hold the tumour in his hand at such times. The patient's father was subject to gout, and the man himself had had many attacks of this disease, but in other respects both the family and previous personal history were good. He had, however, been a heavy drinker for fifteen years, and for twenty years had smoked an ounce of tobacco daily.

State on Admission.—Patient is of rather low stature, somewhat thin, and with eccentric manners, but his general health seems good. He complains of a painful swelling in the right groin, pressure on the margin of which gives ease. He says that getting on to and from his cab gives him great pain. In the right groin is an ovoid tumour in the course of the femoral artery. It extends from one inch above to two inches below Poupart's ligament, pulsating very distinctly and eccentrically, the pulsation being diminished on pressure above the tumour in the line of the external iliac artery. Its boundary is well defined, and the wall of the aneurism is a little hard, but neither bruit nor thrill is detected.

On the 27th, the aneurism having notably increased in size and become more painful in the past two days, after the administration of a simple enema at 11 a.m., at 2 p.m. Mr. Erichsen proceeded to tie the external iliac artery.

Operation.—Chloroform being given, a crescentic incision four inches long was made, an inch higher than in Abernethy's method, as the aneurism involved part of the external iliac artery. The transversalis muscle was slit up on a director, and the transversalis fascia pinched up at the lower end of the incision, nicked, and then divided on a director. After this the knife was altogether laid aside. Mr. Hill held back the viscera with a butter-pat soaked in carbolic oil. Mr. Erichsen separated the artery with his finger and tied it with an ordinary ligature, deeming the carbolised gut ligature hardly safe with the amount of traction necessary for tying so high in the wound. Hardly any blood was lost. Interrupted wire sutures with alternate strips of plaster brought the edges of the wound together, and dry lint was laid over all. The patient was then returned to bed, the limb being swathed in cotton wool, with an elastic bandage over all, and an opiate was at once given, a grain of opium being ordered twice a day. Some little vomiting, with restlessness and pain in the seat of the aneurism, were complained of next day.

October 29.—Some erysipelas noted about the wound. Ordered ℞ Tinct. ferri perchlor. ♏x., aquæ ʒj., 4tis hôris, with linseed poultices to the part.

Next day the erysipelas had not spread, but considerable tenderness for five or six inches around the wound. Lead lotion was substituted for the poultices for a short time, ammonia draughts given, and the patient seemed much better, stating himself that he was "A 1, barring the cough." The leg and foot remained warm and perfectly easy.

31st.—Morning temperature 100·2°; pulse 78; respiration 20. A restless night. About a drachm of pus escaped from the wound on removal of two sutures, troublesome cough, and slight fur on tongue. A cough mixture with ammonia was given alternately with the iron. Brandy and wine made him sick, so his diet was mainly rice, milk, and custard pudding.

November 1.—After a wakeful night with delirium, the morning temperature was 102°, pulse being 84. He complained of pain in the toes, which were red and tender; the foot was, however, quite warm. The wound kept fairly quiet, the redness being limited to the margin only, and a little pus escaping into the poultices. Next day the pain and tenderness complained of in the toes had shifted to the left hand, but otherwise there was little change. The hand was wrapped in cotton wool. He slept fairly after an opiate.

On November 3 the patient complained of loss of power in the left hand, passed his motions under him into the bed, and needed to have his urine drawn off. These symptoms soon passed off, however, and he began to recover rapidly, the wound granulating nicely—dressed with carbolic acid lotion—and the health and strength returning. On November 9, as he complained much of severe pain in the wound and passing from it over the limb and abdomen, lead lotion dressings with liq. morph. were applied, and gave great relief.

The ligature came away on November 11 (sixteenth day), and the aneurism gradually diminished in size (slight recurrence of pulsation in it being noted a short time after the operation), until by November 30, it felt like an ordinary cedar lead-pencil, with no pulsation in the popliteal artery, nor pain anywhere, the patient now sitting up a short while daily. From this time he made a good recovery, and was sent to the convalescent Hospital at Eastbourne, on January 4, 1870. Early in December some inflammatory enlargement of the inguinal glands simulated suppuration of the sac, but with perfect rest and evaporating lotions, this passed off.

POPLITEAL ANEURISM—FAILURE OF TREATMENT BY COMPRESSION AND FLEXION—LIGATURE OF FEMORAL ARTERY — RECOVERY FROM OPERATION—SUBSEQUENT DEATH FROM EXHAUSTION.

(Under the care of Mr. ERICHSEN.)

Edmund S., a French-polisher, aged 23, single, was admitted October 4, 1869. Had always had good health, and was always fat. Had constitutional syphilis two years ago, and twelve months ago was under Mr. Erichsen's care for diseased bone in the foot. Had been a hard drinker.

Five weeks before admission he first noticed a weakness in the calf of the left leg, extending up the ham; followed in two weeks by shooting and throbbing pains; knew of no strain or other cause for his symptoms, and never noticed any swelling until seen by Mr. Heath two days since.

On admission a circumscribed tumour was found to occupy the left popliteal space, fluctuating and pulsating, the pulsation being stayed by pressure on the femoral artery. There was a very distinct bruit, and the man complained of shooting pains in the ham and calf. On the evening of admission two of Carte's tourniquets were applied—one to the artery in the groin and the other in the middle of the thigh. These were kept on for three days and nights, until the patient could no longer bear the pressure, the leg being evenly bandaged with an elastic roller all the time. Diet consisted of—Breakfast, 2 oz. of bread and butter; dinner, 2 oz. of bread and 2 oz. of meat; and supper, 2 oz. of bread; with 2 oz. of milk or water with each meal. The bowels were kept open with saline aperients.

On the tourniquets being removed, the knee was kept flexed, the tumour being notably less diffused, and feeling rough and grating, with pulsation.

On October 11 digital compression was commenced, and kept up for four hours, the tourniquet being applied for two hours afterwards, so as to completely control the circulation for this time; and this treatment was kept up for seven days, with the effect of producing marked consolidation in the upper and outer parts of the tumour, but not so much below and to the inner side. As the patient complained of the spare diet, the bread was increased to 4 oz.

During the next three weeks compression was kept up for four, six, or eight hours daily, once for thirteen hours, and twice for twenty hours and a half continuously, but with little effect upon the aneurism. The patient became considerably depressed and worn out, but Mr. Erichsen hesitated to operate as the man was so fat and of such a nervous and irritable temperament.

On November 3 Mr. Erichsen consulted with Mr. Heath, and it was resolved to give the patient another chance without resorting to operation. The leg was completely flexed on the thigh, with a pad in the ham, and the limb secured by the foot being buckled to a waistband, subcutaneous injections of morphia being employed. This was found ineffectual, and on November 6 compression with the tourniquet was reapplied.

On November 10 the House-Surgeon found at his morning visit that the swelling was increased to nearly twice its former size, pulsating strongly, and evidently becoming quickly diffused. When Mr. Erichsen saw him he resolved to tie the femoral artery at once. This was done, carbolic acid dressings put to the wound, and the leg wrapped in cotton wool and laid on a pillow. Next day the aneurism was much smaller, foot warm, and the wound quiet; but the patient complained of severe pain in the back and thigh, and of much pain in the wound and leg. Some erysipelas appeared about the wound, with profuse discharge, and spread during some days. The wound healed by November 23, but the man never fairly recovered. Pneumonia appeared, for which he was transferred to the Physicians, and he died on Christmas-day, having recovered from the pneumonia, but sunk apparently from exhaustion.

At the autopsy no special visceral lesions were discovered. There was some general congestion of the organs, and a little recent pleurisy on both sides, but no consolidation of the lungs. At the seat of ligature of the femoral artery there was found a mass of lowly-organised plastic material, which surrounded also the femoral vein and the anterior crural nerve. The branches of the artery were not notably enlarged. The aneurism itself was about the size of a small orange, its walls thin, and the contents fluid.

Cutaneous diphtheritis has not been seen strongly marked. In the majority of cases a connexion was traced with some member of the family then suffering, or another who had recently been carried off by it, with some of the neighbours in the same court-yard, or in the adjoining houses, or in the same lane. In a few cases no connexion could be traced. In a mandarin's family of about 30 individuals rank and file, 11 persons up to the present time have been removed by death, including the father and brother, both over 50 years of age. The male and female servants complained of tightness in the throat, but no fatal case occurred among them except one of their children, a child 5 years of age. Those attacked were related, and had all a similarity of constitution, were pale, sickly, and lived chiefly on vegetable food and sweetmeats. Poverty or superstition too often prevents the Chinese from indulging in animal food. In the above family, and this is the rule among the better classes, the bodies of the deceased are retained for a lengthened period prior to interment, during this time, the family, it may be large or the premises may be small, living literally among the dead, with mat awnings erected over their courts, priests chanting prayers, performing the general obsequies, and the members of the family themselves howling and weeping. In this way the disease is propagated. In the later stages of the Peking epidemic, nothing has been found of the slightest use. An unfavourable prognosis has in every such case been given, and not a single case of cure of true and neglected diphtheritic inflammation has come to our knowledge. The scarlatinal forms, and gangrene, when not extensive, have yielded to treatment, but the pellicular exudation when fully formed, with enlargement of the glands of the neck and of the interior of the mouth, has resisted all attempts.—*The Fifth Annual Report of the Peking Hospital, by Dr. John Dudgeon.*

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Medical Times and Gazette.

SATURDAY, APRIL 23, 1870.

THE GOVERNMENT MEDICAL ACT (1858) AMENDMENT BILL.

The early meeting of the General Medical Council which we this week announce indicates that the passage of the new Medical Reform Bill through the Upper House in its present form must not be predicted as a matter of course. Careful examination, however, increases rather than diminishes our conviction that its main provisions are of a character which should commend the Bill to all who desire a wise and moderate reform, although it is equally true that there are some very important points in which the Bill must be considerably altered before it can be allowed to become the law of the land. For the convenience of our readers, we will range in two divisions the points which we hold to be good and bad in the Bill, and we will enumerate the good first.

First, the Bill provides one portal in each division of the kingdom through which all candidates must enter our common Profession. It not only gets rid of the scandal of the nineteen competing licensing boards, but it will in the course of a few decades of years sweep away the last vestige of distinctions and grades, which, it is true, have been handed down to us from former generations, but which have been getting year by year more indistinct and shadowy, and which are to the general public utterly incomprehensible. If the Bill become law every candidate will pass the same examination in all branches of the Profession, and will equally possess the right when registered to practise all branches. Higher qualifications will be taken by those who wish to practise special branches of the Medical art or to take special walks in practice, but the examination which has given the right to registration will be in every case the same, the previous Medical education and training must be in every case in the main identical, and whether a man practise Medicine, Surgery, or Midwifery separately or all three in combination, he will stand on common ground with the whole of his Professional brethren. Provided the ground be not too low, this will ultimately be of enormous benefit to the Profession and the public.

Secondly. Another benefit will be the utter extinction of the variety of Medical man with a single qualification. In the higher walks of practice we shall hear nothing more of the the Physician who prides himself on knowing nothing of Surgery, or of the pure Surgeon who knows nothing of Physic. In the lower walks the possessor of a single Medical or Surgical diploma will gradually die out, and will be replaced by a

more fully educated man. The great art of Medicine will be practically, as it has always been theoretically, held one and indivisible, and, although there will be always men who will devote themselves to one of its departments, there will no longer be men who are ignorant of any.

Thirdly. An important and beneficial provision of the Bill is that it affords full opportunity for the preservation of all that is of value in the present machinery of Medical examination. It proposes to combine and rearrange, but does not destroy or throw away as worthless, the means by which the present licensing bodies have carried on the work of testing the merits of candidates for their several diplomas. We confess that this to us seems a provision of no small value, inasmuch as we believe no board of new and untried judges would or could discharge its duties so satisfactorily as a board composed of the best men of all the present courts of examiners.

Fourthly. Another excellent point in the Bill is that it accepts the principle of the application of the surplus of fees to Professional purposes through the medium of the existing corporations. It especially recognises the propriety of providing for the maintenance of museums, libraries, professorships, and lectures for the general advantage of the Profession. As we shall show hereafter, we are not quite satisfied with the somewhat loose way in which this very important point seems to be treated in the Bill; but the principle of the application of funds to such objects is recognised, and it is a point on the favourable side of the account.

Fifthly. If we put out of sight the excessive powers which the Bill gives to the Privy Council, and the purely permissive character of the clause which treats of affiliation of the new licentiate to any of the existing licensing bodies, we think that the Profession may be fairly satisfied with the respective shares in the matters of education and examination given to the Medical authorities and to the General Medical Council. The past services of the "Medical authorities" in the cause of Medical education give them a right to a large share in the formation of a scheme, and, on the other hand, in case of hopeless disagreement, the Medical Council, in which all the Medical authorities are represented, is certainly the fit and proper body to be intrusted with drawing up one.

Lastly, if it be a negative, it is still an important recommendation of the Bill that it gives no encouragement to the advocates of the mistaken idea of the direct representation of the Profession in the General Medical Council. We should by no means regret to see the Profession more substantially represented in that body through the representatives of the colleges, halls, and universities, and if a clause to that effect were introduced we should undoubtedly support it; but we can only see in the proposal of direct representation the means of subjecting the Profession to continual worry, excitement, and turmoil, and of introducing into the General Medical Council persons conspicuous by their length of purse, length of tongue, and lack of brains.

We now enter on the more unpleasant task of adverse criticism; and of objectionable provisions we think the first is the completely unattached, independent, and irresponsible position assigned to the Licentiate in Medicine and Surgery. The new Licentiate is not necessarily to be affiliated to any of the old corporations or universities; he is to be governed by no code of laws; he gives no pledge as to his Professional conduct; and, except in the way of felonious practices, he would be entirely free to pursue gain by any bye-paths he pleases. The calling of Medicine has hitherto been a profession, its members have asserted and maintained a position above that of the tradesman; they have been governed by a peculiar code of Professional ethics, and they have avoided many of those paths to pecuniary advantage which are open to mere barterers. The licensing bodies have hitherto exerted no small influence in maintaining this state of things; some of them have possessed and exerted powers to check offences against Professional good manners, and others have imposed obedience to certain laws which have been expressly framed on principles which would not be recognised as binding by the world outside. It cannot be supposed that the House of Commons or any non-Medical body would give the General Medical Council the power to enforce an obedience to the laws of Professional ethics. Such an idea is too ridiculous to be entertained; the only bodies, as it seems to us, through which a high rule of Professional practice and morality can be maintained, are the existing corporations and universities, and the Bill cuts away all necessary connection between the Licentiate in Surgery and Medicine and any of these bodies. Unchecked the new Licentiate may advertise in every newspaper, puff his nostrums and relate his cures, gull the public, and injure and degrade his brother Practitioners, and yet be entirely beyond the reach of any constituted authority. This is a patent fault in the Bill—a fault, we think, only to be cured by making affiliation to one or more Medical corporations compulsory, and by confirming to such corporation the power of enforcing obedience to its ethical code.

Next in order of objectionable propositions is the unlimited power which the Bill undoubtedly gives to the Privy Council. We have heard it said in some quarters that this Bill gives too great power to the General Medical Council. We cannot allow the validity of the objection. The real power, as it seems to us, is not lodged in the hands of the Medical Council or of the corporations, but with her Majesty's Privy Council. The Privy Council are to receive and consider objections and representations respecting any scheme of education and examination emanating from the General Council or the Medical authorities. The Privy Council are to confirm any such scheme, with or without modifications as they may think fit. The Privy Council will hear representations on the subject of the modifications they propose; but they are not bound to give weight to such representations, or to alter in the smallest particular the terms which they may choose to impose. Now, we maintain that, however necessary it may be to have a court of final appeal, and however advantageous to the Profession it may be to be represented in Parliament by a Minister of the Crown, these terms are such as no profession can possibly accept. The legal profession would spurn such interference, nor would any Government dare offer it them. The Privy Council practically must resolve itself into the Medical department of the Privy Council, and that department into the Medical officer of the Privy Council. We protest against any one gentleman the nominee of an irresponsible minister—however able, however learned, however impartial he may be—being constituted dictator to the whole Medical Profession of the three kingdoms. The clause to which we most strongly object is that which, under the term "modifications," confers the power of forcing on an unwilling General Medical Council and on unwilling "Medical authorities" any alterations in Medical education and examination which may find favour in the Government office. Suppose, for instance, a Medical adviser of the Privy Council had determined that it would be advantageous that all Medical education should be thrown open, that no attendance on lectures or Hospital practice should be required, and that no previous course of study should be enjoined. Under this Bill no power on earth could prevent him, if he had the ear of their lordships, from insisting on these all-important modifications. Or, suppose the Government of the day, in obedience to certain members of the House of Commons, were determined to throw open the whole Medical Profession to women, and to enforce regulations under which women and men should pursue their studies together in the same Hospital wards and in the same anatomical theatres, this Bill removes every difficulty from such a course. We are quite prepared to admit that differences may arise between the General Medical Council and the Medical authorities which may require arbitration, and we

should be quite willing to submit such differences to the arbitration of the Privy Council. Nay, we might go further, we might perhaps, without harm, allow the Privy Council the powers of confirmation and of veto in Medical matters directly affecting the interests of the public. But we would protest emphatically against any minister of the Crown possessing the right to originate under the name of modifying schemes of Medical education and examination, and we maintain that where the General Medical Council and the Medical authorities are agreed their decision ought to be final and irreversible.

We would next notice that the clauses of the Bill dealing with the financial side of the question, do not appear to us sufficiently clear. The treasurer of the Branch Medical Council is to receive the fees for examination, as well as the fees for registration, and it by no means seems expressly provided that the sums resulting from Medical examinations should be expended solely in defraying the expenses of the examining boards, and in maintaining the museums, libraries, and lectureships of the Medical authorities. There is nothing to prevent part of this money being expended on the General Medical Council, should that body insist on making such expenditure a part of their scheme, and thus more important Professional objects may be only partially obtained. In our opinion the General Medical Council should be entirely supported by the fees for registration, and restrictions should be provided to keep their expenditure within their income.

Again, we think that the Bill brings too prominently forward the fact that the license is to be a minimum qualification. Although a minimum one, large may be the least. The Bill recognises the possibility that Foreign and Colonial diplomas may be granted "in respect of a higher degree of knowledge in Medicine and Surgery than is required for obtaining a license under this Act." Now it should be clearly understood that unless the standard of examination for the general license be a fairly high one the Bill is no real measure of reform. We should be sorry to recognise the possibility of the possession of any foreign diploma proving the possession of a higher amount of knowledge of Medicine and Surgery than that which gives the power to treat in matters of life and death British subjects.

Lastly, the powers given to the General Medical Council to prosecute unregistered pretenders are only permissive, and no funds are provided to defray the expenses of such prosecutions. Moreover, no right is allowed to private individuals to institute such prosecutions.

We have now enumerated what appear to us to be the chief excellences and the chief defects of this most important measure. The excellences, we think, are such as ought to secure it success, provided its defects are subjected to the modifying power which the Privy Council seem anxious to exercise on schemes of a totally different nature. We feel sure that some wise concessions in committee on the points to which we have referred would cut away the ground from under the feet of objectors, and would secure the adhesion of all who are anxious for a final settlement of the question of Medical education and examination.

PROSTITUTION AND THE "WESTMINSTER REVIEW."

The oracle has spoken at last, and, in an article in its April number, the *Westminster Review* announces as its panacea for the physical evils resulting from prostitution, for the widespread syphilitic contamination of families in all ranks of life which is "producing a profoundly degenerative influence on the physical life of the British people," as the only national policy which deserves to be entitles "the policy of justice and common sense"—what? Simply this:—To throw open the general Hospitals throughout the kingdom to all prostitutes who may think fit to apply for relief. The writer of the article really believes that this proceeding, supplemented by the moral agency of "a volunteer army of sensible, educated, and thoroughly enlightened women, who would work as sisters of charity," would suffice to effect that physical regeneration which he regards as so necessary at the present time for the British nation. He believes that if sufficient Hospital accommodation were provided, if prostitutes could avail themselves of it without being subjected to the stigma of admission into a Lock Hospital, if while in Hospital they were treated kindly and considerately, and properly classified, they would troop in to be cured without any pressure of compulsion, and would remain voluntarily until their cure should be perfectly accomplished. He expects that adequate funds for the maintenance of the necessary number of beds could be raised by voluntary efforts (which we very much doubt), but he suggests that where soldiers and sailors congregate the Government ought to grant subsidies in aid. The weak point of the latter suggestion is that Government is to be asked for subsidies, is to pay its share of the expenses, but not even to have the right accorded to an ordinary subscriber to a Hospital of exercising any control or even supervision. "The subsidies ought," he says, "to be free gifts, and it would be inexpedient to accept them unless they were tendered as such. If by virtue of such subsidies governmental inspectors were once allowed to enter those Hospitals, and through them any governmental control were exercised over them, the principle of governmental recognition and regulation of prostitution would to that extent be virtually adopted, and to a like extent the moral principle underlying the establishment and working of the voluntary system would be vitiated." We fear this is a sort of bargain that it would not be very easy to strike. Here, then, is, according to the *Westminster Review*, the solution of the problem which now vexes our social philosophers and puts them to their wits' end.

What have we to say to it? Why just this: that it is a scheme for the charitable relief of diseased prostitutes which has been suggested before; and that, if anybody thinks that the British charitable public will listen to it, and subscribe an amount of money sufficient, at the rate of £35 per bed per annum, to carry it into operation, by all means let it be tried. The *Westminster* reviewer seems to consider that fear will operate to loosen the public purse-strings where benevolence fails. To strengthen his appeal, he threatens us that, in case we refuse to sanction the working of a system, one of the objects of which is to lessen and heal venereal diseases, "the diseases in question must still continue to exert their degenerative influence and do their destructive work until the enormity of their baneful effects shall at length rouse the nation to inquire whether the theological doctrine which leads to these results can really be true." We repeat that we have no sympathy with the exaggerated and sensational appeal with which the *Westminster Review* inaugurated its series of articles; and we say now that, whatever the amount of true syphilitic contamination in the families which make up the British people may be, there is no ground for believing that it will be materially reduced by the proposed scheme. The more we study the habits and temper and proclivities of the class of women who supply the prostitution market, the more are we satisfied that the only women who would be attracted by the open doors of a Hospital, who would voluntarily resign their freedom and submit to the necessary constraint of an in-patient, would be those who have become too ill to pursue their trade with comfort. They would be mostly those who suffer from the disabling and painful forms of disease, while women with dangerous but less painful forms of true syphilis would see no reason for seeking admission to the Hospital, but would continue nightly to infect their male companions as long as they could do so with personal impunity. In the name of Christianity, of charity, and, if you please, of expediency, let prostitutes no longer be turned away from the portals of our Hospitals as unfit recipients of public bounty; and, in the name of religion,

let them be reclaimed, if possible; but let no one think that by this means we should be exercising a profound influence in the physical regeneration of the British people.

We confess we do not see what "justice" has to do with the proposed scheme. If it has anything to do with it, either prostitutes must have a right to be cured at the public expense or the public must owe them some compensation. The idea seems to involve something like a reversal of our ordinary notions. We have been accustomed to think that prostitution was an offence against public morality, and that the women who practise it cannot therefore claim, as a right, relief from the public purse for the diseases contracted in a vicious course of life. And we fancy that this will be the popular view of the case. We imagine that if the argument of "justice" is advanced, there will be a claim raised on the other side, and that power will be demanded to put down with a strong arm the annoyances to which the decent part of the community is subjected by the proceedings of immoral women. The "common sense" of the British public will not be slow in leading them to some such conclusion as this.

But there is a question we should very much like to put from our view of the case, which is by no means so alarming as that adopted by the writer in the *Westminster Review*, and by the promoters of the extension of the Contagious Diseases Act to the civil population. Are we not in danger of going wrong by too much haste? Both parties are doing all they can to rouse a popular excitement; and a state of excited feeling is thoroughly antagonistic to the exercise of a sober judgment. Our suggestion would be that these efforts should cease, that the Act of last year should be left to work peaceably, as an experiment, at the military and naval stations to which it is now applicable; and that an attempt should be made to extend the benefits of our general Hospitals to the prostitutes in other parts of the kingdom. The pretended hardships inflicted by the Act we regard as so much claptrap, nor can we allow that its principle has any affinity with the Continental systems, which would drive all prostitutes into brothels. We need not trouble ourselves on this score. Our advice would be to leave the Contagious Diseases Act alone to do its work for some years, and then we shall be better able to judge what sort of work it is doing—and we would urge those who agree with the *Westminster Review* to try and apply their scheme, in the mean time, to the prostitutes that infest our civil population. Experience will enable us to judge as to the practicability and efficiency of the rival systems.

THE WEEK.

TOPICS OF THE DAY.

The General Medical Council are summoned to meet on April 28, and their meeting—at least during four days—will be held, we are informed, in the theatre of the Royal College of Surgeons, Lincoln's-inn. It appears that a majority of the Council think it better that the Lord President's Medical Act Amendment Bill should be fully discussed before its second reading in the House of Lords, and although this entails much trouble on the members and much expense, the present crisis is so important that we are not disposed to question the wisdom of the decision. The Council and Fellows of the Royal College of Physicians are also fully employed in discussing the Bill, and we believe that a meeting of the Fellows of the College will not permit that body to place its rooms at the disposal of the General Medical Council during this early session. The full discussion of the Bill in the General Medical Council must be of great value to the Profession, for it cannot but throw light on many points of the Bill which at present do not seem clear, and it will probably lead to explanations on the part of the Government and to modifications in the clauses which at present seem to detract from the undoubted general excellence of the measure.

We have seen a letter circulated by the Royal College of Surgeons of Ireland in answer to some of Sir John Gray's statements made in his recent speech in the House of Commons when moving the second reading of his Bill. Sir John Gray gave point to one of his sweeping assertions by instancing the case of a student who had presented himself for examination before the Royal College of Surgeons of Ireland, and had shown lamentable ignorance of the operation of trephining. It appears that Sir John Gray was himself present when this unlucky wight was examined; but, curiously enough, he never mentioned in his speech, that the gentleman was very properly rejected for his ignorance. If our legislators think that by any amount of legislation they can prevent idle, unprepared students presenting themselves for examination, they must be in a blissful state of ignorance of human nature. What higher praise can be given to an examining board than that it detected and rejected incompetence? We trust that the high colouring which Sir John Gray seems to have thought it necessary to give his speech will not lend a tinge to the coming debates on Medical reform. Medical education and examination are not in the deplorable condition that Sir John Gray described; and although we are most anxious to see a consolidation of examinations for the sake of the public and the student, we are not sanguine enough to suppose that, under a new system, the average attainments of students will be much higher than under the present.

The Commissioners of Lunacy have laid before the House of Commons special reports on the recent occurrences in Hanwell and the Carmarthen Asylums. In reference to the case of Nistri at Hanwell, the report does not throw any fresh light on the circumstances under which the injuries from which the man died took place. But the Commissioners report that there is an insufficiency both in the Medical staff and in the number of attendants at Hanwell. They say they have frequently noticed in their reports, but without avail, the insufficiency of the Medical staff. On this point their opinion clashes with that of the visitors, who are supported in their view by Dr. Begley. It seems there are upwards of 600 male patients in the asylum, 240 of whom are under special Medical supervision. The Commissioners think that the care of these patients and the keeping of the case-books is sufficient work for two assistant Medical officers, and we should suppose that few would doubt it. The visitors, however, think that one assistant Medical officer is sufficient, and they refuse to appoint another. They state that they are thoroughly convinced that if the assistant Medical officer on the male side duly discharges the duty expected from him no such addition to the Medical staff is required—a self-evident proposition. But the question is not if he does, but whether he is able to do so, giving due care to the 240 patients who require his attention. A reply in the negative, we think, cannot be avoided. In the Carmarthen case, the Commissioners consider that the attendant Hughes was at fault, and they recommend that he be dismissed. Here, however, they state that had there been two attendants instead of one present the patient, an enfeebled old man, would not have sustained the injury he did. The Medical attendants also, Dr. Hearder and Mr. Davies, are not acquitted. The latter omitted to examine the patient's chest although serious symptoms had supervened, and when he said he suspected fracture of the ribs. In connexion with this subject we may notice that a case of great fragility of the bones in connexion with general paralysis was reported at the last meeting of the Pathological Society by Dr. Thompson Dickson, who seemed disposed to trace a connexion between the general paralysis of the insane and faulty nutrition of the osseous structures. We would observe, however, that in neither of the cases which have attracted so much attention has the post-mortem examination revealed any particular brittleness of the bones, and that the two conditions are not necessarily connected was proved by Dr. Thompson Dickson himself, who narrated the case of a patient suffering from general paralysis

who exhibited enormous strength, tearing down the iron bars of his window—a feat which could not have been performed if he had suffered from any degree of fragilitas ossium.

Edinburgh seems to be at present the chief quarters of the female Physician movement. A paragraph has lately appeared in the morning papers, inviting signatures to petitions to the House of Commons in favour of affording facilities for the study of medicine by women. A lady whose address is given in Edinburgh, is the honorary secretary. We would only remind those ladies who may sign it, that if women are to enter the lists with men and compete for practice, for every woman doctor who gains a livelihood, there must be one less doctor's wife. The amount of practice amongst our population is a limited quantity, and it is clear that every woman who displaces a man, must prevent that man from placing a woman in the position, which hitherto women have held to be the most enviable.

By obtaining a third place in honours in the Edinburgh chemical examination Miss Pechey has at least attained commensurate notoriety. One most gallant gentleman, roused to indignation by the wrongs done her in not being awarded a Hope Scholarship, immediately rushed into print, and proposed a subscription to defray the expenses of her Medical education. As the Hope Scholarship was worth only ten guineas, the lady had the satisfaction of declining the proposal in large type in the *Times*. It seems, however, that the alleged injustice was no injustice at all, as, before the competition, the ladies were informed that, in the opinion of the Professor, the terms of the Scholarship only permitted its award to members of the general class of chemistry in the University. At the last half-yearly meeting of the University Court, which took place on Tuesday, an attempt was made by Professors Masson and Balfour to get rescinded the regulation which prevents women studying Medicine in the same classes as male students. This, however, was strenuously opposed by Professors Laycock and Christison, and we are glad to say, for the sake of the University, their opposition was successful. We trust that the dilemma in which the University authorities have been placed by Miss Pechey's affair, may induce them to reconsider their present position. There is no doubt that the rank of the University as a Medical school is threatened by the present commingling of the sexes within its walls. Professor Christison told the meeting of the University Court, that parents and guardians objected to young men receiving Professional instruction with young women—and rightly so. We would not lift a finger to prevent women studying medicine if they please, but let them for decency's sake have schools and examining boards of their own. The chief glory left to Auld Reekie is her University, and sorry indeed should we be to see that glory depart, but it requires no prophetical gift if the present policy be persevered in to foretell that the day must come when the satirist's couplet, altered, will pretty exactly apply to the picturesque old town—

> Here falling houses thunder on your head,
> And here the female Doctors talk you dead.

We notice that an effort is being made to provide a sum for defraying the legal expenses incurred by Dr. Ellis in his late disputes with the St. Pancras guardians. As certain of the charges brought against Dr. Ellis were completely answered, and others were not proved, we hope that his friends will come forward and pay the little bill of costs, which are said to amount to £190.

Professor Tyndall has written at considerable length to the *Times* in answer to the letter of Dr. Charlton Bastian, to which we recently drew attention. Professor Tyndall relies upon the allegation that air filtered through the lung in cases of fractured ribs with emphysema will not produce putrefactive changes. We may appeal to the experience of Surgeons as to whether putrefactive changes never follow such accidents, and we would repeat that many Surgeons of large experience have never seen any harm arise from the admission of external air into the cavity of the pleura. In our recent notice we quoted Mr. Skey's authority in support of our position, and, in conversation, that gentleman has since assured us he has never witnessed any ill effect from the admission of air into the pleural cavity in the operation of paracentesis, and on this point the large experience of the late Dr. Todd was in exact accordance with his own.

MEDICAL SOCIETY OF LONDON.

Mr. Francis Mason, F.R.C.S., Senior Assistant Surgeon to the Westminster Hospital, will deliver the annual oration of this society on Monday, May 2, at 8 p.m,, at the Queen's Concert Rooms, Hanover-square, instead of at the society's rooms, George-street, a large gathering of the Fellows and their friends being anticipated. Mr. Mason, we hear, has undertaken the self-imposed task of searching the records of the society since it was instituted in 1773, and intends to give an epitome of his labours, which cannot fail to be interesting to the Profession. The oration is to be followed by a *Conversazione*.

THE BRIGHTON REVIEW.

No serious casualties occurred. The field Hospitals were placed, by orders from the War Office, in charge of Brigade Surgeon J. Cordy Burrows, of the 1st Sussex Artillery Volunteers, and Assistant-Surgeon Charles Mayo, of the Inns of Court Rifles. Ample provision was made for accidents. An artillery captain had his face badly scorched by the flash of a gun. His spectacles luckily saved his eyes. A man of 47, with a fatty heart, very nearly died of syncope. Another had an ague fit. About a dozen more presented various degrees of syncope, and most of these were men who were manifestly unfit to go through the fatigues of the day. One had been in bed two days with febrile sore throat. A score of other cases of exhaustion and faintness occurred. On the whole, the volunteers stood the day's work very well, and went home dusty and in good spirits. A battery of heavy guns was placed just in front of the principal field Hospital. This gave rise to deafening noise and smoke.

DR. ANGUS SMITH ON THE CHEMICAL EXAMINATION OF AIR.

Dr. Angus Smith read a very important paper at a meeting of the Association of Medical Officers of Health held last Saturday. The subject was the Examination of Air, and the most striking feature was the announcement that he had detected and measured the nitrogenous organic matter in different kinds of air, and that between country air and the air of towns or of close rooms there was a most marked difference in this respect. The process adopted by Dr. Smith was very novel and ingenious. It consists in shaking up a small quantity of perfectly pure water with a measured volume of the air to be examined, by which operation the organic impurity of the air is transferred to the water which is afterwards analysed by the ammonia-process invented by Wanklyn, Chapman, and Smith. The author of the paper expressed great confidence in the results he had obtained, and said that he would not scruple to ask for the demolition of all crowded courts in towns, the atmosphere of which presented the characteristic signs of contaminated air.

WRITING PRESCRIPTIONS IN HIEROGLYPHICS—POISONING.

Dr. Browson, of New York, lately prescribed for a drunken fireman, and wrote his prescription in hieroglyphics, so that no one but a druggist named Martin could understand it. The prescription contained poisonous doses, all to be taken the

same day. In the afternoon, as the fireman was found to be dying, another Doctor was called in, but, being unable to decipher the prescription, was unable to determine on the antidote. Martin refused flatly to tell the name of the medicine given, though he was informed the man was dying and the only hope of saving him was the immediate discovery of what poison he had taken. The second Doctor would hold no communion with Browson, whom he regarded as a quack. The unfortunate man was allowed to die. Surely some punishment will be awarded to Browson and Martin.

FROM ABROAD.—M. GALLARD ON HEIFER VACCINATION—M. VACHER ON SMALL-POX IN PARIS—ACTION OF CHLORAL WITH CHLOROFORM —DISLOCATION OF THE ASTRAGALUS.

We return once more, briefly, to the subject of the heifer vaccination, in order to direct attention to an excellent lecture on vaccination delivered by M. Gallard at La Pitié, and reported in the *Union Médicale*, March 24-31. He enters fully into the question of the conveyance of syphilis by vaccination, which he utterly disbelieves, exhibiting the sources of the erroneous belief in its possibility. "Such an adulteration of the vaccine lymph by syphilitic virus does not exist, and it is a bugbear that ought not to frighten you. It is a phantom which, like all other phantoms, vanishes on close examination." As to the "heifer vaccination," he states that repeated trials have convinced himself and the other Hospital Physicians that it is quite inefficacious and in no wise to be relied on. The panic which has arisen, however, and the multitude of re-vaccinations, have thrown everything into such confusion that no one now knows what virus he is really using, and never since the introduction of vaccination into France has there been such an utter scarcity of authentic Jennerian virus.

"I do not hesitate to proclaim before you the indispensable necessity that exists of revaccinating as speedily as possible all those who have been vaccinated of late years, and especially during the last few months. Such revaccinations should be at once resorted to, when we have extricated ourselves from the frightful confusion in which we are now involved."

In an article in the last number of the *Gazette Médicale*, M. Vacher observes that not only has small-pox prevailed with such intensity in Paris, but various other epidemics have also at the same time been prevalent, while affections of an endemic or accidental character have assumed an exceptionally grave aspect. Consequently, the deaths of the first quarter of this year considerably exceed the mean number. They have been 15,178 in number, while the corresponding quarter of 1869 furnished only 12,543 deaths. In this increased mortality, however, variola plays the chief part, the deaths from this source amounting to 915 from January 2 to April 2, being a far greater number than the mean for an entire year. So far from the epidemic having died away, it has probably not yet reached its culminant point. Variola differs in its progress much from cholera, for while this last usually attains its maximum after some days (in thirteen in 1832 and in seventeen in 1865), epidemics of variola are usually characterised by the appearance of several successive maxima, and especially by the slowness of their development. In the three great explosions which occurred in Paris in 1818, 1822, and 1825, the deaths, with a population less than a third of the present, reached the high numbers of 993, 1084, and 2193, and the disease did not begin to decline until after six or seven months.

The distribution of deaths according to *sex* in the present epidemic is curious. Males have been attacked in a much larger proportion than females; and, of 458 deaths in which the sex was indicated, 260 were males, 198 females. "Women, in consequence of their coquetry, are more attentive than we are in avoiding contagion, while they are more anxious (as has been seen in this epidemic) to secure the good offices of the vaccinator. The proof that this is the true cause of their lesser participation in the disease is found in the fact that in women, at the age at which the ideas of coquetry begin to disappear (which, at the earliest, must be placed at 65), the equality of the sexes as regards variola becomes established." As regards *age*, remarkable differences also exist. Young infants are the greatest sufferers, for of 257 deaths, those under one year amounted to 43—*i.e.*, $\frac{1}{6}$th, while the number of infants of that age in Paris is only 20,000, or $\frac{1}{100}$th of the whole population. This great mortality is chiefly attributable to the great delays which usually take place in vaccination. M. Vacher joins with M. Besnier in condemning the false security which is often felt as to the protection from vaccination or revaccination during the progress of an epidemic becoming *immediately* operative. The immediate utility of the revaccinations now practised is highly questionable, and the establishment of the period at which immunity by vaccination can be guaranteed is very important. The great number of cases of hæmorrhagic or black variola has excited much attention, and has led to the belief that this is the fatal characteristic of the epidemic of 1870. M. Vacher, however, is of opinion that these cases of black variola are not more proportionately frequent than in other epidemics, and he believes the mortality—*i.e.*, the proportion of deaths to cases—is not greater than usual. The deaths from small-pox for the week ending April 16 were 102 out of a total mortality for the week of 1196.

Communications on chloral multiply daily. Among some of its curious effects may be noticed an observation of M. Liégeois at the *Société de Chirurgie*, that in a case in which he had performed a minor operation under the influence of chloral, which produced sleep, but not anæsthesia, he resorted to chloroform. To his great surprise he found that the association, so far from increasing the effects, gave rise to excitement which lasted as long as the inhalations were continued. The fact is the more to be remarked as tending to disprove the identity of action between chloral and chloroform insisted upon by Liebreich. M. Giraldès, proceeding in a different direction, administered to infants who have been chloroformed and remained very agitated, a chloral draught. The effect of the association was to produce peaceful sleep for from five to eleven hours. Since then he has frequently employed chloral, either in mixture or enema, whenever children have remained excited after chloroform, and always with success. M. Demarquay observed that he has continued with advantage his practice of giving patients immediately after operation successive doses of 2 or 3 to 5 grammes of chloral until sleep is produced. All subjects are, however, far from exhibiting the same effects from the action of chloral. In some, when it is given immediately after the operation, it produces a quiet sleep and deep calm which lasts all day, and prevents any of the pain consequent on the traumatism being felt. Others proved refractory to the action of chloral, which is sometimes rejected by vomiting. As a medium dose he gives 2 grammes in two spoonfuls of syrup diluted with water. M. Giraud-Teulon has observed the same excitement produced by administering chloral in children that have been etherised as related by M. Liégeois in those who have been chloroformed.

Last week M. Tillaux brought a case of dislocation of the astragalus before his pupils at the St. Antoine, observing that this accident is an interesting one both on account of its rarity and the difficulty in treating it. The present case was also of especial interest in consequence of its mode of production. The subject of it, while engaged in a struggle, threw his body forcibly backwards and to the left, keeping his right foot immovably planted on the ground. The foot had undergone such a deviation that the heel looked directly inwards and the toes directly outwards, the axis of the leg being in its normal direction. The astragalus projected sensibly both to the sight and touch on a level with the internal and anterior part of the instep, the head of the bone projecting about three centimetres in front of the tubercle of the scaphoid bone. The antero-posterior diameter of the foot was increased by the thickness of

the astragalus, the dorsal surface of the foot measuring three centimetres less than that of the opposite side, and the leg being two centimetres shorter. The internal malleolus was masked by the projecting astragalus, and the fibula was broken at four or five centimetres above the malleolus. The foot was absolutely immovable in its abnormal position. M. Tillaux diagnosticated a complete dislocation of the astragalus forwards and inwards, and informed the pupils that its reduction would prove difficult and probably impossible. He should, however, attempt it if only to restore the foot to a more normal direction. Chloroform having been administered until muscular resolution was produced, energetic extension was employed, but without any result as regarded the displacement of the astragalus. The foot, however, was restored to a good position.

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

Establishment of the "Lancet"—Sir Astley Cooper's Lectures—William Cobbett, William Lawrence, and Thomas Wakley—James Wardrop.

On October 5, 1823, the year referred to in my last, being Sunday, there issued from a small publisher's in the Strand, opposite St. Clement's Church, the first number of a journal which was to exercise great influence on the Medical Profession. This was the *Lancet*. It was a little foolscap 8vo. of 36 pages. Its contents were of a motley character; and now with that first number before me, I can hardly imagine it to be father, as it were, of the huge *Lancet* of to-day. It started modestly enough as to appearances; it had no cover; but it contained a bold and defiant preface, enunciating the objects and principles of the new periodical, objects and principles which so long as he who wrote that preface lived, were in the main kept in view, and acted upon.

The first article was a lecture by Sir A. Cooper, delivered in the theatre of St. Thomas's Hospital, which at that time was united with the neighbouring Guy's. Then came an onslaught on the Livery of London, more political than Medical; but still evincing that able and powerful mastery of invective which its author maintained until the last. Then came a short leading article with the simple heading "Dr. Collyer," but an article of such a character that it cannot, with its successors, be passed over in a cursory manner here; it will be referred to in some future article. Then Critiques of Dramatic Performances, then Extracts from Quarterly Medical Journals, Composition of Quack Medicines, Table Talk, and a savage Review of Southey, the Poet Laureate.

I have thus briefly enumerated the contents of the first number of the journal with which I was associated for nearly forty years, and with whose chief I laboured in the cause of the Profession so long, and occasionally so laboriously. And here let me say, in respect to the late Thomas Wakley, that, in my personal relations to him, nothing could have been more genial and satisfactory. It is something to say of a man after being his lieutenant for many long years, exposed as he was to many vicissitudes, "harassed to-day, harassing others to-morrow," like the soldier described by Corporal Trim, never out of danger, that, with one solitary exception, I never had an unkind word from him. The occasion of the utterance of that unkind word was a paltry quarrel with a person whose name is not worthy of being mentioned here. But, this momentary anger over, our friendship became as warm and steadfast as ever. And here also let me say of Mr. Wakley that he never broke his faith with me either in the most trivial or the most important matters. I think it necessary to say this much, because in the course of this and succeeding papers I may have to speak of him with that freedom that he always advocated, and which he invariably exercised when writing or speaking of others.

Thomas Wakley was the son of a farmer at Membury, in Devonshire, at which village he was born in 1795. As a boy he was of a restless disposition, and was anxious to go to sea. This he did on board an Indiaman, one voyage to Calcutta, after which he relinquished the "ocean wave" and went to school at Wiveliscombe. He was apprenticed to an apothecary at Taunton, but finished his indentures with two other gentlemen, one at Henley-on-Thames, the other at Beaminster. After visiting the various Hospitals in London with the view of selecting the most eligible one to enter, he fixed upon the united Hospitals of Guy's and St. Thomas's, at which Sir Astley Cooper, then in his zenith, gave the lectures on Surgery. Young Wakley was no doubt influenced in his choice of a school by his admiration of Sir A. Cooper, then one of the handsomest men of his time, and of most pleasing and genial manners. However this may have been, he finished his curriculum in the Borough, and passed the College of Surgeons in 1817. From that time to 1823, when the *Lancet* was established, there is little worth noticing in his career; but shortly before the latter period he had opened a shop at the east corner of Norfolk-street in the Strand, so long and well known afterwards as Butterfield's the chemist's, and as the post-office. It was whilst in this shop that he conceived the idea of establishing a weekly journal to reform the abuses which existed in the Hospitals, schools, and colleges of the metropolis. He communicated his plan to Mr. Collard, now the venerable head of the eminent firm of that name, the pianoforte manufacturers. Mr. Collard, I believe, was an old schoolfellow of Wakley's, took much interest in his welfare, and assisted him in the first seven or eight numbers of the new journal. It is worth mentioning, to show how steadfast and firm were the friendships of Mr. Wakley, that amongst the half-dozen immediate followers of his remains to their last resting-place, was his old school-fellow, bowed somewhat by age and not so elastic as forty years before, but as cheerful as was consistent with the occasion, and redolent of praises of his old chum, of his boldness, of his kindness of heart, of his imprudent chivalry, and his inconsistent firmness. I have stated that the first article in the little hebdomadal was a lecture by Sir A. Cooper, delivered in the theatre of St. Thomas's Hospital, on Wednesday evening, October 1, 1823. It was entitled "Duties of the Profession," and was reported as if verbatim. But this was really not the case; but the report was altogether so admirably done from notes, that it suffered nothing from not having been taken in short-hand. The reporter was Thomas Wakley. It may well be imagined that the appearance of the new journal was received nowhere with more surprise than at the Hospitals in the Borough. The Professors were in a perfect state of alarm and astonishment, threatened the offender with all kinds of punishment, and declared such an "outrage" against rights and privileges could not be allowed to go on. The students received the bantling in a very different spirit; they were delighted with the new comer. They saw at once the great advantages which must accrue to them from the publication of able and authentic reports of the lectures delivered by their teachers. The *Lancet*, from the first, was popular with the alumni and Surgeons in general practice; dreaded, feared, and disliked by consulting Practitioners, lecturers, and Hospital Medical officers. For a short time the name of the editor of the new journal was kept secret, but it could not long remain so. Young Wakley was seen to take notes: but many of the students did the same, and he was not a man to answer any questioner whom he might deem inquisitive or impertinent. But Sir Astley Cooper was really alarmed at the publication of his lectures—alarmed for a reason which will appear directly, and was most anxious to stop their publication. He had his suspicion of his old student, and took a summary but decisive mode of determining whether his suspicions were well founded. He went late to Mr. Wakley's house in Norfolk-street, rung the night-bell, requested to see the "Doctor" immediately respecting an urgent case, was ushered into Mr. Wakley's private room, and there found the culprit actually correcting "a galley" containing a report of his (Sir A. Cooper's) lecture delivered the night before! I have heard Mr. Wakley say that the interview had a very ludicrous aspect in some respects, and the unexpected meeting and the discovery gave rise to a hearty laugh on both sides. But this soon subsided, and Sir Astley, in a tone evincing real concern, expressed his alarm and annoyance at the appearance of his "unprepared and off-hand lectures" in print. The young editor reasoned with his

visitor, declared that the lectures had given great satisfaction, were models in their way, and that it would be a great loss to the Profession if their publication were discontinued. He was met with the complaint that the lectures contained scarcely anything but the experience of the lecturer himself. "I read few books, and I know scarcely anything that is going on in Surgery on the Continent. The productions are most incomplete and unsatisfactory." He was again assured that the lectures were of extreme value, mainly from the fact that they were the genuine records of the lecturer's experience. Eventually Sir Astley was satisfied with the reasoning advanced in favour of the publication, and stipulated only that he in future should correct the "proofs" before going to press. This was assented to with thanks, and, after an interview which was prolonged until the small hours, the friends parted. It is somewhat remarkable that Sir Astley Cooper, though he opposed Mr. Wakley in after life, and more particularly in the trial of Cooper *v.* Wakley, never was the subject of a nickname in the *Lancet*. We had Brodie "the little eminent," Earle the "cock sparrow," Mayo "the owl," Halford the "cel-backed," and a host of others to whom I shall refer on a future occasion; but Cooper never was "honoured" with a *sobriquet*. The *Lancet* was carried on for several years at "the point of the bayonet," and was dreaded and hated by one section of the Profession, whilst it was encouraged and supported by the other. After a time the journal was printed at the office of Mills, Jowett, and Mills, the extensive printers in Bolt-court, Fleet-street. Cobbett printed his famous *Register* at the same establishment, and this brought him and Wakley frequently together. I mention this because Wakley, to some extent, made the style of Cobbett his model; but Wakley was far inferior to this remarkable person in his knowledge of the English language. The style of the *Register* was as truly Anglo-Saxon as was anything written by Dean Swift; the *Lancet* was forcible, rotund, and occasionally inflated. Cobbett had a more racy and biting wit than Wakley, who had more humour and good nature in his ridicule or invective. At this time it was not an uncommon occurrence for four persons to meet in a little room in Mills's office; three of them made themselves famous—William Cobbett, William Lawrence, and Thomas Wakley; the fourth was a barrister of the name of Keen, who used to join the party on printing nights, probably with a view of determining whether the productions which were about to appear were libellous. However this may be, the sanctum was seldom violated; the printers' boy was the only person admitted, and the "boy" at the time in question was poor George Clark, the printer of the *Lancet* for many years, and who died in harness only the other day. "George," as we always called him in the office, because there was another "Clarke" on the establishment, has told me that the little room was a scene of the utmost merriment. He could hear as he ascended the stairs the boisterous laugh of Cobbett above the rest; the loud, cheerful, good-humoured "ring" of Wakley; and, on entering the room, could *see* the quiet sneering smile of Lawrence, and hear the suppressed giggle of the lawyer.

What a quartette! Three of those present were remarkable men indeed; one all but unknown.

> "As mid the horses of the sun,
> One was, they say, of earthly race."

And yet, with some similarity in the three, how different in many respects! Similar, as each of them was the architect of his own fortune. Similar in that self-reliance which raised each and all of them to high distinction. Similar in their ambitious selfishness, in their being all "good haters." Similar in another respect scarcely to be understood. They were all professors of liberal opinions at one period of their lives, at others they became "something more than Conservative." It is well known that Cobbett, in spite of his fierce attacks upon all Governments, whether Tory or Whig, was a "Tory of the good old type." Lawrence commenced as a Radical *simple et pur*. He obtained power, and then his great abilities and vast acquirements were ranged in opposition to all reform. Wakley in the House of Commons as the Liberal member for Finsbury or as the demagogue addressing a mob was a very different person to Wakley when he had retired to his "Sabine Farm" at Harefield. There he could, and did, expatiate on the importance of protection to the landowner, and he preserved game with a rigour that was never surpassed in the region of "The Dukeries." The contrast between these three men, however, was marked in an especial manner in their powers as public speakers. Cobbett, unrivalled as a writer of pure English, able and interesting as a lecturer, was a poor speaker. He was nowhere in debate. His miserable failure in the House of Commons is a matter of history. He who in his *Register* was the terror of Governments and the leader of a large portion of the thinking public was "a bye word and a jest" before the assembled Commons. In fact, he had no readiness of expression. He was quite deficient in imagination, and halted, and even broke down, in the discussion of subjects with which he was undoubtedly well acquainted. Not so Thomas Wakley. He was equally happy when addressing a low audience as in his place in the "House." Indeed, I know no one of his contemporaries who was his equal in this respect, with the exception of O'Connell. But Wakley was considerably below the "Liberator" in all respects. O'Connell was a great scholar, had a voice unsurpassed in richness and power, and broke out occasionally into eloquence which has never been surpassed in ancient or modern times. Wakley had wonderful tact in adapting his style and his expressions to his audience. He had a voice of considerable power and sweetness. He had, moreover, a fund of humour which served him to good purpose on many occasions. When addressing the "unwashed," he could tickle their fancy and appeal to their rough ready sense in a manner which commanded their admiration and applause. In the House he was always listened to with pleasure and interest, and in his few personal encounters in that assembly, he certainly was on no occasion "second best." I shall have occasion from time to time, in these memoirs, to give specimens of his tact and ability as a speaker. It is remarkable that with the exception of O'Connell, he was, I believe, the only man of that time who sustained his reputation as a speaker to the populace, and to the first assembly of gentlemen in the world. "Orator Hunt," who in his palmy days was even superior to Wakley as a speaker to the mob, broke down ignominiously when he spoke in Parliament. The success of Wakley was not due as in the case of O'Connell to extensive acquirements and a classical education, for he "knew nothing of Greek, and less of Latin," but he had strong common sense, a fine presence, and the power of seizing, as it were, instantly on the main points of an argument. Moreover, his genial good nature and wonderful animal spirits must be taken into account when estimating the cause of his success as a public speaker. William Lawrence was altogether of a different type of speaker. The polished, accomplished, and classic Lawrence would have been quite out of his element if he had attempted to address an election mob; he would have failed to enlist their sympathies. He could not condescend to lower his intellect to theirs; for, notwithstanding his shortcomings, and his desertion of his "principles," he was a proud man, well acquainted with his power, and too shrewd to "throw pearls to swine." But when he stood to address an intellectual audience, Lawrence was really great as an orator. What could have been finer than his speeches on Medical reform, delivered with so much grace and eloquence at the Crown and Anchor Tavern? There he shone unrivalled. Well might we all exclaim, when he joined the opposing party, "*Et tu Brute!*"

I have entered somewhat into detail respecting the connexion of Cobbett and Lawrence with the early career of the *Lancet*, because undoubtedly they exercised a most important influence on the fortunes of that journal. Cobbett, it is true, never wrote for the *Lancet*; there is not a single article from first to last that emanated from his pen, but he acted the part that Johnson acted to Goldsmith in his two delightful poems, "The Traveller" and "The Deserted Village.(a) He put the coping-stone occasionally on the building; put the master touch on the structure, and no doubt occasionally "improved the occasion" by his pungent wit and his inimitable powers of invective. Lawrence, on the contrary, was an active though unpaid member of the staff. He wrote reviews of the most pungent character. He was the author of many of the leading articles which denounced the College of Surgeons for its selfishness, its imbecility, and its meanness. Those of my readers who have the time and opportunity of referring to the volumes of the *Lancet* for 1825-28 will have afforded to them a rich intellectual treat in perusing the leaders on the College of Surgeons; and if they rise from the perusal of these remarkable productions with a sigh of grief that the writer "turned his back upon himself," and became the most formidable antagonist of his own principles, they may content themselves that he rendered good service to the cause, and that he was not the first who was—

> "Friendly at Hackney, faithless at Whitehall."

When Lawrence was ensconced in power, and became the ablest and most uncompromising of "obstructives," of course

(a) Johnson contributed the four last lines both of "The Traveller" and "The Deserted Village."

he ceased to have any connexion with the journal of progress. Then it was that the able, witty, and unscrupulous Wardrop joined the staff of the *Lancet*. He smarted under the infliction of real or assumed grievances; he had been passed over by the Council, and he never forgave the insult or injury, whichever it might be, and spent several of the best years of his life in denouncing personally the individuals by whom he had been slighted. I have in a former article in this journal given a sketch of Wardrop. I may here say, in addition to what I therein stated, that Wardrop rendered immense service to the *Lancet* during his connexion with it. His scurrility, his wit, his venom, were not without their effects. To Wardrop the *Lancet* of the time owed its raciness. He was inimitable in his abuse. He showed himself the master of satire in his "Intercepted Letters," and he overwhelmed antagonists by the fertility of his resources, and by his happy and appropriate coinage of nicknames.

ON TARASP, IN THE LOWER ENGADINE, AS A WATERING-PLACE.

By J. BURNEY YEO, M.B.,

Assistant-Physician to King's College Hospital; Medical Tutor and Lecturer on Animal Physiology in King's College.

Ten years ago St. Moritz, in the Upper Engadine, was almost unknown to English Physicians, and consequently to English invalids. Now, in the height of the season there is scarcely house-room and food enough for the crowd of visitors who annually throng to it and fill it, and overflow into the hotels of the neighbouring villages. Tarasp, in the Lower Engadine, is scarcely better known at the present time to the Medical Profession in England than St. Moritz was nine or ten years ago; yet Tarasp, like St. Moritz, will most undoubtedly acquire a deservedly high reputation with us when its claims to our consideration, which are very considerable, become more generally known.

It is only of late years that English Physicians have commenced to investigate with something like system and interest the influence of the different Continental spas in the cure or amelioration of chronic maladies, and it must be admitted that the better we have become acquainted with their action and uses the more freely have we followed the Continental system of sending our patients to drink these health-restoring springs, which our pharmacy cannot rival or imitate. The additional circumstance that many of the most efficacious mineral springs of Europe arise in the neighbourhood of magnificent scenery and in localities favoured with a salubrious and invigorating climate has further commended them to the increased attention of the practical Physician.

A curious reflection continued to recur to my mind during a visit to some of the most frequented of European watering-places in my autumn vacation of last year. It was to the effect that homœopathy and what the homœopathists *will* call allopathy (although I am not aware that *we* desire to be tick ted with any dogma) meet at these places on common ground. It is, indeed, remarkable, considering how widely we are supposed to differ on theoretical grounds, that Practitioners of both schools should be found coinciding in the nature of the cases which they send to the iron springs of Schwalbach and St. Moritz, to the sulphur springs of Aix and Bagnères, and to the saline springs of Carlsbad and Vichy! It shows clearly enough that the true art of healing, founded on advanced physiological and pathological knowledge, aided by careful observation and cautious induction, is rapidly rising superior to speculations and dogmas which often obscure rather than elucidate the true nature of disease.

After spending a month in the Upper Engadine, I took the opportunity, on my return homewards in the beginning of last September, to visit the baths of Tarasp, which are situated between thirty and forty miles from St. Moritz on the main road leading, through the valley of the Inn, to the Austrian Tyrol, a most delightful drive of five or six hours through the grandest scenery. Arrived at Tarasp, thanks to the kind offices of the English chaplain, the Rev. N. B. Whitby, and those of the resident Physician, Dr. Killias, I was enabled to make the best use of the limited amount of time I had at my disposal. I do not know of any place which has impressed me so favourably as a health resort. Its natural advantages are very great, as I am about to show, believing that those members of our Profession who are unacquainted with the merits of Tarasp as a watering-place will be glad to learn the results of my own personal observation. The information I have to give will naturally arrange itself under the three following heads:—1. The nature, composition, and therapeutic effects of its mineral springs. 2. The nature of its climate. 3. Some topographical and general details.

No fewer than twenty mineral springs rise very near each other in the neighbourhood of Tarasp—some alkaline and aperient, some chalybeate, and others, in the Val Plafna, behind Tarasp, sulphurous. The springs to which Tarasp chiefly owes its repute are the saline-alkaline sources which rise close to the banks of the Inn, and in the immediate vicinity of the Kurhaus. Those that are used for drinking are situated on the right bank of the river; there are others on the left bank, which are used for bathing purposes.

The drinking springs are named the St. Lucius and the St. Emerita; they rise quite close together, and are almost identical in composition. The St. Lucius is somewhat richer in mineral constituents, and contains more carbonic acid. I give the composition of the St. Lucius source. In a pint (sixteen ounces) of the water there are 95·6225 grains of mineral substances, made up of

Carbonate of lime . . .	12·4323 grains.
Carbonate of magnesia . .	5·0764 ,,
Carbonate of protoxide of iron	0·1520 ,,
Carbonate of sodium. . .	27·2294 ,,
Chloride of sodium . . .	29·4013 ,,
*Iodide of sodium . . .	1·5360 ,,
Sulphate of sodium . . .	16·5473 ,,
Sulphate of potassium . .	2·6975 ,,
Silica, phosphoric acid, etc. .	0·2503 ,,

The carbonates are here calculated as simple carbonates, but they are all contained in the water, combined with some carbonic acid in the form of bicarbonates. There are also 33·86 cubic inches of free carbonic acid contained in a pint of this water. It will be seen, then, that this spring contains a large proportion of chloride of sodium, very nearly an equal quantity of carbonate of sodium, a large amount of the aperient sulphate of sodium, the alkaline carbonates of lime and magnesia, and an appreciable quantity of iron. As to the amount of iodide of sodium* which appears from the above table to be present in this spring, I must observe that there is clearly a mistake here in the calculation. It would be a very important constituent indeed, did it exist in anything like the proportions herein stated, but on comparison of other percentage analyses, I find there is but a mere trace of this substance—viz., 0·0002 in a thousand parts. This very inaccurate statement has been carelessly copied into English works on the Swiss baths and watering-places. Compared with other European spas, the St. Lucius and St. Emerita springs of Tarasp resemble most nearly the waters of Vichy and Carlsbad.

The differences are chiefly these—the Vichy water has much less carbonic acid, very much less chloride of sodium, scarcely any sulphate of sodium, less magnesium salts, and a mere trace of iron. The quantity of carbonate of soda is nearly the same in each. The relative quantities of their chief constituents are shown in the following table.

In 10,000 *parts.*

	St. Lucius, Tarasp.	Grande Grille, Vichy.
Carbonate of sodium . .	35·455	36·54
Chloride ,, . .	38·283	5·43
Sulphate ,, . .	21·546	0·168
Sulphate of potassium. .	3·903	3·362
Salts of magnesium . .	6·61	2·0
Carbonate of iron . .	0·198	0·02
Carbonic acid . . .	45·426	26·65

It will be seen, then, that the Tarasp water is as alkaline as the Vichy water, but that it contains a much larger proportion of aperient salts, and that it is also mildly chalybeate.

The Carlsbad water has, again, much less carbonic acid, less chloride of sodium, less carbonate of sodium, less magnesium salts, nearly the same quantity of the aperient sulphate of sodium, a much larger quantity of the aperient sulphate of potassium, scarcely any iron, and it has a much higher temperature, probably a not unimportant difference. The springs of Carlsbad vary from 125° to 165° Fahr., those of Tarasp from

40° to 45° Fahr. The following table will show clearly the extent of these differences :—

In 10,000 *parts.*

	St. Lucius, Tarasp.	The Sprudel, Carlsbad.
Sulphate of sodium . .	21·546	19·48
,, potassium. .	3·903	12·2
Chloride of sodium . .	38·283	11·36
Magnesium salts . .	6·61	0·52
Carbonate of soda . .	35·455	11·8
Carbonate of iron . .	0·198	0·04
Carbonic acid . . .	45·426	10·123

It will be noticed that the Carlsbad water contains more of the aperient alkaline sulphates; the Tarasp spring, on the other hand, contains three times as much chloride of sodium, and nearly three times as much carbonate of soda. We find, therefore, that the Tarasp water combines the alkaline character of the Vichy and the aperient character of the Carlsbad springs, while the presence of so large an amount of carbonic acid renders it more agreeable as a beverage, and promotes the absorption of its constituent salts. The presence of an appreciable quantity of iron renders it also a blood restorative.

There is scarcely a spring in Europe that is known to possess so many important qualities.

But Tarasp has the additional advantage of possessing several very important acidulous chalybeate springs of a purely tonic character. The one most commonly drunk is the St. Bonifacius spring. It is situated on the right bank of the Inn, about a mile distant from the Kurhaus. It contains quite as much iron as the stronger spring at St. Moritz, but rather less carbonic acid. In the table which follows, the constituents of these two springs are contrasted :—

In 1000 *grammes.*

	St. Bonifacius quelle. Tarasp.	Paracelsus quelle. St. Moritz.
Carbonate of lime . . .	1·9023	0·8911
,, magnesium .	0·3366	0·1583
,, protoxide of iron	0·0330	0·0329
,, manganese .	—	0·0043
,, sodium . .	1·0325	0·2074
Chloride of sodium .	0·0570	0·0404
Sulphate ,, . . .	0·2147	0·3481
,, potassium . .	0·0955	0·0205
Silica	0·0185	0·0495
Phosphoric acid . . .	—	0·0006
Alumina.	—	0·0004
	3·6901	1·7535

Of free carbonic acid there are 37·91 cubic inches in 32 cubic inches of the St. Bonifacius well, and 51·20 cubic inches in the same volume of the Paracelsus well. This spring has a slightly chalybeate taste, which is not unpleasant, owing to the large amount of carbonic acid it contains.

A milder chalybeate spring rises close to the Kurhaus, the Carola spring; it contains only half as much iron as the Bonifacius, but it has, to my thinking, the great advantage of containing only one-fourth the quantity of carbonate of lime, a mischievous ingredient in many cases where iron waters might otherwise be useful.

There are several more iron springs in the district of Tarasp, but the only other to which I shall now call attention is the Wyh Spring, which rises out of the ground, quite unprotected and unenclosed, in one of the meadows on the hillside above the village of Schuls, and about twenty minutes' walk from the Kurhaus. This spring contains a considerable quantity of iron, rather more than the Alte Quelle at St. Moritz, and its water, as it streams down the mountain side, deposits an abundant red ferruginous covering on the soil it flows over. It rises in a most picturesque and somewhat out-of-the-way spot, and is one of the pleasantest mineral waters to drink I have ever tasted. It is not, however, much frequented. We found a tumbler hidden under an adjacent bush, which had been left there by a benevolent fellow countryman for the use of those who might subsequently find their way to this delightful spring. We made use of it and returned it to its hiding-place.

Of the sulphur springs in this locality the one in Val Plafna and another in Val Dragun, on the way from the upper village of Schuls to the village of Fettan, are the most important. They are both impregnated with sulphuretted hydrogen. The Dragun spring appears to be an acidulous chalybeate spring saturated with sulphuretted hydrogen. These sources have not yet been enclosed or utilised.

I have now a few words to say as to the therapeutic action of these waters.

It will not be difficult, bearing in mind the composition of the mineral springs, to analyse briefly their action on the human economy.

The primary effect of these alkalo-saline springs must be an antacid action on the gastric mucous membrane. After absorption of the saline constituents, we naturally get increased activity of the secreting organs, by which these salts are eliminated from the blood. If the waters be taken early in the morning, as is generally ordered, with gentle walking exercise, several fluid motions from the bowels are commonly obtained before breakfast or immediately afterwards. The diuretic action of the water is manifested later in the day. It is further reasonable to conclude that when a considerable quantity of a strongly alkaline and saline fluid is taken into an empty stomach, from which it must at once pass into the portal system of veins and thence through the secreting structure of the liver, that the condition of this organ and the character of its secretion may be greatly modified thereby. We know that sodium is the base with which the acids of the bile are found combined, and there can, I think, be but little doubt that the internal administration of dilute solutions of the carbonate of sodium exert an important influence in modifying the character of this secretion.

One of the most useful remedies in cases of jaundice associated with congestion of the liver, as well as in cases of obstruction from biliary calculi, or from the presence of inspissated bile in the duct of the gall-bladder, is large draughts of warm water containing carbonate of sodium in solution. What is the Carlsbad water, which is found to be so efficacious in the relief of biliary concretions and in the reduction of fatty and congested livers, but a warm dilute solution of carbonate of sodium with some additional saline purgative constituents? Doubtless the warmth of the water, in this instance, favours its action. The Tarasp water is much richer in the alkaline carbonate of soda, and very nearly as rich in aperient salts. We are therefore quite prepared to hear that these waters are found especially useful in visceral congestions and obstructions, as, for example, chronic affections of the liver, hyperæmia of that organ and the fatty liver arising from errors in diet, certain cases of jaundice, and gall-stones; congestion of the spleen after intermittent fevers; dyspepsias, especially those associated with excessive formation of acid and with vomiting, and originating in want of exercise, improper or irregular feeding, or obstinate constipation; general corpulence; chronic gout and rheumatism—conditions especially associated with increased development of acid substances in the blood or with defective action of the eliminatory organs. Tapeworms are said to be occasionally expelled during the use of these springs. Some forms of catarrhal affection of the kidneys and bladder, and disposition to the formation of renal calculi, are also relieved here, just as, indeed, they are by the use of the Vichy water. Disorders of menstruation, associated with a chronically congested state of the uterus and ovaries, are reputed to be relieved in a very remarkable manner by a course of the waters at Tarasp. Some cases of chronic eczema have also been greatly benefited here. It is further stated that persons suffering from chronic laryngeal or bronchial catarrh with hoarseness are relieved by drinking these waters, and some Physicians believe them to be useful in the incipient stage of pulmonary tubercolosis. It is, however, very probable that the pure and invigorating mountain air has more influence in producing the improvement observed in cases of pulmonary disease than the use of the mineral springs.

As to the quantity of water that is usually taken, patients begin with two or three glasses (each holding six ounces), and increase gradually to six or eight. These are drunk in the morning before eating, at intervals of a quarter of an hour, gentle walking exercise being taken all the time. It not unfrequently happens that persons with weak digestions suffer considerable inconvenience from headache and flatulence if they drink any quantity of cold water before breakfast. When such is the case it is better to take an early light breakfast, and drink two or three glasses of the water two or three hours afterwards. If necessary, a glass or two more may be taken late in the evening. A common practice also is to warm the water before drinking.

It is very obvious that a powerfully alterative aperient and alkaline water should not be taken continuously for a long time. There are very few cases in which its use should be prolonged without interruption for longer than a fortnight; and many cases would probably derive much greater benefit

from a combination of the saline and the chalybeate treatment than from either singly—the saline water for three or four days, then the chalybeate for a similar period, and so on. I am thinking especially of those cases of anæmia in females, associated with obstinate constipation and disorder of the generative system, in which we know, as a matter of common observation, that preparations of iron are rarely useful unless combined with an aperient, and that frequent aperients are injurious unless combined with some tonic remedies. Tarasp, with its saline aperient water on the one hand, and its bracing chalybeate spring on the other, seems to be exactly suited to such forms of disease.

2. In the next place I would desire to say a few words on the climate of Tarasp. This district, situated at an elevation of between 4000 and 4500 feet above the level of the sea, possesses all the invigorating characteristics of an Alpine climate, while it has the advantage of being much less severe and rigorous than that of the Upper Engadine. There are here fewer sudden changes of temperature, and an unexpected fall of snow in the summer months, by no means an uncommon occurrence at St. Moritz, is at Tarasp quite an exceptional event. The milder character of the climate is indicated by the much greater luxuriance of vegetation; rye and flax are extensively cultivated in this district, and fruit orchards flourish near Schuls, while the local flora is exceedingly rich and diversified.

As well as being milder, the air is not so dry and rare as in the Upper Engadine—a condition which occasions frequently most uncomfortable excitement and irritation in many cases of functional nervous disorders which have been of late years sent in considerable numbers to these high Alpine stations. Unpleasant and troublesome herpetic eruptions about the face are very commonly produced in persons with delicate skins by the dry stimulating air of St. Moritz. These are not so frequently observed in the milder climate of the Lower Engadine. This part of the valley is almost entirely protected from the north and north-east winds, the prevailing winds being the south-east and north-west.

The snow begins to melt here in April. The spring is short, as in all mountain districts, and in June the summer is so far advanced that on the 15th the bath season commences. This continues to the end of September, a month generally remarkable for constantly fine genial weather, the only drawback being the shortness of the days. The mean atmospheric temperature in the months of July and August ranges from 56° F. to 60° F. The maximum and minimum temperatures noted in the same months were 82° F. and 37·5° F. It will thus be seen that the climate of Tarasp especially commends itself to those cases in which it is thought desirable to try the influence of mountain air without incurring the risk which certainly attaches itself to an exposure to the sudden changes of temperature, the highly rarefied air, and often the continuous cold of the Upper Engadine.

Also, on leaving the Upper Engadine, Tarasp offers an admirable intermediate point where patients may break the suddenness of their descent into the plains of Italy or Switzerland, which to many persons proves very trying, and the presence of chalybeate springs of a precisely similar character to those of St. Moritz offers facilities for continuing or prolonging the course of steel waters if it be thought desirable to do so.

3. This account of Tarasp would be very incomplete if I were to omit to add to the preceding remarks on its climate and mineral springs a few topographical and general details.

The quickest way of getting to the Lower Engadine from England is through Paris and Bâle to the Landquart station on the railway between Zurich and Coire—it is the next station but one after Ragatz. A little distance from this place, the beautiful and picturesque valley of the Prattigau opens. The road ascends through this valley to Davos, in the Davos-Thal, which is reached in about six hours by diligence or by posting. From Davos a new carriage road crosses the Fluela pass to Süs in the Lower Engadine, and by this route Tarasp may be reached in about seven hours from Davos, so that the whole journey between Landquart and Tarasp may be accomplished in one rather long day, and the entire distance between London and that place in three days, sleeping one night on the road at Ragatz or Landquart.

I have heard it remarked that "Tarasp is in a hole," and an impression of this kind is certainly produced upon one when, coming from the Upper Engadine, the diligence drives down to the left bank of the river and deposits one at the Kurhaus, which is built at the bottom of the somewhat narrow gorge through which the Inn here flows. But although it has pleased the proprietors to build the *Etablissements des Bains* at the bottom of this gorge in order to be close to the principal mineral springs, it does not follow, nor is it true, that "Tarasp is in a hole." Tarasp is the name of the district, and a spot more beautifully situated or with greater natural advantages it would be difficult to find. It forms a small plateau, around which spreads a hilly country covered with meadows, corn-fields, and wooded slopes in charming variety, crowned on each side by mountain summits of singularly bold and striking outlines. Beautiful lateral valleys, the sides of which are covered with shady and fragrant pine woods, penetrate deeply into the recesses of the Alpine chain, and afford a great variety of singularly attractive walks. For mountain climbers there is every kind of work, from rugged hitherto unscaled peaks to those lower points of view which may be described, in guide-book phraseology, as "easily accessible for ladies;" while the largest glacier fields in this part of the Alps—the *Vadret-Lischanna*—can be readily reached in a few hours. One of the great charms of the place is the number of pleasant shady walks over the wooded park-like hilly slopes in the immediate vicinity of the springs, which can easily be prolonged into more ambitious efforts as the strength of the invalid returns.

Those who object to the situation of the Kurhaus can obtain excellent accommodation at the Belvidere Hotel at Schuls, which is admirably placed, and distant about a mile from the springs, to which, however, residents at the hotel are conveyed in carriages daily free of charge. But commend me especially to the little hamlet of Vulpera, containing some homely, but good *pensions*, where most assuredly the Kurhaus ought to have been erected; it is placed in a sunny and pleasant open spot about 300 feet above the bath establishment on the opposite bank of the Inn, and from it a good zig-zagged path leads in about seven minutes to the mineral springs.

Those who do not mind being "in a hole"—though, at an elevation of more than 4000 feet above the sea, it is obvious that such an expression can only have a relative significance—will find extremely pleasant quarters at the Kurhaus. No effort has been spared to make it as comfortable and complete as any of the best hotels in Europe. English is spoken by the manager and by the waiters, and there is an English chaplain resident in the Kurhaus, who, it may be of interest to many to know, is desirous of establishing a daily service and a weekly celebration of the Holy Communion. The proprietors have with great liberality offered the use of a convenient building adjacent to the Kurhaus for the English church service, and at the same time placed a sum of money at the disposal of the chaplain sufficient to fit it up appropriately for that purpose.

Consideration for your valuable space, which I fear I have already too greatly trespassed upon, prevents my adding many interesting details connected with this locality which I may probably have an opportunity of describing elsewhere.

Clarges-street, W.

REVIEWS.

Report on the Sanitary Administration of the Punjab for the Year 1868. Furnished by Dr. A. C. C. De Renzy, Sanitary Commissioner.

Bad water and ineffective disposal of filth and sewage; this is the refrain which runs through the entire of the excellent report of Dr. De Renzy. It is nothing new to us to learn that these are the true pests of our Indian population, nor were we unprepared to find the Commission reporting as due to these faults a high mortality from preventible diseases. In towns the water supply is derived chiefly from unprotected wells sunk in a soil saturated with the filth of years; and even in the hill sanitaria, it is derived either from impure surface drainage or is brought from springs in unprotected conduits, and is thus liable to every form of pollution. Where attempts at removal of filth have been made, the "dry system" has hitherto been preferred, but while the Commissioner declares in its favour as applied to gaols and cantonments, he regards it as quite inadequate for the removal of excreta and the prevention of water contamination by fæcal saturation in towns. We have heard it said that the deficiency of water in India precludes the adoption of any other system, but Dr. De Renzy recommends the adoption of the sewer or water system, and goes so far as to suggest the utilisation of the sewage in the liquid state for the fertilisation of land. It is impossible for a person writing in England to form a judgment as to the prudence of this suggestion; if adopted it will have to be proceeded with cautiously. The recommendation to bring into towns a pure and ample supply of water from a distance and from untainted

sources by impervious pipes is one which all must concur in; but, as with us, there arises against it the inevitable complaint of expense, of want of funds, and the question "who is to pay?" The Lieutenant-Governor thinks it hopeless to expect the Supreme Government to contribute funds for municipal improvement from the imperial revenue, and the municipalities have themselves neither funds nor credit for raising loans. Anyhow the money ought to be forthcoming. We cordially re-echo the words of the Lieutenant-Governor "that the protection of the lives of the inhabitants from death and disease ought to be deemed an object for which we might be content to sacrifice a large amount of the theory of taxation, when such sacrifice is wholly in keeping with the feelings and wishes of the bulk of the people themselves." "Native disbelief in our knowledge of the laws of health is," we learn from the report, "one of the greatest difficulties to be contended with in introducing sanitary improvements" into India. The native public will not believe when "in the face of our pretensions, they have seen our troops swept away in hundreds by the sudden strokes of epidemic cholera, and our only defence against that terrible foe has consisted in flight from its attacks. . . . The difficulty may be removed rapidly by some signal demonstration of our power to control the spread of cholera in an epidemic form, by making towns and cantonments and gaols proof against the attacks of the pestilence." Hence Dr. De Renzy recommends that sanitary works should begin in the towns, from which, as centres, they might be extended elsewhere. He believes, and gives some good reasons for his belief, that cholera may be controlled in the Punjab by measures similar to those by which it has been controlled in England. Especially he thinks that the connexion of cholera with the character of the water supply has not gained so much recognition in India as with us, although there is reason to infer that the method of diffusion of the disease is much the same.

A large portion of the report is occupied by detailed accounts of the sanitary condition of particular stations; but, as they only confirm and illustrate the general principles and facts dwelt upon, we may pass them over with the remark that they are well worthy of study, and exhibit evidence of much laborious and praiseworthy research.

The registration of death, which is a *sine qua non*, as a basis of sanitary administration, is beset with innumerable difficulties. It is impossible to obtain reliable information as to the cause of death, except as regards a few diseases that are marked with very distinct symptoms, and with which the people are unhappily too familiar—such as small-pox and cholera. Nor can any reliable information regarding the death-rate of different periods of life be obtained, as the great majority of adult natives are unable to tell their age with any approach to correctness. "If you ask a man his age, his answer generally is —'My father and mother know; how could I know?' or, if he makes a guess, he is obviously wrong by twenty or thirty years." The infantile death-rate, however, is more readily obtainable, and is a valuable gauge of local salubrity.

It often happens, in our observation, that the appendix to an official report, like the postscript to a lady's letter, is the most interesting and novel part of the whole. We do not say it is absolutely so in this instance, but we must call attention to two papers of great value—one consisting of "Observations on the Propagation of Malaria through the Medium of Water," and the other on "An Outbreak of Relapsing Fever which appeared among the Punjab Muleteers while returning from Abyssinia," the latter by Assistant-Surgeon Gray, M.B., Civil Surgeon at Multan. We have only space for an abstract of the paper upon the propagation of intermittent fever by drinking-water. Dr. De Renzy says — "Last year, when, owing to the extreme dryness of the season, there was an entire absence of the conditions usually considered necessary to cause atmospheric malaria, there was a very large amount of intermittent fever in Donald town and the civil station of Lahore generally. In the railway quarter about Nowlucka hardly a single family escaped the fever; and in the lunatic asylum an unusually fatal fever, believed to be malarious, prevailed at a time when the surface of the surrounding country was perfectly arid from want of rain." There was only one defect discoverable in the sanitary arrangements, "the water was extremely bad; it contained ammonia and nitrous acid, and fifty grs. of chlorides per gallon. The use of the water was discontinued, and the health of the inmates appeared at once to improve, and several of the establishment who were sick at the time rapidly recovered. It has been said that the railway families suffered unusually from fever; but there was one curious exception which, taken in connexion with the case of the lunatic asylum, is of some interest. One family escaped the fever altogether, and attributed their exemption to their using Montgomery water for drinking and culinary purposes, and not Lahore water. The head of the family was a railway guard, and brought up the water by train from Montgomery, a distance of 100 miles. He was much laughed at by his neighbours for doing so, but he carried out the arrangement notwithstanding, and was confident that it kept him and his family, altogether four persons, free from fever." "It is certain that intermittent fever prevails as an endemic where the conditions supposed to be essential to its propagation do not exist, where the ground instead of being marshy is extremely dry, to a depth ranging from twenty to sixty feet, where there is no stagnant water within miles, and where the proportion of organic matter in the soil is small. I have seen intermittent fever occur at Multan and in the arid districts adjoining the station in the absence of every one of the conditions described as essential. . . At Mian Mir last September there was a great deal of intermittent fever, although from the failure of the rains the soil had been perfectly dry for months." In this instance Dr. De Renzy attributes the disease to the drinking of stagnant water from the wells, "which are, in fact, deep ditches floored with a thick deposit of putrid vegetable and animal matter. Some of the decaying matter found in the wells is deposited through the open mouth; but a portion, and perhaps the most dangerous portion, is carried down in solution through the soil and through the pervious well shaft. . . It may be laid down as a law in hot climates that, in places whether marshy or not, where the drinking water is taken from wells at a depth of from six to ten feet from the surface, intermittent fever and spleen disease will prevail to a great extent."

There is a native belief that these fevers are caused by impure water, and observations are accumulating in different quarters in support of a doctrine which is rather disinterred from forgetfulness than new.

Grundzüge der Wissenschaft des Glücks. Von F. A. v. Hartzen. Halle: Pfeffer. 1869.

Principles of the Science of Happiness. By F. A. v. Hartzen. Halle: Pfeffer. 1869. Pp. 39.

The well-known author of this little tract expounds in it his pleasant doctrine on happiness, which he considers the goal of life. He contends that every one of us is entitled to some share of happiness; that happiness beautifies body and mind, strengthening them at the same time. The highest happiness is to make others happy; but this is not the lot of many. A certain amount of egotism is quite defensible, supposing it necessary for the happiness of the individual. A happy man is generally a better man than an unhappy one; therefore the doctrine is not opposed to morality. The science of happiness is the knowledge how best to attain it. The various conditions are enumerated which are necessary for happiness—for instance, the faculty of impressiveness or sensitiveness. The ways and means are explained by which you are able to spread happiness. Political activity is highly valued, and the author thinks that the number of those members of society is on the increase who make it their business to make others happy. The State should care that every citizen lives as happily as possible, and in an ideal State every one would follow his own inclinations undisturbed and without interfering with others.

NEW BOOKS, WITH SHORT CRITIQUES.

Renal Diseases: A Clinical Guide to their Diagnosis and Treatment. By W. R. Basham, M.D., F.R.C.P., Senior Physician to the Westminster Hospital, and Lecturer on Medicine, etc. London: John Churchill and Sons. Pp. 244.

*** This little manual is intended as a guide to the student in studying a class of diseases sufficiently common to be worthy of careful attention on his part, written by one whose name is already well known and highly esteemed as an authority on the subject. It is divided into three parts, one dealing with the inflammatory affections of the kidney, the other with those where inflammation is not one of the marked phenomena of the disease. Finally are considered the physical, chemical, and morphological conditions of the urine as guides to the existence of morbid change. We strongly commend the book to those for whom it is specially intended; its use cannot fail to be beneficial.

The New York Medical Journal for April,

*** Which has just come to hand, contains a very good paper on the use of oxygen in the treatment of disease, by

Dr. Andrew Smith, of New York. The paper was an essay, to which a considerable prize was awarded by one of the Medical societies.

Descriptive Anatomy of the Horse and Domestic Animals. Chiefly compiled from the Manuscripts of Thomas Strangeways, LL.D., late Professor of Anatomy in the Edinburgh Veterinary College, and the late Professor Goodsir. By J. Wilson Johnston, M.D., F.R.S.E., Bengal Medical Staff, and T. J. Call, L.R.C.P., Medical Officer to Ilkley Hospital. Edinburgh: Maclachlan and Stewart. Pp. 525.

*** This seems to us to be, on the whole, a very good manual for the veterinary student. It is fairly written and illustrated. The only fault we detect is an attempt to teach too much. What has a book like this to do with reproduction by *fission* or *gemmation?* We are not aware that any of our domestic animals are so produced.

The Cell Doctrine: Its History and Present State. For the use of Students. By James Tyson, M.D., Lecturer on Microscopy in the University of Pennsylvania, etc. Philadelphia: Lindsay and Blakiston. Pp. 150.

*** Dr. Tyson became impressed with the belief that a collection of the various views which have been held as to the ultimate organic element would be useful to the student, and the present neat little volume is the result. Dr. Tyson inclines to accept the views of Dr. Beale—which, indeed, are more in favour in America than are any others. The bibliography of the cell theory is here collected, but in a way which is not, we think, the most useful in dealing with such a progressive subject. The author's names are given alphabetically; a better plan would have been to make the order chronological.

GENERAL CORRESPONDENCE.

THE LICENTIATES OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

Letter from Dr. Hen. A. Pitman.

[To the Editor of the Medical Times and Gazette.]

Sir,—Differences of opinion having been expressed as to the Professional status of the Licentiates of this College, I am directed to forward you the following opinion of counsel in reference to this question:— I am, &c.

Hen. A. Pitman, Registrar.

Royal College of Physicians of London.

Question.—Is a Licentiate of the College of Physicians a Physician, and may he so entitle himself?

Answer.—We are clearly of opinion that the Licentiates of the Royal College of Physicians who have obtained their licences to practise Physic subsequently to December 22, 1860, are entitled to call themselves Physicians, and to hold appointments as such under 21 and 22 Vict. c. 90 s. 36, if duly registered as Licentiates of the College according to s. 27, and Schedule (D) of the same Act.

(Signed) Roundell Palmer,
George Denman.

Lincoln's-inn, February 25, 1870.

TREATMENT OF PERINEPHRITIC ABSCESS.

Letter from Dr. Henry J. Bowditch.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your valuable journal for January 22, 1870, you quote, under the title of "Vienna Clinique," a case of "Perinephritis, with extensive Suppuration and Death." It had been treated by Oppolzer. You make no remarks or criticism on the report, and yet, in my opinion, it is open to the severest criticism on (what I cannot but consider as) the mismanagement of the case. The admirable skill at diagnosis which distinguishes the eminent Professor is evident in the report. But in the treatment it is lamentably deficient. It does not seem to have occurred to Oppolzer that the only means left to him was the opening of the abscess in the renal region. By this neglect he seems to me to have allowed a patient to die, who might perhaps have been saved. It is true that Oppolzer might declare that the "cheesy deposits" would have prevented an entire cure. But his *ipse dixit* does not prove that this result would have happened. Certain it is that the affection for which the patient was treated ran a very rapid course in the left side—evidently acute and inflammatory. It is equally certain that the same "deposits existed in the right kidney without any important changes in the surrounding parts." I therefore cannot but think that if either by a free incision with a bistoury or by a simple puncture with trochar and canula, the abscess had been evacuated, the patient's life would probably have been saved.

This is my firm belief; and in order to convince you that I have some ground for that faith, I take the liberty of sending by this post a short published report of three cases of perinephritis in which the most happy results followed such an operation. Since these cases were published I have collected seven more illustrative of the chief practical points presented in the paper forwarded. Those points are:—

1st. The important fact that thoracic complications, similar to those mentioned by Professor Oppolzer, are apt to occur in cases of perinephritic abscess, and these complications call for decisive measures, if life is to be saved—viz., the operation above alluded to should be performed.

2nd. The operation, as it is urgently called for, appears at times to be the only means of saving life.

I am, &c. Henry J. Bowditch, M.D.

Boston, U.S., March 4.

COW-POX INOCULATION.

Letter from Dr. F. E. Jencken.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a letter from Dr. Ballard that appeared in a recent number of your journal, in which he refers to the comparative failure of the inoculation of the cow-pox from the heifer in Paris, he seems to ascribe the want of success more to the undue haste in which the operation was performed, than to an insufficiency of transmissive force in the lymph to be conveyed.

Though every Physician acquainted with the theory, history, and practice of vaccination, must inevitably bear witness to the justice of this remark, I am inclined to think our eminent sanitarian has somewhat overlooked the fact that there must naturally exist a discrepancy between human and animal vaccinia, and that lymph, in order to be always and readily transmissible, must to a certain extent, not only be mitigated, but modified in its nature; a desideratum which can only be attained by passing the virus first through the human economy.

Animal lymph should, therefore, not be employed for ordinary vaccination, as has been done in France and Belgium; but bearing in mind the affinity that should obtain between the vaccinifer and the subject to be operated upon, ought only to be employed to renew the stock of virus, and as a means of maintaining the typical vaccine pustule, by which alone an immunity from small-pox is ensured; the preservation of the quality of the lymph depending on the operator, and being entirely a matter of hygiene. I am, &c.

Ferdinand E. Jencken, M.D., M.R.C.P., etc. etc.

Kingstown, April 19.

OUT-PATIENT PRACTICE.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have just seen your interesting report of the meeting of Medical men at the rooms of the Royal Medical and Chirurgical Society to consider the abuses in the out-patient practice at Hospitals, and venture to submit to you for consideration that a registry of all applicants for relief, with name and address, before being admitted to the Medical man in attendance, would go a long way towards curing the abuse, and that the more regular way for proceeding in the matter would be to memorialise Hospital committees or boards on the subject, and suggest a register. I most respectfully submit that to the board or committee belong the duty and the power of inquiry and remedy, and not to the Medical officer. The truthfulness of any statement made could then be tested with ease occasionally. As the funds of the charity are supposed to be imposed upon, I think that the Hospital funds should bear the expenses of the registration—say £20 a year.

I am, &c. Thrasybulus.

St. George's Parish, Grosvenor-square, April 16.

M. Gueneau de Mussy's Resolvent Ointment.—Chlorhydrate of ammonia 2, camphor 1, and lard 30 parts. To be used morning and evening to the inflamed glands in subacute adenitis—employing at the same time emollient cataplasms and baths.—*Union Méd.*, April 12.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 22, 1870.

GEORGE BURROWS, M.D., F.R.S., President, in the chair.

A PAPER by Dr. CHARLES ELAM was read on

IDIOPATHIC GENERAL CEREBRITIS.

The object of the paper was to indicate the existence of a special inflammatory affection of the substance of the brain, not complicated by any altered condition of the meninges, and differing widely in most of its essential characters from any form of cerebritis or encephalitis hitherto described in systematic works on the subject. This was called "General Acute Idiopathic Cerebritis." Its principal phenomena, positive and negative, were these—uniformity in its commencement, beginning with vomiting; uniformity in its termination, ending with death. Its duration was from thirty-six hours to twelve days. Its progress was remarkable from the absence of the striking phenomena that generally characterise compound cerebritis—that is, the form that is accompanied by meningitis. There was no convulsion, no paralysis, but little delirium, and that mild and transitory, and coma only supervened shortly before death, as it might do in many general affections. Three case were selected from a number as illustrations, with brief details of the post-mortem examinations. This sketch was intended to supply a link in our nosological system, which, as it appeared to the author, had been in great measure, if not altogether, hitherto missing.

The PRESIDENT expressed a high sense of the value of Dr. Elam's communication. He believed that it was very rare to have inflammatory affections of the brain in which the membranes did not participate, and asked for the experience of the Fellows upon this point.

Dr. CLIFFORD ALLBUTT had been greatly interested by the paper. It appeared that in one case much post-mortem change had been found, in the other two nothing but congestion. Such cases as the last are perplexing. What are they? In the two no microscopic examination was made; in the one there were exudation corpuscles in the brain substance. He hardly knew in what sense the word "brain" had been used by the author, and had observed no mention of the state of the mesocephalic ganglia. Even in the one case, how far was the state cerebritis? In the other two the use of the term was questionable. Proliferation of the connective tissue of the brain was a matter of great and unusual interest. He himself was only acquainted with partial encephalitis, and has only seen this either artificially produced by injuries, or existing at the borders of morbid growths.

Dr. CHARLTON BASTIAN knew nothing of uncomplicated cerebritis, from knowing no anatomical distinction characteristic of it. He thought the evidence did not entitle Dr. Elam to call himself the discoverer of such a disease. Dr. Elam had brought forward three cases which agreed in no one particular. In the first the most noticeable morbid change was hyperæmia, in the second general softening, in the third induration. These surely could not be placed in the same category. Of the first it would be very hazardous to speak. In the third it was impossible to believe that induration could have taken place from any acute change. It was a chronic process in all organs. In the second case the chief point was the existence of exudation corpuscles, and these are now known to be the ordinary accompaniments of all degenerative changes; so that there was nothing to differentiate the change described from *ramollissement*. The very universality of the change was an argument against its inflammatory character, because the brain is a multiple organ as regards its blood supply, so that inflammation would affect its different portions independently. We should look for the causes of inflammation in one of three elements—either in the connective tissue, the nerve tissue, or the bloodvessels—and pathological changes in any of these three may be followed by other pathological changes in the region implicated. No reliance could be placed on symptoms as evidence of the nature of disease. An affection of the hemispheres would produce different symptoms from the same affection of the pons Varolii or of the cerebellum. Symptoms would not be dependent on the nature of the structural change, but on the part in which that change took place.

Dr. RADCLIFFE said that thoughts like those to which Dr. Bastian had given expression had passed through his mind while listening to the paper. He could scarcely allow that the post-mortem evidence adduced in support of the existence of cerebritis, as defined by Dr. Elam, was conclusive, but he was chiefly disposed to call in question the symptomatology of the disorder. He believed that the accounts of encephalitis in the ordinary text-books required revising; that acute pain in the head and active delirium or high fever, or active symptoms of any kind, were not the symptoms commonly met with; but that mental dulness and indifference rapidly deepening, ushered in by vomiting, with little or no feverishness, and with little or no disposition to paralysis beyond weakness of the bladder, were the usual symptoms, not only when the substance of the brain without the membranes was affected, but also when the membranes were implicated in the inflammation. He therefore would not regard the symptoms given by Dr. Elam as diagnostic of cerebritis *pur et simple* as being really so diagnostic.

Dr. WYNN WILLIAMS inquired how soon after parturition the disease had shown itself in the case of the adult lady, and mentioned instances in which somewhat similar symptoms, leading to a fatal issue, had been attributed to the absorption of putrid matters after delivery.

Dr. HABERSHON believed that every one must frequently have been perplexed by the absence of post-mortem change in cases of apparent tubercular meningitis. Dr. Bastian had drawn attention to a correct division of these instances, according as they might be due to changes in the tissue elements or in the blood-vessels. In the latter case he believed that manifest hyperæmia was often due to capillary embolism; and he doubted if we should be warranted in regarding the changes described by Dr. Elam as being due to acute general inflammation.

Dr. CHARLTON BASTIAN wished to supply an omission in his former observations. He had frequently found that general turgescence was due to capillary obstruction, occlusions of various kinds disseminated throughout the brain; and he had found similar obstructions in other organs, as the liver, with clear evidence, from the consecutive tissue changes around them, that they had been formed during life.

Dr. ELAM, in replying, said that he had selected three cases having a certain distinct clinical relationship. The changes were general—universal over the brain. The disease was acute—sudden in its invasion, without premonitory symptoms, rapid in its progress to death. The post-mortem changes were general, and had a certain relation. In the second case the brain was diffluent; and if the first patient had lived twelve days, his brain might probably have been in a similar condition. In the third patient there was no induration, but the texture was a little firmer than natural, with the hardness of the first stage of inflammation. This case lasted as long as No. 2; but the difference in the rate of morbid change might be due to the difference of age—one patient being a boy of 13, very young for his years; the other the mother of three children. In all the changes were such as we are accustomed to call inflammatory. In No. 2, besides the very great softening, there was the roseate tint of the tissue, which stained a knife, and the presence of the exudation corpuscles. It was certainly much to be regretted that disease should be so illogical as to produce results which it ought not to produce, but it was our most important duty to trace facts as they occurred.

CLINICAL SOCIETY.

FRIDAY, MARCH 25.

Mr. PAGET, President, in the Chair.

MR. CHRISTOPHER HEATH narrated five cases of Imperforate Anus upon which he had been called upon to operate within the last two years. The first and fourth (both males) were examples of an anal *cul-de-sac* with termination of the rectum about an inch from the surface. In both cases the bowel was reached, in the first being drawn down and stitched to the margin; but both children sank, and in the last case the peritoneum was found to have been opened. The second case was the male child of a Medical man, in whom there was no anus, but merely a dimple in the skin. Mr. Heath succeeded in reaching the bowel after cutting through some very dense structure, but was unable to draw it down to the skin. The child has thriven, and is now 2 years old. It has a bougie passed occasionally, and there is no great tendency to contraction. The third case was in a female child, 13 months old

when brought to Mr. Heath in 1868. There was no anus, but a small opening into the vagina, through which fæces escaped with difficulty and in small quantity. An attempt had been made to establish an anus in the proper situation soon after birth, but without any good result. Mr. Heath repeated the attempt, but, failing to give relief to the distension of the abdomen, afterwards divided the perinæum, and opened freely into the rectum from the vagina. The child recovered its health, and did well until last month, when it died somewhat suddenly with symptoms of enteritis.

Mr. Willett had seen a case at St. Bartholomew's that very week, as well as certain others previously. The first he saw, in 1867, was a male, with no *cul-de-sac*, but a bulging quite apparent. He perforated with a trocar. But the child, which was six or seven days old, was exhausted, and died the same night. His second patient was a girl, aged 13, with an extremely minute opening into the vagina. Early in life, an anal opening had been made, but allowed to close. She was in bad condition, with her abdomen greatly distended. He cut through the perinæum, dissected the bowel, brought it down, and stitched it to the skin. He was some time in removing the fæces, which were strongly impacted. The stitches cut through the skin, but not the bowel. At last she got well, and has been kept so by the use of a bougie, and occasionally a laminaria tent. The third case occurred in a male child, five days old, with a *cul-de-sac*. The abdomen was distended, and the child was vomiting. The extremity of the bowel was detected and a trocar passed. The child did well for a time, but subsequently died.

Mr. Thomas Smith said people imagined it easy to cure such cases. He rather thought them irremediable—*i. e.*, they could never be left to nature, for it was impossible to transform a mucous canal into a mucous membrane. Generally they died, but some were still alive and uncomfortable. He ordered mothers each night to distend with a pair of scissors, protected by a vulcanite hood. He often saw a *cul-de-sac* with only a ring between it and rectum. Even this could not be left to itself. He had seen the bowel brought down, but with no great good result. As to females, he thought the mucous membranes of the vagina and rectum became continuous, so that the fæces preferred to pass by the fistula; he therefore laid the whole open, so that no perinæum was left. The wound does not then close. He did not know the condition of these patients in womanhood. He thought the plan of distension bad. He only required to stuff with lint.

Mr. Callender thought there were still two points to notice —the occurrence of bleeding, which had troubled him in two instances, in one proving fatal, and the difficulty of getting rid of the accumulated fæces, as the muscles were generally deficient round the lower gut, especially the sphincter.

Mr. Paget said these were not cases on which Surgeons looked back with pleasure. He knew of only one success in his practice as compared with he did not know how many failures. In this case there was an opening into the vagina. He opened the anus, which remained patent. He was quite willing to admit the benefit of having a single cloaca in the child, but what about womanhood? It had been suggested to him as questionable if such patients ever live till 30. In another young lady with recto-vaginal opening, who lived till 17, there had accumulated an enormous mass of fæces in a pouch with a narrow orifice, such as formed in all these cases. He increased the orifice, and scooped out a quantity of fæces, in the centre of which was a crystalline mass of phosphates. The patient improved. These were his only two good cases.

Mr. Barwell had seen something similar. He operated on the patient, who improved.

Dr. Duckworth communicated a case of the True Keloid of Alibert which had been under his observation for two years. It was illustrated by a coloured plaster cast and a water-colour sketch. The points of interest in the case were that it occurred in a male, aged 65, and had been growing slowly for thirty-six years; that it occupied the sternal region, a locality affected in nearly half of the recorded cases, and that no cause of any kind was assigned as a starting-point for the disease. The case agreed remarkably with several that had been carefully observed and described, and Dr. Duckworth expressed his belief that we were in possession of sufficient facts to warrant the distinction of these cases, originally made by Alibert, into true or spontaneous, and false or cicatricial, keloid. Mr. Hutchinson had lately asserted that Alibert's keloid was a disease of scars and not of skin, and that the affection is scarcely ever met with in adults or elderly persons, excepting with a short history, and that after reaching a climax of growth it commenced to soften and lose its irritability. This case appeared to disprove these statements, since it afforded the longest history of true keloid yet recorded, and the growth continued to enlarge and cause, perhaps, more pain and discomfort each year. Mr. Hutchinson's observations seemed solely to apply to the spurious or cicatricial form of the disease.

Mr. Davy asked the microscopical appearances.

Dr. Duckworth said the structure as described by Quekett was fibroid.

Mr. Barwell said there was one described by him in the *Pathological Transactions*.

Dr. Handfield Jones related a case of Fatal Epileptic Stupor occurring in a young woman who had been admitted into St. Mary's Hospital in a state of unconsciousness. In the absence of any history, diagnosis was at first difficult. She had bed sores; no decided paralysis; normal temperature; quiet respiration; no spots; urine not albuminous, deficient in uric acid. She died in asthenia twenty-five days after admission, and autopsy showed chiefly an atrophied brain with much arachnoid and ventricular fluid. It transpired that three relatives had died insane or epileptic, that she had suffered from epilepsy and from mania lasting one month, and that a fit had occurred two months prior to last seizure. It was considered that the encephaloid was either originally imperfectly developed or had undergone atrophic change, and the fluid in arachnoid and ventricles was complementary. The stupor was probably consecutive to an epileptic paroxysm.

Dr. Leared brought forward the case of a gentleman who was seized with epileptoid fits after an attack of apoplexy. The fits were so protracted that apparent death from apnœa ensued on six occasions, and the patient was restored to animation each time by Sylvester's method of artificial respiration. The duration of apnœa after a fit was on one occasion two minutes and a half, and the length of the fit itself was certainly not less, during which, also, respiration was in complete abeyance from spasm of the glottis. There was therefore a period of complete apnœa of five minutes. By the aid of bleeding from the arm and the subcutaneous injection of bromide of potassium he so much improved that he survived five days, during which he was at times able to converse rationally with members of his family, who—also by the treatment adopted—were afforded time to come from a distance. He died at length from asthenia, notwithstanding every effort to combat it. As a last resource ammonia was injected into a vein, but with no good result.

Mr. Callender inquired as to the character of the convulsions and the condition of the patient as to rigidity.

Dr. Powell asked the cause of the high temperature.

Dr. H. Jones said he had seen cases where the respirations were 50 with deep coma, and a temperature of 102° or 103° with no inflammation. He had lately noted certain cases of rapid respiration in coma.

Dr. Beigel asked whether a patient was to be said to die of epilepsy when he was convulsed. They now found that many things were called epilepsy which were not. In Dr. Leared's case there was disease of the brain. Neither were truly epileptic.

Dr. H. Jones said the cases were not exactly epileptic—certainly not in Dr. Leared's case. Epilepsy and chorea were alike in certain respects; they both might have totally different causes, and yet each present its own peculiar symptoms.

Dr. Leared said the rigidity existed at first only.

Dr. Buzzard said he had seen Dr. Handfield Jones's case, and been much interested in it, especially as to diagnosis. This was extremely difficult at first, owing to the want of a proper history, but as soon as that was supplied the difficulty ceased.

Dogs and Doctors.—A curious case has lately occurred in New York. Dr. Strachen had presented to him four fine sporting dogs—pointers. These he kept in a yard behind his house. Complaint was made that the dogs were an annoyance by their barking and their filth offending the neighbours. On a report to the Board of Health, and after due inquiry, the dogs were ordered to be removed by the magistrates. Hereupon ensued a truly American battle. Petitions and counter-petitions respecting the dogs were sent into the magistrates. In opposition to the doctor of the Board of Health, other doctors certified that the dogs were neither noisy nor injurious to health. Invalids appeared on either side. Eventually it was decided by the magistrates that the weight of evidence was in favour of the dogs, which were consequently removed home again.

OBITUARY.

THOMAS HARROLD FENN, M.R.C.S., L.S.A.

We regret to record the death of Mr. T. H. Fenn, of Nayland, Colchester, who has recently died after nearly thirty years of incessant country practice. He was born on December 15, 1815, and was educated at Merchant Tailors' School, where he was rapidly rising to a high position, when he was removed at the age of 15 to be placed as a pupil with his uncle Mr. Liveing, an eminent Medical Practitioner, at Nayland. He afterwards proceeded to St. Bartholomew's, and became a Member of the College of Surgeons and Licentiate of Apothecaries' Hall in 1838. After a short period of study in Paris, he settled at Rushall, in Wilts, where his stay was, however, of short duration, for he removed in 1843 to Nayland where a larger field of work was open to him, and there his memory will long be cherished by both rich and poor, not only as a peculiarly skilful Practitioner, but as a true kindhearted friend ever ready to sacrifice his own time and strength for any who sought his advice or aid in trouble or distress. Gifted with a clear head and a well stored mind, he rapidly obtained a high position among his Professional brethren in the neighbourhood. After twenty-nine years of almost uninterruptedwork, his brain began to show signs of exhaustion, and in September last he was laid up with a slight attack of hemiplegia. After a few months' perfect rest, mental and bodily, he appeared once more to have regained some share of his former health, but the improvement was only apparent, for on the night of the 12th inst. he was seized with apoplexy, became rapidly unconscious, and died early on the morning of the 13th, in his fifty-fifth year. He has left no record behind him to testify to his work beyond that which is indelibly engraved on the hearts of all his friends and patients.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the Diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 19th inst., viz.:

Allwood, John Philip, Stafford, of Guy's Hospital.
Blenkarne, William L'Heureux, L.S.A., Ladbroke-road, of Guy's Hospital.
Blyth, Alexander Wynter, L.S.A., Tollington-park North, of King's College.
Chabot, Herbert, L.S.A., Camberwell, of Guy's Hospital.
Cooper, Arthur, Stamford-street, of Guy's Hospital.
Drake, Arthur John, Kingsclere, near Newbury, of St. Thomas's Hospital.
Eager, Thomas Cowley, Ripley, Surrey, of the Westminster Hospital.
Herman, George Ernest, L.S.A., Chatham, of the London Hospital.
Kitching, Walter, York, of the London Hospital.
Lattey, Arthur, Cambridge-place, W., of St. Mary's Hospital.
Lloyd, Albert Eyton, St. Asaph, of the Leeds School.
Manby, Alan Reeve, L.S.A., East Rudham, of Guy's Hospital.
Marshall, Lewis Walter, Bristol, of the Bristol School.
Mayo, Alfred Charles, L.S.A., Coleford, Gloucestershire, of King's College.
Morris, John, L.S.A., Lewes, Sussex, of Guy's Hospital.
Morris, John Edward, Gosberton, Lincolnshire, of St. Thomas's Hospital.
Parson, Francis John, L.R.C.P. Edin., Old Cambridge-terrace, Clapham-road, of St. Thomas's Hospital.
Rix, William Knibb, Thrandeston Scale, Norfolk, of the Charing-cross Hospital.
Robinson, Richard Swanne, L.S.A., Gray's Inn-road, of St. Bartholomew's Hospital.
Soutter, Mansfield Collier, Boundary-road, N.W., of King's College.
Sutcliffe, John, L.S.A., Ashton-under-Lyne, of St. Thomas's Hospital.
Tosswill, Lewis Henry, M.B. Cantab., Exeter, of St. Bartholomew's Hospital.
Walker, Samuel, York, of Guy's Hospital.
Wicks, Frederick, L.R.C.P. Edin., Cherryhinton, Cambridgeshire, of Guy's Hospital.

The following gentlemen were admitted Members on the 20th inst., viz.:—

Berry, Walter, Wisbeach, Cambridgeshire, of King's College.
Brierley, James Brassey, Churton-heath, Cheshire, of the Edinburgh School.
Cartwright, James Henry, L.S.A., Oakley-street, Chelsea, of St. George's and St. Thomas's Hospital.
Crocker, James, L.S.A., Wetherby, Yorkshire, of the Leeds School.
Dickman, Henry, Kandy, Ceylon, of the Calcutta School.
Fear, William, Clifton, Bristol, of King's College.
Fitzgerald, Conrad, Bristol, of the Bristol School.
Lorraine, William James, Wakefield, of the Leeds School.
Murphy, Shirley Forster, Ampthill-square, N.W., of Guy's Hospital.
Nicholson, Thomas Dickinson, Liverpool, of the Edinburgh School.
Patchett, William Ashton, L.S.A., Mottram, Cheshire, of the Manchester School.
Stoney, Percy Butler, Lonsdale-square, N., of St. Bartholomew's Hospital.
Waddy, Henry Edward, L.R.C.P. Lond., Gloucester, of Guy's Hospital.
Willmore, Frederick William, West Bromwich, of the Birmingham School.

Six candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their Hospital studies for the usual period.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, April 14, 1870:—

Beach, Fletcher, Bridport, Dorset.
Cox, William, Dorchester, Wallingford.
Crocker, James, Wetherby, Yorkshire.
Frost, Richard Russell, Launceston.
James, James Bowen, Middlesex Hospital.
Lewis, Henry Harman Dendy, Somerset-street, N.W.
Lucas, Thomas Pennington, St. Neots, Hunts.
Patchett, William Ashton, Mottram, near Manchester.
Vickers, Charles William, Huddersfield.
Westbrook, Charles, Sheffield.
Westcott, William Wynn, Martock, Somerset.

The following gentlemen also on the same day passed their First Professional Examination:—

Biggs, George Moses, University College.
Newberry, William John, St. Bartholomew's Hospital.
Williams, Benjamin Harvey, Guy's Hospital.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—The following appointments have been made:—Dr. Duncan Hilston, Surgeon to the *Lord Warden*, and George Bolster, Assistant-Surgeon to the *Nankin*, additional, for service in the *Lightning*.

In accordance with the provisions of her Majesty's Order in Council of February 22, 1870, the undermentioned officers have been placed in the retired lists of their respective ranks from the 1st inst.:—Staff-Surgeons: George A. Nicolls, M.D.; Thomas M. Costello; James Henry, M.D.; William H. Cameron; Horace H. Smith; Charles E. Playfair; Archibald L. Archer, M.D.; Charles H. Chambers; John Hudson; William D. Smyth, M.D.; Edmund Waller, M.D.; Arthur J. Ireland, M.D. Assistant-Surgeons: Thomas W. Hughes, George Clark, and Joseph Whitaker, M.D.

BIRTHS.

Batt.—On April 8, at 215, Camden-road, N.W., the wife of Edward Batt, Esq., M.D., of a son.

Fox.—On April 14, at 43, Sackville-street, Piccadilly, W., the wife of Tilbury Fox, M.D. Lond., Fellow of University College, of a daughter.

Hughes.—On April 14, at Bromley, Kent, the wife of Hugh Spencer Hughes, Surgeon, of a daughter.

MARRIAGES.

Aldridge—Bainbridge.—At St. Pancras Church, John Devenish Aldridge, eldest son of John Petty Aldridge, M.D., of Dorchester, to Annie Longdon Bainbridge, youngest daughter of John Bainbridge, Esq., of London.

Kirkman—Peake.—On April 19, at St. Paul's, Deptford, Dr. William P. Kirkman, of Barming-heath, Maidstone, to Amelia, second daughter of the late Henry Loyalty Peake, Esq., of her Majesty's Dockyard, Sheerness.

Roe—Owen.—On April 19, at St. George's Hanover-square, George Hamilton Roe, M.D., of Park-street, Grosvenor-square, to Angela Frances, eldest daughter of the Rev. Henry P. Owen, of Foulis-terrace, Gnslow-square.

DEATHS.

Chapman, Joseph, Surgeon, at Woodville House, Hounslow, of disease of the heart, on April 13, in the 53rd year of his age.

Fenn, Thomas Harrold, M.R.C.S., L.S.A., at Nayland, Colchester, on April 13, aged 54.

Fergusson, Andrew, M.D., Retired Inspector-General of Hospitals, and Honorary Physician to her Majesty, at 15, Hamilton-park-terrace, Glasgow, on April 8, aged 83.

Fowler, George, Esq., of Newington-terrace, Kennington-park, London, at Harewood House, Brighton, on April 13, aged 68 years.

O'Brien, Dr. John Joseph, youngest son of the late Michael O'Brien, at Cecil-street, Strand, after a short illness, on April 13.

O'Loughlin, Joseph Edward, Assistant-Surgeon 17th Lancers, at the Royal Victoria Hospital, Netley, on April 13, aged 36.

Puckle, Caroline, the dearly-loved wife of George Puckle, M.D., at 17, Denmark-hill, on April 17, after three days' illness, on her 38th birthday.

Tayler, Anne, widow of the late Alexander Tayler, M.D., of Banff, N.B., at Queenstown, Ireland, on March 26, aged 79.

Thomson, Dr. Ebenezer, late of Surbiton, Surrey, at sea, near the Island of Ascension, on his homeward voyage from the Cape of Good Hope, on March 17, aged 32.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Asylum for Idiots, Earlswood, Redhill, Surrey.—Assistant Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary on or before the 28th inst.

Cork South Charitable Infirmary and County Hospital.—Medical Officer for the Intern Department, and Surgeon for the Extern Department. Candidates must hold the licences of the King's and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland. Applications and testimonials to the Board of Trustees on or before May 12. Election on the 13th.

Hospital for Consumption and Diseases of the Chest, Brompton.—Resident Clinical Assistants; must have some qualification. Applications and testimonials to the Secretary on or before April 30.

Hungerford Union.—Medical Officer for the Lambourn District. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board. Applications and testimonials to Mr. H. E. Astley, Clerk, Hungerford, on or before April 26. Election on May 4.

London Fever Hospital. — Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, Islington, on or before May 9. Election on the 13th.

Retford General Dispensary.—House-Surgeon and Apothecary; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Dispensary Committee on or before May 1. The duties will commence at the end of June.

St. Pancras and Northern Dispensary, 126, Euston-road.—Honorary Physician; must be M.R.C.P.L., or be a Graduate in Medicine of one of the Universities of Great Britain or Ireland, and not be engaged in the practice of pharmacy. Applications and testimonials to the Hon. Sec., S. S. Wigg, Esq., 33, Gordon-square, on or before April 30.

Seamen's Hospital Society, Greenwich (late the "Dreadnought").—Physician; must be M. or F.R.C.P.L. Applications and testimonials to the House-Surgeon and Secretary, at the office of the Hospital, Greenwich, on or before May 4.

University College Hospital.—Resident Medical Officer. Applications, with statements of qualifications and testimonials, to John Robson, B.A., Secretary, on or before April 26.

Warneford, Leamington, and South Warwickshire Hospital.—Physician; must have a Medical qualification and be registered, and not practising Surgery, Pharmacy, Midwifery, Hydropathy, or Homœopathy. Applications and testimonials to the Secretary, on or before May 3. Election on the 13th.

Weobly Union.—Medical Officer for the Dilwyn District. Candidates must have the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Robert Rickards, Clerk to the Union, Weobley, Herefordshire, on or before April 25. Election on the same day.

West Riding Asylum, Wakefield.—Dispenser. Applications and testimonials to Dr. Browne on or before April 23.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Brentford Union.—The Eighth District is Vacant; area 3720; population 9999; salary £100 per annum.

Eastry Union.—The Eythorne District is vacant; area 8539; population 2168; salary £30 per annum.

Hungerford Union.—The Lambourn District is vacant; area 24,888; population 4115; salary £80 per annum.

Oswestry Incorporation.—The St. Martin's District is vacant; area 9950; population 3981; salary £60 per annum.

Sudbury Union.—The Sixth District is vacant; area 7686; population 2590; salary £41 per annum.

Wallingford Union.—Mr. Wm. C. Byass has resigned the Dorchester District; area 14,019; population 4801; salary £115 per annum.

Wells Union.—Dr. Charles Pope has resigned the Fourth District; area 16,158; population 5402; salary £80 per annum.

Weobley Union.—Dr. Empson has resigned the Weobley District; area 18,774; population 3279; salary £75 per annum.

APPOINTMENTS.

Cardiff Union.—Alfred Sheen, M.D. St. And., M.R.C.S. Eng., to the Workhouse and the Industrial Schools; John Evans, M.R.C.S. Eng., L.S.A., to the Llandaff District.

Hastings Union.—Augustus R. Ticehurst, M.R.C.S.E., L.S.A., to the Second District.

Holbeach Union.—Algernon Ewen, M.R.C.S. Eng., L.S.A., to the Sutton Bridge and Long Sutton District.

Northallerton Union.—Robert Pringle, L.F.P. and S. Glas., to the Osmotherley District.

Whitehaven Union.—Walter Somerville, M.D. Univ. Edin., to the Gosforth District.

New Fellows.—At the last meeting of the Council of the Royal College of Surgeons the following members were admitted Fellows of the College—viz., Messrs. Andrew Good Brookes, Council-house, Shrewsbury, diploma of membership, dated June 13, 1836, and Samuel Parker, George-street, Sheffield, Surgeon to the Sheffield General Infirmary, April 26, 1841. The following Members were elected Fellows, viz.:—Messrs. Edward Henry Rudderforth, Air-street, Piccadilly, Member, August 8, 1836, and Daniel Ross, Commercial-place, Commercial-road East, February 3, 1843.

Collegiate Elections.—At the last meeting of the Council of the Royal College of Surgeons, Mr. Edward Cock, President of the College, was elected a member of the Dental Board, in the vacancy occasioned by the resignation of Mr. F. C. Skey, C.B., F.R.S., a former President. Mr. George Augustus Ibbetson, F.R.C.S., late President of the Odontological Society, was elected an Examiner in Dental Surgery in the vacancy occasioned by the resignation of Mr. John Tomes, F.R.S., one of the earliest members of the Board. Mr. Ibbetson, who is deservedly well known by his valuable contributions to the advancement of odontological science, is also Lecturer on Dental Surgery to University College Hospital. Mr. Samuel Cartwright, F.R.C.S., was re-elected a member of the Board.

Collegiate Meeting.—The adjourned meeting of the Members and Fellows of the Royal College of Surgeons "to discuss and consider the present position of the College with respect to probable legislation, and the formation of a single examining board for each division of the United Kingdom," is fixed to take place this day (Friday), when Mr. Cock, the President, will take the chair at 3 o'clock. It will be recollected that the requisition was signed by 244 Fellows and Members, and at the first meeting there were present 93 Fellows, 75 of whom were resident in London, and 130 Members, of whom 106 were resident in London. It is curious as showing how little interest was taken in the subject of the meeting by the requisitionists that of the 244 who signed it only 29 attended—viz., 21 Fellows and 8 Members.

Collegiate Prize. — The following is the subject for the Jacksonian Prize of the Royal College of Surgeons for the ensuing year, viz.—"The treatment of wounds after operations, including the arrest of hæmorrhage, primary and secondary."

Collegiate Examinations.—The following were the questions on Surgical anatomy, and the principles and practice of Surgery submitted to the candidates for the diploma of membership of the Royal College of Surgeons, at the last meeting of the Court of Examiners. 1. Describe the situation, extent, and attachments of the superficial perineal fascia. Explain how it limits extravasation of urine in certain directions, and allows it to spread in others. 2. Describe the process of hypodermic injection: Mention the apparatus employed, and the mode of using it: also the quantity of morphia and of atropine respectively which may be injected. Write a prescription for a solution of a salt of morphia proper to be used in the process. 3. Describe the situation of the femoral artery in the middle third of the thigh, and its relation to surrounding structures. Describe the operation of placing a ligature on the artery in this region. 4. Describe the symptoms indicative of inflammation of the membranes or of the substance of the brain, which may follow fracture of the skull or other injuries to the head. Mention the probable result of such inflammation. 5. Abscesses in the female breast: Describe their causes, situation, progress, and treatment. 6. Mention the different structures which are necessarily cut in the lateral operation of lithotomy. Mention also those contiguous structures which should be avoided in the operation. The following were the questions on the principles and practice of Medicine. 1. Mention the causes, mode of accession, and symptoms of acute and chronic renal disease (albuminuria, or Bright's disease), and describe the condition of the kidney after death. 2. What treatment would you adopt in such cases? 3. Enumerate the more important preparations of mercury, lead, and zinc, contained in the British Pharmacopœia; state the purposes for which they are employed, and the doses in which they should be used when given internally.

Messrs. Alford and Gervis, of Haverstock-hill, have been elected as Surgeon-Apothecaries to the Orphan Working School, Maitland-park, in succession to the late Mr. H. C. Harris, of the City-road.

Dr. William Bruce has been presented with a silver tea service, a claret jug, and a dining-room time-piece, on the occasion of his leaving Crimond for Dingwall.

"Professor" Allen, Vegetable Chemist, Lecturer on Medical Botany, Anatomy, etc., Glasgow, has been sentenced to sixty days' imprisonment for representing himself to be a duly qualified Practitioner.

New Medical Magistrate. — Dr. Owen Daly, F.R.C.P., of Hull, took the oaths and his seat as a magistrate for the East Riding at the Quarter Sessions held at Beverley on Tuesday last.

Professor Rudolf Gneist. — This distinguished Professor, a member of the Prussian Parliament now visiting this metropolis, met with a serious accident on Sunday morning through reading some manuscripts in bed. The curtains caught fire, and, in attempting to extinguish the flames, the Professor was severely burnt. His family were at once telegraphed to in Berlin. It is gratifying to state that, under the care of Mr. Hodgson Rugg, the learned gentleman is progressing favourably.

Upwards of £1300 has been subscribed by towns for the prosecution of the inquiry into the treatment and utilisation of sewage, which was set on foot by the British Association, and to which we called attention some few weeks ago. Glasgow and Manchester have subscribed £100 each. On the other hand, other towns that we should have supposed

would have taken part in this investigation are "conspicuous by their absence" from the list. Liverpool and Edinburgh are among the non-subscribers. This is the more surprising, inasmuch as the British Association is about to visit Liverpool.

VACCINATION IN SCOTLAND.—From the vaccination returns just received, it appears that, of the 115,621 children whose births were entered on the registers during the year 1868, 102,140, being 88·340 per cent., were successfully vaccinated; 914, or 0·791 per cent., had their vaccination postponed from bad health or other causes; 514, being 0·444 per cent., were found to be insusceptible of vaccination, 277 from constitutional insusceptibility, 7 from having had small-pox, and 230 from having been previously vaccinated; 9440, being 8·165 per cent., died before they could be vaccinated; while 2613, being 2·260 per cent., had removed from the district before vaccination could be enforced, or were otherwise unaccounted for.

PAID NURSING IN WORKHOUSE INFIRMARIES.—We have seen a report just issued by Dr. Orme Dudfield, the Medical officer to the parishes of SS. Margaret and John, Westminster. The report fully proves the value of paid nursing in Workhouse Infirmaries. Dr. Dudfield does not hesitate to ascribe a reduced death-rate during the past five years to the introduction of paid nurses. The report also mentions several other improvements which have been introduced mainly, we believe, through his suggestions, and affords good evidence of how much may be done when Medical officers and boards of guardians work for the benefit of the sick poor in unison.

MEDICAL CHARITIES.—During the past week the following bequests and donations to metropolitan and provincial Hospitals have been announced:—To St. George's Hospital a donation of £1000, from F. G. N.; to the Poplar Hospital £10 10s., from the workmen of Messrs. Dudgeon and Co. Legacies from Mr. Peter Greenwell, of Bolton, £2000, to the Infirmary of that place. Mr. John Naish Sanders, of Clifton, Bristol, has bequeathed £500 to the Bristol General Hospital, the interest of which is to be appropriated for a scholarship for the encouragement of the study of Medicine and Surgery in that Hospital, and to be held for three years. Mr. Henry Warner, of Loughborough, Leicester, has bequeathed £500 to the Dispensary of Loughborough. Mr. John Roberts, of Mornington-road, has made the following bequests:—To the Hospital for Consumption and Diseases of the Chest, Brompton, £200; the Hospital for Diseases of the Throat, Golden-square, £200; University College Hospital, £100; King's College Hospital, £100; Hospital for Sick Children, Great Ormond-street, £100; Royal Orthopædic Hospital, £100. All legacies to be paid free of duty. An unknown gentleman, using the initials C. R. W., has just left at the Messrs. Hoare's bank a second donation of £1000 for the London Fever Hospital.

CURE OF SNAKE-BITE BY DR. HALFORD'S REMEDY.—Dr. Meyler, of Bambra, has forwarded to the *Melbourne Argus* an interesting case of snake poisoning cured by the adoption of Dr. Halford's remedy. The patient, Mrs. Parker, of Bambra, at ten o'clock, a.m., on February 18, when going down to the creek to get a bucket of water, was bitten in the leg by a tiger snake about four feet in length. She immediately placed a ligature above the bite, and hurried up the hill to her house, which is about forty yards from the creek, when she felt very faint and vomited. She sent her children across to Mr. Giles, who came and offered to cut the bit out, but she would not let him, but desired to be brought immediately to Dr. Meyler, at Winchelsea. She took a dose of brandy previous to getting into the waggonette. On arriving at Winchelsea, a distance of fourteen miles, she was completely comatose, having to be carried into the house. The pupils were fixed, dilated, and insensible to light. The bite on the leg was red and showed two distinct punctures. Dr. Meyler gave a dose of brandy and water, which there was some difficulty in getting her to swallow. Afterwards he gave her a dose of aromatic spirits of ammonia and water. After half an hour, finding that she showed no sign of rallying, the Doctor determined to use Professor Halford's remedy. Having bound up the right arm as if for the purpose of bleeding, he made an incision of an inch and a quarter through the skin over the cephalic vein, and having freely exposed the vein, he injected a mixture of ten drops of the strongest ammonia and fifty drops of water. During the operation she was quite insensible. Before half a minute had elapsed, a tremor seemed to pass through the whole body, and she roused up into consciousness, and said there was fire going up her arm and down her side. The pulse became fuller, and the temperature of the body was sensibly increased. In a quarter of an hour she became hungry, and ate bread and butter, and from that time rapidly recovered. The incision at the bend of the elbow, which had been closed with sticking-plaster on the morning of the 19th, is now (February 22) healing nicely, just as one caused by bleeding would, there being neither pain nor sign of inflammation. It was remarked that ten minutes after Mrs. Parker was bitten, that is, one hour before she tasted the dose of brandy, it was very difficult to keep her awake, so powerfully had the poison affected her.

MORTALITY AND DISEASE IN LIVERPOOL.—Dr. Trench, in his able report of the health of Liverpool for 1869, says the average age of death of the inhabitants of the borough during the twelve months of the year 1869 was 23 years, in the parish 24 years, and in the out townships 20 years. The deaths of infants below the fifth year of their age amounted to 7319, and thus comprised 49·6 per cent. of the whole deaths. There were at the last census 60,760 children under 5 years of age within the borough of Liverpool, and the number may now be estimated at 69,672, therefore their mortality in 1869 was equal to 10·5 per cent. of the whole. 4461 infants, or every fourth child, born within the borough of Liverpool died before attaining the age of twelve months. During 1869 there were 783 deaths from typhus and infantile remittent fever, or 542 in the parish and 241 in the out townships; the rate of their mortality was equal to 1·5 per 1000 per annum of the estimated population; their percentage rates relatively to deaths from all causes was 6·3 during the first, 6·1 during the second, 4·6 during the third, and 4·3 during the fourth quarter of the year. Their deaths included 421 males and 362 females; 198 persons below the age of 15; 175 between the ages of 15 and 30; and 410 above the age of 30. Every form of continued fever is included under the generic term of typhus; but the registers of deaths attribute 21 cases to gastric fever, 99 to typhoid fever, 30 to enteric fever, 4 to low fever, 4 to continued fever, 1 to brain fever, 1 to bilious fever, 1 to relapsing fever, and 475 to typhus. Under the term of fever there were registered 86 deaths, under that of febris 13 deaths, and under that of febricula 20 deaths. The deaths registered under the term of infantile remittent amounted to 28.

MEDICAL WOMEN AT VIENNA. — The *Wien Med. Wochenschrift* states that at present there are only two Medical women in Vienna, an Englishwoman and a Swiss. The former has been a most industrious attendant upon the syphilitic division of the Hospital, and the other, who is laying herself out as an operator, recently assisted an interne in a case of castration.

THE VIENNA MEDICAL SCHOOL.—The Professors complain that while the number of students has more than doubled during the last ten years, the teaching power has continued unincreased. The number of students, which was 1350 (760 winter and 590 summer semesters) in 1859, progressively increased to 1869, when there were 2962—1503 for the winter and 1459 for the summer semester.—*Wien Med. Woch.*, Febrnary 18.

RAILWAY ACCIDENTS IN PRUSSIA IN 1868.—During this year there were 56,588,244 travellers, and 97,996 officials and workmen. The officials working the railway numbered 41,729. There were 7 travellers killed and 8 injured, and through their own carelessness 3 killed and 9 injured. Of the railway *employés* there were 183 killed and 320 injured. There were also 87 persons killed and 27 injured unconnected with travelling, through their own carelessness, while there were also 40 suicides and 3 injuries from attempting suicide. The total number of accidents, therefore, was 687—*i.e.*, 320 deaths and 367 injuries. It results that there was an injury in 1 of every 70,592 travellers.—*Berlin Klin. Woch.*, March 14.

EASY MODE OF EXAMINING THE FAUCES.—M. Guillaumot states that the throat may easily be examined during the act of yawning, and with much greater ease and convenience to the patient than by the employment of any depressor of the tongue. After two or three trials the yawning can be voluntarily induced; and the Practitioner should exhibit to the patient in his own person how easily it is brought about. Children readily fall in with the plan.—*Rev. Méd.*, March 19.

PHENIC ACID IN SMALL-POX.—MM. Chauffard and Douillard state that they have derived great advantage from the administration of large doses of crystallised phenic acid at an early stage of confluent variola. From seven to fifteen grammes are administered *per diem*, and this dose has been continued for eight or ten days without inducing any ill effects. On the contrary, it cuts short the secondary fever and suppuration, usually so fatal in confluent small-pox. A tonic regimen is followed, and lotions of phenic acid diluted in from 50 to 100 parts of

water are also applied to the face and hands.—*Union Méd.*, April 5 and 7.

Russian Student Life.—The Russian students work tolerably hard, especially at Moscow and St. Petersburg, where many of them are obliged to give private lessons, to translate, or do other odd jobs, in order to find their livelihood. Singing is not so much cultivated by the Russian students as even with us. They sometimes know "Gaudeamus" and perhaps "The Fox," but have no special songs. Many of them play on instruments; a piano or a violin, or, more often still, a guitar, is very common in their rooms, and there is a student orchestra in nearly every university. For amusement, they patronise the theatre and the ballet, if they happen to have thirty kopecks to pay for a seat in the paradise; they have their drinking bouts, too, where they make *zhonka*, a peculiar punch, and other less pardonable dissipations. The irregularity of their life causes them all to be well acquainted with the pawnbroker and the usurer, especially the latter. The student manages to read a great deal notwithstanding, and is well acquainted with literature and with modern ideas; he swears by Büchner and Moleschott, Darwin, Buckle, and Draper, the most of whom he has probably read in the original. Wild theories of all sorts, of crime, of life, of communism, are the order of the day. He is as liberal in politics as in philosophy, will show all the faults of the government, will discuss the rights of man and the advantages of a republic, detests Napoleon III., admires Lincoln, believes in the cause of Poland, and regards America, and his imaginations of liberty, order, and simplicity there, with great reverence. As to religion, every university has a church, but there are no daily prayers, and attendance is never obligatory. The students endure the lectures on religion, for they have to pass an examination.—*New York Nation.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Wine Taster.—Write to M. Du Lac, Gauphine, près Béziers, France.

Mr. Howard, Hebden-bridge.—Consult the advertising columns of our Students' Number.

Dr. H. Osborn, Southampton.—Your communication, with enclosure, has come safely to hand.

Inquirer.—Mr. Ernest Hart is in New York, and spoke at a meeting of the Medical Society held on February 7.

Shade of Jenner.—We have seen the article on "Compulsory Vaccination" in the *Cosmopolitan* for April 14, but surely no serious notice need be taken of a writer who makes the following assertion:—"We believe that millions of deaths have been caused by this loathsome vaccination superstition, and never a life saved by it!"

A Fellow, Manchester.—According to the last Calendar of the College of Surgeons, there are 1329 Fellows—viz., 210 honorary, 389 by examination, and 730 by election, The election will take place about the beginning of July.

The Scotsman.—A writer in this influential journal says, in reference to the struggle which is likely to take place between the various corporations in respect to their position under the provisions of the new Medical Bill,

"Whatever the result may be, it is at least cause for congratulation to the Medical Profession that Government has made no proposal to destroy its independence by taking its management into its own hands—an arrangement which seemed at one time likely to be proposed. The Profession has surely vitality and energy and talent enough to regulate its own affairs, and Government interference should as much as possible be restricted to removing from its path all the legal obstructions which at present hinder its advancement."

Unostentatious Munificence.—In the report of the Bradford Infirmary for 1869 appears the following, which is worthy of being placed upon record as a splendid example of that charity which is neither "seen nor heard to flow:"—

"It is with a gratitude, which will be responded to by the governors, and all who are interested in the Fever Hospital, that the board have to announce that, in November last, the sum of £3000 was placed to the credit of the Fever Hospital building fund by an anonymous donor, the only condition appended to the munificent donation being that care should be taken to prevent its being commented on in the newspapers. The governors of the infirmary will therefore understand how it has occurred that so noble a gift, which naturally called for a public expression of the gratitude of the board, as representatives both of the Fever Hospital and the public at large, has not appeared in the papers.

Removal of Plaister from the Fingers.

To the Editor of the Medical Times and Gazette.

Sir,—Many dressers may not know that the simplest way of clearing plaister from the fingers is by applying a piece of rag to them and holding it near the fire, when the plaister melts and can be then easily wiped off with the rag. I am, &c. C. O.

Vaccination for the Antipodes.

To the Editor of the Medical Times and Gazette.

Sir,—Could you or any of your correspondents kindly inform me whether vaccine lymph in tubes or on points will bear unimpaired a voyage to the antipodes? And also where I should be likely to obtain a supply but few removes from the cow? I am, &c.

Reading, April 18. Vaccinator.

Degrees without Residence.

To the Editor of the Medical Times and Gazette.

Sir,—I entirely endorse the sentiments expressed by your correspondent Dr. Inman respecting University degrees. Like him I wrote to the different Universities asking permission to be admitted to an examination for the degree of M.D. with a similar result. If the examination is a sufficient test of a candidate's fitness, it can scarcely matter where he received his education, and if it is not, a short residence in a University will scarcely supplement the deficiency. As a matter of pecuniary consideration to a University adopting a principle in accordance with the liberal spirit of the times there is little doubt but that it would gain a great deal and lose nothing. I should (and I am sure I speak for others as well as myself) be glad to know the editorial opinions on a matter of such importance. I am, &c. Another Candidate.

April, 1870.

P.S. I trust that the subject being now broached other members of the Profession will take it up warmly.

Medical Acts Amendment.

To the Editor of the Medical Times and Gazette.

Sir,—Though I have attempted to comprehend the proposed changes in Medical Registration I have failed to do so, and turn to you for a little explanation. We are informed that the title of Licentiate will no longer be given by the Colleges of Physicians. Are we then to understand that this grade and title will cease to exist, and that the present licentiates will receive some new title, or be absorbed into the grade of Members? Again, we are told that the "Medical authorities" will be compelled to confer their lowest grade of qualifications on the Licentiates in Medicine and Surgery. Now, I see that the University of London is styled a Medical authority, will, therefore, every newly fledged "licentiate" be allowed to claim this University's M.B.? Again, is every person who has attained the honourable rank of a Licentiate in Medicine and Surgery to claim to be admitted a member, or associate, or bachelor of every existing "authority"? Will, for instance, every such person be allowed to claim the L.R.C.P. Lond.? Though this may seem to have nothing to do with the subject of my letter, we have yet to see whether the new Act will not be found merely to have added three very highly privileged corporations to the nineteen existing ones. I am, &c. A. J. H. C.

Birmingham.

*** We presume that no alteration will be made in the titles of Medical men registered before the passing of the Act. The Medical authorities are not compelled to confer their lowest grade of qualification unless they receive part of the surplus fees. The clause is permissive, not compulsory.

Certificates to Pauper Lunatics.

To the Editor of the Medical Times and Gazette.

Sir,—Will you be good enough to give me your opinion in your next issue on the following case:—I was called to see a private patient suffering from acute mania on January 29, 1870, and, after a few days, finding her quite beyond the control of her parents and friends, I recommended her removal to a lunatic asylum, her parents being only in poor circumstances and living in my district, for which I have been Medical officer for thirteen years. I advised them to get an order from the relieving officer to have her removed as a pauper. I continued my attendance for several days, when the relieving officer brought me an order for her removal, by request of the magistrate, to the detention ward of our old workhouse. I complied with his request, and continued my visits there up to February 23, when to my astonishment I was told by the master of the house that the magistrate, Mr. Howitt, who has only qualified this year, had been up the night before, and taken along with him Dr. Moore, of this town, to fill up the certificates for her reception into the county asylum. Mr. Howitt is himself a Surgeon and the President of our Medical Society, and this, I believe, is the first thing he did in his judicial capacity in connexion with the Poor Law. Such a proceeding has never, I believe, occurred in this union before, with the exception that some years ago Mr. Howitt, when an elected guardian, by some means got all the cases taken to himself, and, of course, received the 10s. 6d. fee paid for each case. Dr. Moore, on becoming acquainted with the real facts of the case and the custom that existed, at once in the most gentlemanly manner expressed his regret that he had complied with Mr. Howitt's request, and offered to return me the fee. Unfortunately for Mr. Howitt, the patient was refused admittance into the asylum in consequence of an eruption on her skin, which the Surgeon of the asylum pronounced to be itch, but which, I am certain, only arose from her filthy habits. She came back to the old workhouse, and under my care again, and remained so up to April 9. Mr. Howitt, knowing that most of the Profession in town had condemned his former conduct in the matter, "again" called in another Medical man to certify—this time a Dr. Marshall—but not until one of the Lunacy Commissioners had ordered her immediate removal to the asylum. I am well aware that legally the magistrate has a right to call in any Medical man he chooses; but, as the Commissioner himself stated, custom has overridden the law, in those cases, in always giving the case to the Union Surgeon, and Mr. Howitt being himself a member of the Profession, in my opinion, should have been the last man to break through the custom. I will, however, not make any remarks of my own on the case, but leave it for your own impartial criticism. I may state that a week or two before this case occurred, a conversation took place at the Board of Guardians with regard to the propriety of another than the Union Surgeon certifying for all such cases; and when one gentleman cast certain doubts upon the impartial certifying of the Union Surgeons, Mr. Howitt, instead of defending his Professional brethren, coincided with him; but there was no resolution come to to adopt such a practice. I am, &c.

27, Church-street, Preston, April 13. William Smith, M.D.

*** We think Mr. Howitt acted very ungraciously in this case, and in departing from the "custom" of the town, acted so far illegally.

COMMUNICATIONS have been received from—

Dr. H. A. Pitman; Dr. E. Blackwell; Dr. Ironside; Dr. William Smith, Preston; Dr. Day, Torquay; Mr. Roeeat Howard; Thaasydulus; Wine Taster; Mr. N. Alcock; Vaccinator; Mr. A. S. G. Jayakar; Dr. McCall Anderson; Another Candidate; Dr. F. E. Jencken; Dr. Day; A. J. H. C.; Mr. H. Osgoan; Dr. E. L. Fenn; Mr. F. H. Welch; Mr. H. Arnott; Mr. J. Chatto; Dr. James Russell; Dr. John L. Pateason; Mr. G. Farr White; Dr. Ballard; Dr. Phillips; C. O.; Dr. Playfair.

BOOKS RECEIVED—

Dr. Wemyss on the Construction of Hospitals—Ashton on Prolapsus, Fistula in Ano, and other Diseases of the Rectum—Nicholson's Manual of Zoology—American Journal of Psychological Medicine, April—Transactions of the New York Academy of Medicine—Dr. Townsend's Report on the Cholera Epidemic in the Central Provinces of India in 1868—Edinburgh Review, April—Report of the Bradford Infirmary and Dispensary—Westminster Review, April—Dr. Beddoe on the Stature and Bulk of Man in the British Isles—Report presented to the Minister for Agriculture, Commerce, and Public Works, by the Imperial Academy of Medicine, respecting the Vaccinations performed in France during the Year 1867, translated by George S. Gibbs—Reports of the Proceedings of the Royal Institution of Great Britain.

NEWSPAPERS RECEIVED—

Parochial Critic—The Eastern Morning News—Melbourne Argus—The Cosmopolitan—The Scotsman.

APPOINTMENTS FOR THE WEEK.

April 23. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

25. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 1½ p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Mr. William Adams will bring forward "The Case of a Man in whom a Subcutaneous Division of the Neck of the Thigh-bone within the Capsular Ligament was successfully performed for extreme Deformity with Bony Anchylosis of the Hip-joint." Dr. Andrew Clark will relate "Some Cases of Basic Pneumonia arising out of Bronchitis in the Aged." Dr. Thudichum, "On the Chemical Theory of Disease with special reference to the Fungo-genetic Hypothesis." At the conclusion of his paper, Dr. Thudichum will demonstrate the newly discovered Normal Free Acid of the Urine—Kryptophanic Acid.

26. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Ethnological Society, 8 p.m. Mr. E. B. Tylor, "On the Philosophy of Religion among the Lower Races of Mankind." Dr. Donavon, "On the Brain in the Study of Ethnology."

Royal Institution, 3 p.m. Prof. Blackie, "Principles of Moral Philosophy."

Royal Medical and Chirurgical Society, 8½ p.m. Adjourned discussion on Mr. Gant's paper "On Excision of Joints." Dr. Broadbent will describe a new Sphygmograph, etc.

27. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Hunterian Society, 8 p.m. Meeting.

Society of Arts, 8 p.m. Meeting.

28. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

Royal Institution, 3 p.m. Prof. Tyndall, "Electricity."

29. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Royal Institution, 8 p.m. Prof. Blackie, "Interpretation of Popular Myths."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 16, 1870.

BIRTHS.

Births of Boys, 1076; Girls, 1022; Total, 2098.
Average of 10 corresponding weeks, 1860-69, 2040·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	735	740	1475
Average of the ten years 1860-69	739·0	693·7	1432·7
Average corrected to increased population	...	...	1576
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	8	10	1	8	2	2	1	1
North ...	618210	...	3	23	5	15	2	6	...	6
Central ...	383321	...	4	6	1	5	...	1	1	4
East	571158	2	4	8	...	9	2	1	2	3
South	773175	...	9	23	2	18	...	6	4	4
Total	2803989	2	28	70	9	55	6	16	8	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·048 in.
Mean temperature	50·1
Highest point of thermometer	65·2
Lowest point of thermometer	37·0
Mean dew-point temperature	40·9
General direction of wind	W.S.W.
Whole amount of rain in the week	0·07

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 16, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending April 16.	Deaths Registered during the week ending April 16.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2098	1475	65·2	37·0	50·1	10·06	0·07	0·18
Portsmouth ...	122084	12·8	85	59	70·4	33·6	49·1	9·50	0·00	0·00
Norwich	81087	1·09	62	35	67·5	35·5	47·6	8·67	0·43	1·10
Bristol	171382	36·6	132	88	65·7	37·7	48·1	8·95	0·08	0·20
Wolverhampton ...	72990	21·5	49	47	67·1	36·7	47·6	8·67	0·44	1·12
Birmingham ...	369604	47·2	241	144	68·1	38·2	48·7	9·28	0·48	1·22
Leicester	97427	30·4	75	47	69·5	32·5	47·3	8·50	0·17	0·43
Nottingham ...	88888	44·5	52	32	63·2	35·9	47·1	8·39	0·39	0·99
Liverpool	517567	101·3	339	256	59·8	38·0	46·7	8·17	0·23	0·59
Manchester ...	374993	83·6	229	184	67·0	38·0	47·8	8·78	0·49	1·25
Salford	121580	23·5	97	58	65·5	37·9	46·4	8·00	0·46	1·17
Bradford	143197	21·7	96	69	59·8	37·2	47·0	8·33	0·22	0·56
Leeds	259527	12·0	118	130	63·0	38·0	48·0	8·89	0·27	0·69
Sheffield	247378	10·8	185	123	70·8	36·0	48·5	9·17	0·01	0·03
Hull	130869	36·7	76	50	...	...	...	...	...	...
Sunderland ...	94257	30·5	73	39	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	90	34	69·0	37·0	47·1	8·39	0·45	1·15
Edinburgh	178970	40·4	127	69	62·7	42·0	50·5	10·28	0·00	0·00
Glasgow	468189	92·5	382	269	57·6	35·5	47·5	8·61	0·31	0·79
Dublin (City, etc.*)	321540	33·0	158	159	63·9	34·0	49·7	9·83	0·30	0·76
Total of 20 Towns in United Kingd'm	7209603	33·8	4764	3367	70·8	32·5	48·0	8·89	0·27	0·69
Paris—Week ending April 16	1889842	242	...	1196	...	...	...	...	...	...
Vienna—Week ending April 9 ...	605200	167	...	410	...	...	44·6	7·00	...	...
Berlin—Week ending April 14 ...	702437	112	439	492	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·048 in. The highest barometrical reading was 30·33 in. on Saturday, and the lowest was 29·37 in. at the beginning of the week.

The general direction of the wind was W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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ORIGINAL LECTURES.

SIX LECTURES
ON
PRACTICAL HELMINTHOLOGY,
ILLUSTRATING
THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE
Medical College of the Middlesex Hospital

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

LECTURE IV.

GENTLEMEN.—Towards the close of my last lecture I was speaking of the unappropriateness of certain remedies still commonly in vogue. Here are two cases bearing upon the point then raised.

Case 9. — K. H., a captain in the Royal Fusiliers, consulted me on July 23, 1869. He had contracted tapeworm in India four years previously and had taken the usual remedies without more than a partial success. He suffered from anorexia, nausea, vertigo, and general loss of health. By the male-fern method of treatment I brought away no less than sixteen feet of a pork-tapeworm, some of the lowermost neck-segments being present. No further treatment being at the time pursued, and there being no evidence that the head was expelled, this seemed to me to be one of the cases in which I might have reason to believe that the worm would reappear; and I may so far anticipate what I have to say upon the subject of anthelmintics by remarking that this patient had previously taken kousso, kamala, and turpentine.

Case 10.—C. M., a delicately nurtured child, in her 4th year, was recommended to see me respecting a tapeworm which she also had contracted in India. The Medical gentleman who thus advised had himself successfully expelled fourteen feet of the parasite by means of a simple dose of calomel and jalap. At the time (May 20, 1869) it was evident that the head and greater part of the neck remained behind, but there were circumstances which induced me to attempt their separate expulsion. No result, however, having been directly obtained in this way, and it being clear that we had to deal with the pork-tapeworm, I awaited the return of the fully developed worm, segments of which appeared at the expiration of ten weeks. I now administered a suitable dose of male-fern and brought away twelve feet of the parasite. Though not so lengthily developed as the previous expelled specimen, it was a much more perfect individual—so to speak—the finer and uppermost neck-segments being among the dislodged fragments. As I had no opportunity of myself searching for the head, it appeared to me quite possible though scarcely probable that the head was also dislodged. Eventually it turned out that a perfect cure had been accomplished, and that the head of the worm had been passed, doubtless at the time the very fine neck-segments had come away. Up to the present hour the child has had no return of the parasite.

The above cases offer every encouragement to those who administer male-fern remedies in a proper manner; for although in the treatment of the pork and mutton tapeworms you may occasionally be baffled, it is satisfactory to know that, with proper care, you are not likely to be otherwise than successful with the unarmed variety derived from beef. This will be made more obvious immediately. Meantime, let me call your attention to all the more important drugs commonly employed. This I shall do in terms very similar to those I have adopted in the small treatise previously referred to. "The remedies for tapeworm are male-fern, kousso, kamala, turpentine, panna, pumpkin-seeds, and pomegranate-root bark. The right administration of any one of these is likely to produce the desired result; but many other drugs have been and still are employed with more or less success. Patients have consulted me after trying five or six of the above-named remedies, to say nothing of others not worth mentioning. Some Practitioners seem to think one vermifuge just as good as another. Because such persons find santonine a useful remedy in threadworm, and almost a specific in roundworm, it by no means follows that the same drug is effective, or even of the slightest value, in tapeworm. When so many excellent tapeworm-vermifuges abound, it becomes a waste of time to dwell on the virtues of second- and third-rate drugs, such as oxide of silver, tin, scammony, jalap, and various other drastic purgatives which exert no poisonous influence upon the worm." Dr. Shapter, of Exeter, has employed chloroform with success; at least, speaking of one or more cases thus treated, he says, "The cure was effectual, and without distress of any kind." Now, supposing it were really necessary to try several drugs in succession, I would recommend their adoption separately in the order I have just placed them. Of course, in no individual case will you ever be called upon to adopt such a practice. Without asserting their actual relative value as tapeworm poisons, I give them a preference in the order in which they are here placed. Probably, as I have elsewhere said, there is no better remedy for tapeworm than oil of turpentine, and yet its nauseous character, combined with the fact that it not unfrequently produces irregular and violent effects upon the nervous system, are circumstances always inducing me to substitute other drugs. From cases which have come under my notice, I have no doubt whatever as to the great anthelmintic virtues of turpentine. Here is a simple instance of its value and activity:—

Case 11.—L. R. E., a Cambridge undergraduate, after, and in consequence of, listening to a paper of mine on the subject of entozoa, is impressed, correctly enough, with the belief that he is infested by a tapeworm. Having some knowledge of medicine, he resolved to subject himself to the ordeal of taking a large dose of turpentine, and very soon succeeded in bringing away the parasite. This gentleman subsequently sent me a full description of the specimen, accompanied with a pen-and-ink sketch of the head and neck. The data thus supplied enabled me to decide that the tapeworm was a fine example of the kind derived from beef.

The treatment in the case just given may be recorded as a "lucky hit," for I have known similar steps adopted under proper Medical care without any result whatever. One person will bear this drug with impunity, whilst another will complain that it "affects his head." In any case the administration should be cautiously carried out, castor-oil, or some other cathartic, being added to ensure a rapid action. I may here mention that Miss Elizabeth Garrett informs me that she has treated between thirty and forty dispensary cases with turpentine and castor oil, this remedy having "never failed to bring away the worm where it has been known to be present." With other drugs, some preliminary steps may be advisable; but long fasting prior to their administration is, in my judgment, a "great mistake." The important thing is to be sure that your pharmaceutical preparations are the very best that can be made. Inferior drugs will cause you much disappointment; and, of course, some forms of the same drug are better than others. For example, I would say "never administer the powdered male-fern root if you can get a properly made ethereal extract. The powder is liable to lose its strength by long keeping; and it is perhaps more easily adulterated than the extract. This rule applies to other anthelmintics also. I have cured cases of tapeworm with the oil of male-fern, where the powdered root was of little or no service." Herein also lies some hindrance to the employment of that really excellent drug kousso, and perhaps also to some extent with the powdered areca-nut. With this remedy I have had little personal experience; but in Hospital cases treated by Dr. John Barclay, it has been prescribed with very remarkable success. I believe he first introduced this particular remedy into British practice. The large quantity of kousso required to be swallowed is highly objectionable, especially in the case of young children. Even the administration of decoctions, as in the instance of pomegranate root-bark, is not without some similar disadvantage, as regards results. My own experiences have given me great confidence in the so-called oil of male-fern when properly prepared; and in proof of the fact that I do not over-estimate its therapeutic value, I shall now direct your attention to a considerable series of instructive and highly successful cases:—

Case 12.—S. G., a respectable young man, had suffered from tapeworm for a period of five years, during which time he had taken a variety of drugs. At the time I saw him (July, 1865) he was much emaciated, had marked cerebral symptoms, extreme depression, and a suicidal tendency. He had at length been successfully treated by an able Medical Practitioner, who, however, had sent him to me to pronounce upon the worm which had come away, and, in fact, to give a "prognosis" of the case. On careful examination of the materials brought by the patient, I found all the parts, including the head, of a well developed beef-tapeworm.

The other cases will be recorded in my next lecture.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture III.

I.—DISEASES OF INFLAMMATION.

Inflammation of the Skin from Common Causes.

(Continued from page 409.)

Tumescent Erythema exhibits the swellings and enlargements already spoken of, and to the chief of its forms I have given the name of erythema tumescens; others, less considerably prominent and of smaller dimensions are distinguished as erythema papulosum, erythema tuberosum, and erythema nodosum. Impatient, doubtless, with so many names, Hebra includes under the general term erythema polymorphicum or multiforme, the greater number of these varieties; for example, erythema papulosum and tuberosum, together with the annulate forms—namely, circinatum, marginatum, and iris.

Erythema *tumescens* presents the singular feature of a sudden swelling of the part, without other warning than a little heat and tingling or itching; in a few hours I have seen a mass so produced of the size of the hemisphere of a large orange or of a melon; the swelling occupies the subcutaneous as well as the proper cutaneous tissue, and in four or six hours may have disappeared completely without leaving behind a vestige of its presence. When this occurs in the neighbourhood of the orbits, it shuts up the eyelids completely; twice I have seen it in the tongue, where it threatened suffocation, and once under the tongue and in the fauces. Erythema *papulosum* makes its appearance on the back of the hands and elbows, while, on the lower limbs, it assumes the larger proportions of erythema tuberosum and erythema nodosum. The papulous variety of the affection is, in general, very pruritic; the tuberous forms are tingling and tender; erythema nodosum often very painful. Upon their disappearance they are all apt to leave behind them the blue and yellow discoloration of a bruise.

Erysipelas is an intensified erythema exaggerated in all its phenomena. *It is a superficial inflammation of the skin, involving the subcutaneous cellular tissue more or less deeply; it is attended with a feeling of burning heat, tingling, and weight; it is apt to spread, sometimes to change its place by metastasis; it is accompanied with swelling, sometimes considerable, with œdematous infiltration, and with the development of vesicles, generally of large size, containing a yellow or amber-coloured serous fluid, and it terminates by resolution and occasionally by gangrene.*

In this definition it will be seen that, as in erythema, the more striking features of the inflammation are its migratory and delitescent habits, and also its tumefaction; to which is superadded the effusion of serum on the surface of the skin, so as to produce vesicles.

We may therefore arrange the forms of erysipelas under three heads—namely, migratory, tumescent, and phlyktænous. The *migratory* form may be simply erratic in its character, as when it spreads from the periphery of the body towards the centre, from one side to the other, or from a spot of small dimensions, until it involves a surface of considerable extent, such as the entire head. This is erysipelas erraticum. Or it may disappear suddenly in one situation, and appear as suddenly in another, transferred, as it would seem, from one region to another, sometimes, unhappily, from the exterior to an internal organ. This is *erysipelas metastaticum.*

Swelling is always present in erysipelas, but is sometimes the predominating character of the affection. The swelling is due to distension of the cell-organisms of the connective and fibrous tissue with a serous fluid. The tissues are said to be infiltrated; and in this condition the integument sometimes resembles brawn more nearly than anything else with which it can be compared. This is *erysipelas œdematosum.* At other times, and in any of the preceding forms, but more conspicuously in the œdematous variety, serous fluid may be poured out on the surface of the skin beneath the epidermis, attracted, probably, to that locality by the cells of the rete mucosum. In this case the epidermis is raised up into vesicles, sometimes small, constituting *erysipelas miliare;* but usually phlyktai or bullæ of larger size, erysipelas bullosum.

I have previously remarked that the sudden accumulation of fluid in the cells of the connective tissue in erythema tumescens must be attributed to nerve exhaustion, and, as a consequence of the deprivation of nerve-force, to a lowered vitality of the implicated tissues—in fact, to a kind of irritability; and we have only to follow this idea a stage further to arrive at positive death of the tissues, which is the character of *erysipelas gangrænosum.* Another form of erysipelas, of deeper locality and commonly attended with gangrene—an erysipelas sometimes penetrating the connective tissue of the greater part of a limb—is known as *erysipelas phlegmonodes*, and derives its name from a supposed association of the attributes of erysipelas with those of common phlegmon.

As in the case of erythema, erysipelas is sometimes *idiopathic* and sometimes *traumatic*, and it evinces an elective preference for certain regions of the body; hence the very name of erysipelas calls to our mind the face and the head. It is also common in the mamma of women recently confined, or in the neighbourhood of the umbilicus and pudendum of children.

From erysipelas as an exaggeration of erythema we retrace our steps to bring under consideration an erythema which is associated with an excess of pruritus and also with a high degree of the migratory and delitescent element; the itching is peculiar, it has a tingling character, it gives rise to a knotty kind of spasm of the skin, and from a comparison with the itching and other phenomena occasioned by the sting of the nettle, it is denominated *urticaria* or nettle-rash. The Greeks called the nettle *knide*, and the erythema at present under consideration, knidosis.

Urticaria, therefore, or knidosis, is *an erythema attended with a hot, pungent itching and tingling; with a disposition to migrate from place to place; or, suddenly, to disappear and reappear; it is accompanied with prominent white tubercles, sometimes with white ridges or wheals, contrasting strongly with the erythematous base, sometimes rising in the midst of red blotches and sometimes forming their boundary.*

The irritability of the integument in urticaria is often so considerable that the lightest touch will excite spasm of its muscular structure, and wheals may be seen to rise up instantly and follow the tracing of the point of a finger or of a style upon the skin.

It may be worth while, in this place, to review the chief features of the erythematous group; there is redness in all, the redness is migratory and delitescent; there is pruritus, which reaches its acme in urticaria; there is swelling also, which is sometimes considerable in urticaria, but greatest in erysipelas. It must be admitted that a strong family resemblance pervades the group; and that the mind is enabled to pass easily and without effort from one to the other, while it embraces the whole, as of one common disease. In erythema, redness is the predominating sign; in urticaria, redness is associated with intense itching and muscular spasm; while in erysipelas we find redness, with swelling and œdema or vesication.

Like other forms of cutaneous disease, urticaria presents some varieties of manifestation. The *migratory* character is common to all, and the arrangement the best adapted to embrace its varieties is one which shall divide them into acute, chronic, and tumescent. Under the head of acute urticaria, we may place urticaria febrilis and urticaria ab ingestis. Chronic urticaria is chiefly remarkable for its evanescence on the one hand, or its persistence on the other, and also for the degree and extent of spasm of the skin as shown by the number and bulk of the wheals. The members of the group, therefore, are urticaria evanida, urticaria perstans, and urticaria conferta. The *tumescent* division is represented by urticaria tuberosa and urticaria subcutanea, both of which trench upon the territory of erythema tumescens, and serve to cement the alliance between the two forms of erythematous affection.

If we look to the essentials of urticaria, we shall find them to be nerve irritation and muscular spasm; and both of these symptoms of irritation of the skin are sometimes met with associated with other cutaneous diseases, as, for example, with ekzema, with leichen as in leichen urticatus, and with erythema.

Phlyktænous Affections.—Our third group of cutaneous affections we denominate *phlyktænous* or *pemphigous.* In the language of Hippokrates the word phlyktis and its diminutive phlyktaina signify a blister, and smaller blister or vesicle; or, according to the Latins, bulla and bullula or vesicula; the same terms we render in English by blister and vesicle; and from the word phlyktis is derived phlyktainodes or simply phlyktænous. The present group, therefore, is distinguished from the two preceding by having for its predominant lesion a large or a small blister; there is a certain amount of erythema, and upon the erythematous base the blister or vesicle is produced, just as a blister would succeed the application of an epispastic of any kind, the epispastic in the present instance acting from within, and being in fact an irritated nerve. In

one of the examples before us the phlyktæna is small and comparable in size to a milium or millet seed, hence its name *miliaria*. Another is larger, and has been compared to a water-bubble or pemphix, hence the term *pemphigus*. While a third of intermediate size has been denominated *herpes*.

Miliaria, the kengchrias of the Greeks, is *an eruption of small transparent vesicles, of about two lines in diameter, developed chiefly on the trunk of the body in association with heat and perspiration, and scattered more or less widely apart.*

The vesicles are commonly met with, therefore, in the clinical state of the body, and especially in association with fevers. In a work antecedent to the time of Hippokrates, the "coacæ prænotiones," from which he drew some of his views with regard to disease, it is said that "sweats attended with a miliary eruption are bad," whereas, "sweats in the form of drops are good." And Hippokrates in his own book "on prognostics" observes, in reference to the bad symptoms accompanying fevers, that "small phlyktainai occur over the body." And, this association of the small vesicles of miliaria with sweats has gained for them the additional name of "sudamina." Miliaria has been a rare affection in this country since the time of Sydenham, to whom we are indebted for the rule of keeping the body cool in its clinical state, but it may still be met with occasionally after parturition, in rheumatism, and especially in the hot season of the year. The erythema is frequently inappreciable, or, if it exist at all, it is found in the state of hyperæmic puncta, corresponding with the pores of the skin. The vesicles seem to spring from the skin in its normal state, and are chiefly remarkable for their glass-like transparency; when seen in their vertical diameter the hyperæmic vascular plexus at their base gives them a red appearance, hence the term *miliaria rubra*; but by degrees the transparent serum which they contain becomes opalescent and milky; and then they are in the condition which is termed *miliaria alba*. As the vesicles are developed in succession, these differences of appearance are generally visible in the same eruption; some being colourless, others red, and others pearl-like and white. After a short time the fluid dries up and a thin film-like scab is all that can be perceived.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON THE SYMPTOMS OF EMBOLISM OF THE SILVIAN ARTERY AND THEIR CAUSES.

By T. CLIFFORD ALLBUTT, M.A., M.D.,
Physician to the Leeds General Infirmary, etc.

It is a great pleasure to the readers of the *Medical Times and Gazette* to see in its columns the lectures of continental Professors, and more especially of Professors so eminent as those whose lectures are announced for the present year. The lectures on embolism now in course of publication by Professor Niemeyer are an earnest of what is to come. This not only brings German thought and observation among ourselves, but gives us an opportunity of discussing the opinions and statements of German Physicians in a way which is otherwise impossible. Few even of those who read German periodicals can carry on a discussion in the German tongue.

I feel, however, that there is some presumption in my coming forward to discuss any points of Professor Niemeyer's lecture; my only excuse is that these cases of Silvian embolism have for some years been a favourite study of my own, and that I have certain definite opinions concerning the phenomena of them, which opinions are somewhat different from those of Professor Niemeyer. I hope I am justified, therefore, in taking the present occasion for a brief mention of some of them. At the same time let me express my sense of the great value and importance of Professor Niemeyer's lecture, and let me particularly refer to his account of the very interesting collateral phenomena of splenic embolism in the case which he records. I do not think we in England inquire sufficiently into any history of pain in this region or of shiverings, or that we look carefully enough for enlargement of the spleen with or without tenderness. His observations again on the discovery of encephalic embolism and thrombosis as pathological facts are very interesting, as they are in direct refutation of such strictures as that of Nélaton, which has attracted so much attention of late. I mean the absurd accusation against "mikroscopische Spielereien," which, according to Nélaton and others, have the tendency to encourage a beetle-eyed method, and to disintegrate all large conceptions of clinical phenomena. In encephalic embolism we have a discovery which is bred by this new spirit of minute research, which, however, is not a microscopical discovery at all, but one which was open to the naked pathological eye, and which was discovered less by poring among the tissues than by the suggestions of clinical phenomena themselves. So that in this, as in hundreds of like instances, the microscope is the companion of accurate and discriminating clinical observation, and not of petty curiosity.

The point to which I wish rather to refer to-day is that of the phenomena of consciousness and their causation. In the case of Silvian embolism, which Professor Niemeyer records, unconsciousness was a marked symptom, and he speaks of unconsciousness as a common symptom of this disorder. Indeed, he refines upon the diagnosis between embolism and hæmorrhage, and considers that the loss of consciousness in both is one of the resemblances which tend to confound the two kinds of mischief; so that the ultimate diagnosis is rather to be inferred from the less direct evidence of the patient's age and the condition of the heart. In his subsequent remarks upon the pathology of the affection Prof. Niemeyer offers an explanation of this unconsciousness, and he refers it to an œdema of the parts which suffer—to an œdema, that is, of the meso-cephalic ganglia and their neighbourhood which presses upon the cerebrum. This is a very important question, and it is one upon which the diagnosis of Silvian embolism more or less depends.

To take the symptoms first: it is certainly contrary to my experience of cases carefully watched and investigated to suppose that unconsciousness, or what I may call mental or cerebral apoplexy, occurs in them to any marked degree. These cases of embolism are not uncommon either in our waiting-rooms or in our museums, and I have generally six or eight under my own care among Hospital patients and elsewhere. Now it is a remarkable and important fact that in my own cases I rarely get a history of complete unconsciousness. I very rarely find, that is, a history of coma or semi-coma, unless it be of very short duration. In many well-marked cases with complete or almost complete hemiplegia, I have satisfied myself after careful inquiry that there has been no actual unconsciousness at all, but rather shock and bewilderment. To speak pathologically, there has been in such cases no evidence of more than momentary pressure. For example, on turning to my notes I find that a young woman suffering now from marked and obstinate hemiplegia and from all the symptoms of left Silvian embolism and from heart mischief, never really lost consciousness at all. She had risen from bed but a few minutes or moments when she fell and was raised up hemiplegic; she was "dazed," but remembered indistinctly what had passed, how her friends came about her, how her husband lifted her, and how she woke from a sort of confusion to find her right side useless and her speech impaired. To take a second case; a woman was engaged in household work, "a sickness and fainting came over her," but she was able to reach her chair; she seems then to have been "lost" for a few seconds from her daughter's account, but soon recovered consciousness, remaining, however, hemiplegic of the right side. Another woman was standing on a chair to reach something above her, when she fell to the floor hemiplegic.(a) There was but transient unconsciousness. The same stories I find also in the histories of male patients attacked with left Silvian embolism. I am told of their being "dumbfoundered," "faint," "lost for a few minutes," and the like, but seldom really comatose or stertorous.(b) In all these cases, I refer of course to embolisms of the main artery with grave persistent hemiplegia, and some speechlessness, not to embolism of smaller branches on the one hand, or of the internal carotid or anterior cerebral arteries on the other hand. In all cases of simple Silvian embolism, loss of consciousness seems to me to be far from a prominent symptom. Still, in some cases it does occur, but these cases form a small minority of the whole; in them, I believe, there is some

(a) Embolism often occurs after or during some effort, or during an attack of palpitation.

(b) I have just seen a very interesting case of this kind. Mrs. H., about forty years old, and of healthy appearance, had rheumatic fever seven years ago, and has now heart mischief. Nine months ago, on rising from her breakfast-table, felt bewildered and fell. Unfortunately, she was at the moment alone. She arose again, feeling in a dream, and again fell. Three times she essayed to stand and fell, but on the third occasion she managed to fall into a chair and ring the bell. She is sure she never lost consciousness, but was bewildered and "dazed." When her friends came in they found her quite hemiplegic on the right side, and also speechless, or nearly so, but not unconscious. She is still severely paralysed on the right side, and talks with much hesitation.

collateral hæmorrhage in addition to the embolism.(c) Now, this absence or slightness of the unconsciousness is very remarkable when we compare it with a hæmorrhage of like extent. A hæmorrhage into the corpus striatum sufficient to reach the speech districts, and injuring the corpus itself so far as to produce grave and abiding hemiplegia, is always attended with decided, if not with serious, coma, with coma lasting, perhaps, for several hours, and accompanied with more or less stertor.

So far for the symptomatology; let us now inquire into the pathology of the affection. Embolism occurs in one place where we can see it—namely, in the central artery of the retina; and I have been in the habit of collecting all the observations I can find of this disorder as illustrative of the same process in the encephalon.(d) I have also had the opportunity of seeing three cases—one which was shown me by Mr. Teale, another which I watched myself for a long period, and a third, which, however, was of somewhat doubtful origin, but probably embolic. Now, the phenomena in these cases are—

1. Instantaneous, or almost instantaneous, loss of function.
2. Sudden emptiness of the arteries and capillaries, and more or less of the veins.
3. Œdema of the parts deprived of supply, which œdema comes on gradually, and, in cases seen early, amounts to little more than a slight haziness around the yellow spot.
4. A tendency in the later stages to hæmorrhages from collateral vessels (peripapillary and choroidal).
5. Ultimate thickening of the adventitia of the vessels and fatty degeneration of the retinal tissue, with deposit of cholestearine (Schweigger, Augenspiegel).

I think we may fairly assume that the changes in the encephalon are of the same kind—namely, sudden emptiness of the arteries and corresponding venules, with some momentary deficiency in the contents of the sinuses, œdema of the affected parts, tendency to collateral hæmorrhages, and instantaneous loss of function.

Now, such being the pathological conditions, how are they related to the symptoms? Instantaneous loss of function of course is itself a symptom, and I merely mention it in the present connexion because we are enabled to see from the changes in the eye, which we can follow, that the loss of function is immediate. The promptness and severity of subsequent hæmorrhages seem to depend upon the strain on collateral vessels. For example, in embolism of the mesenteric arteries, I believe, abundant hæmorrhage always occurs. In the eye, on the contrary, where collateral vessels are few and small, hæmorrhages are few and small. In the encephalon we not infrequently find a tendency to hæmorrhage, and hæmorrhage, when it occurs, produces by its pressure anæmia and loss of function in neighbouring parts over and above loss of function in the parts directly cut off from the circulation. There was this tendency to hæmorrhage in the case recorded by Professor Niemeyer. Lastly, as to the œdema. To this Professor Niemeyer attributes the unconsciousness, supposing that it is the agent of pressure upon the hemisphere or brain proper. Now, a study of embolism in the retinal artery shows us that the œdema, so far from being immediate, creeps on somewhat slowly,(e) and that a patient seen soon after the accident presents but little œdema. This œdema occurs, then, not as a "serous apoplexy," but as a gradual infiltration or soaking of the tissues, which is in some way consequent upon the emptiness of their vessels. The œdema may be partly due to a change in diastatic relations; but, I think, in the encephalon it is chiefly compensatory, and is to be likened to the emphysema which compensates atelectasis in the lung. An arterial region is emptied, collapse follows, and we sometimes find, in addition to local œdema, an excess of fluid, which may be blood-tinged, in the subarachnoid spaces or in the ventricles, with or without an evident accumulation of venous blood in neighbouring parts. The greater degree of exudation is not seen, I think, in embolism of the lesser vessels, but is recorded in embolism of the carotids.

Œdema, then, is, I believe, a compensatory process subsequent to the plugging; is not a cause of pressure upon surrounding parts, but is a support to parts which are in danger of collapse. Hæmorrhage, again, is, in the eye, a late process, and never simultaneous with the embolism. I believe the same is true also of the encephalon. Hæmorrhage, therefore, is not often a prompt cause of pressure upon the hemispheres in these cases; so that both clinical and pathological experience lead me to deny that unconsciousness is a grave symptom in Silvian embolism, and to maintain that in this the symptoms of Silvian embolism differ from those of encephalic hæmorrhage in the same region and of equal extent.

I admit that, although in some cases of Silvian embolism there is no unconsciousness at all, unless a transient bewilderment be called unconsciousness, yet in many cases there is no doubt an interval of unconsciousness, though far less than in a case of hæmorrhage of equal extent. What is the cause of this transient unconsciousness? Now, as this symptom is sometimes absent, and, if present, is present in very various degrees, there are probably two or more causes at work which may alone or together throw the action of the hemispheres or cerebrum proper into temporary abeyance, the caprice of the symptom being probably due to some want of uniformity in its causation. I believe that unconsciousness may be due to one or both of the following causes:—

1. That shock, which in the whole encephalon seems by a certain sympathy, as it were, to echo the shock of sudden injury to any one of its principal parts. It is a matter of common experience in Medicine, and likewise in experimental pathology, that partial injuries, if slowly induced, may be unfelt by neighbouring and connected parts; but that, if suddenly induced, they are followed by great disturbance of such other parts. This disturbance is shown in losses of sensibility, in rotatory movements, in vertigo, and the like. In this way, it seems to me that the sudden collapse of the mesocephalon in Silvian embolism may be echoed in the hemispheres and thus give rise in them to some transient molecular disturbance and some transient change in corresponding function. It seems certain that the sudden emptying of important bloodvessels cannot take place without collapse in the parts cut off and dislocation in the parts which are near them.

2. There must be a moment of increased tension in all the encephalic arteries at the time of the plugging of the Silvian artery. The next heart-stroke and the next systole of the carotids is expended upon a smaller extent of surface than before. In cases where the vessels are diseased prompt hæmorrhage might occur in this way, and would occur rather in parts whose normal resistance is lessened—in the parts, that is, which surround the Silvian region, and which, by the collapse of this region, are deprived of their normal support. But it is merely to the increased fulness of the vessels in the hemisphere above beyond the Silvian region to which I would especially refer as a consequence of the temporary increase of strain, and which would produce a momentary effect of concussion when the extra blood is thrown into them from the carotid, whose calibre remains unchanged.

(c) Embolism may, of course, be followed soon by "red softening" in the hemisphere, when there may be serious disorder of consciousness.

(d) Comp. especially Liebreich, *Deutsche Klinik*, 1862, No. 50; and Atlas, p. 23.

(e) "Einige Stunden" (Blessig), or, "am folgenden Tage nach Beginn der Erkrankung" (Liebreich).

DIPHTHERIA—SUDDEN DEATH DURING CONVALESCENCE.

By GEO. FARR WHITE, F.R.C.S. Lond.

A CASE of death from nerve lesions following diphtheria, in the Radcliffe Infirmary, reported in the *Medical Times and Gazette* of February 6, 1869, induces me to forward the following history of a case of diphtheria that terminated fatally in a sudden and, to me, unaccountable manner during an apparently favourable convalescence:—

F. M., aged 9, an intelligent, healthy-looking girl, the child of wealthy parents, was brought to me on November 22, having been suffering from a cold and sore throat for about a week previously. The following remarks were made at the time:—"Child says she feels better than she did, but is very weak. Countenance dull and heavy; speaks plainly; can swallow tolerably well, and open mouth moderately widely; breath very offensive; tonsils, velum, uvula, and back of pharynx velvety red, with large thick patches of ashy-looking false membrane scattered about, separating with some little difficulty and bleeding; external glands somewhat swollen; earache; tongue thickly furred, but moist, and cleaning at tip and edges; chest sounds normal; pulse feeble, 108; passes but a small quantity of urine, and that very albuminous; bowels free; skin moist." Treatment: Absolute rest in bed; room well ventilated, and kept at an equable temperature; tinct. ferri internally, and potass. chlorat. gargles; inhalations; hot lard inunction; fomentations; fauces mopped out with strong

solution of nitrate of silver, etc., etc. The child was most patient and submissive, and was very carefully nursed.

November 23, vespere.—Has been comfortable all day, and able to read in bed; removed more false membrane from throat; fœtor less; no discharge from nostrils; skin perspiring; two stools to-day; but little urine—not above five ounces; no tenderness over kidneys.

24th.—Is better in all respects, having had a very profuse perspiration last night. Great pain in the ear on swallowing. This seems to be caused by inflammation of the Eustachian tube. False membrane clearing away from the anterior, but still present on the posterior parts of throat. Less fœtor. Tongue cleaning. Bowels inclined to be constipated. Skin cool and moist. No cough. Pulse 108, pretty full. Urine loaded with lithates, and albuminous; rather larger quantity passed to-day.

26th.—Going on favourably. Lungs carefully examined, and no mischief found there. False membrane all but disappeared, and what little remains is not thick and white, but more gelatinous looking. Urine still albuminous, notably so.

It is scarcely necessary to follow my note-book day by day, suffice it to say, she got better in all respects, could get up, read, draw, and play about the room; she certainly looked anæmic, and earache, want of appetite, and a tendency to vomit on swallowing, were the only symptoms that gave rise to uneasiness.

On December 5 there was but the slightest trace of albumen in the urine, and the throat all but well.

December 6.—No albumen in urine. Up and about all day, but confined to one room. Parents did not think her quite so well at night; said that she had been a little "fainty."

7th.—11 a.m.: Had a good night, and ate a breakfast of fish and bread-and-butter. I found her sitting up in bed reading. I depressed the tongue with a spoon, but did not touch the throat with anything; she vomited, a thing she had often done before, and then seemed very faint. I remained with her a little, and left her eating a biscuit and drinking wine. 2 p.m.: Was called to see her, and found her in a state of collapse, pulseless, ghastly pale, feet, legs, and arms in a cold sweat. She was perfectly intelligent, and conscious of the slightest action. Complained of heat, and begged to be fanned. There was no great amount of dyspnœa, but she occasionally tossed her arms about. Heart's action most rapid, intermittent, and tumbling; second sound only heard; no increased dulness, as from effusion. The treatment consisted of champagne, brandy, and stimulants of various kinds, administered by mouth and by enemata, sinapisms to the region of the heart, hot bricks, etc. At one time she seemed to rally slightly, but this was only transient, and she died at 2 a.m. on the 8th, quite tranquilly, and perfectly conscious to the last. She craved for tea, and after a time refused all other kinds of drink.

Remarks.—No post-mortem was allowed, and without that almost infallible aid, it seems to me difficult to account for death so suddenly occurring in a case that promised to do so well. At first, I thought that some effusion into the pericardium had taken place, but careful percussion, practised both by an eminent practitioner in the neighbourhood, and myself, negatived this idea; it then occurred to me that a clot might have become detached during the act of vomiting, and then have got impacted in a manner to impede circulation (embolism), but then there was no sudden pain, no lividity, no distressing dyspnœa, nor were there any harsh murmurs transmitted along the large vessels in the cardiac region; besides, the heart and lungs had frequently been examined during her convalescence, and nothing abnormal discovered. No blood was present in any of the excreta, and she micturated, defecated and vomited more than once during the state of collapse, indeed, the latter symptom was rather distressing for a time; it could not therefore be imagined that any internal organ had ruptured. Her intellect was perfectly clear to the last moment of her life, and she was particularly careful to ask for help when she required to relieve the bowels, etc. There was a great deal of scarlet fever about at the time, and it is possible that an overwhelming dose of this poison might thus have fatally prostrated her. In India I have seen cases of death from sudden collapse, supposed to have been induced by a concentration of marsh poison that killed its victim before reaction took place, as the most careful post-mortem examinations revealed nothing particular to cause the fatal result. Now the child in question seemed to die in exactly the same manner as in these cases, there being in all, collapse, perfect consciousness, vomiting, and moderately free discharge of urinary and alvine excretions. Dr. Gray's explanation respecting the secondary toxic effects of diphtheria upon the nerve centres appears, however, to account for the termination of the case in question, for during the collapsed state the only symptom that seemed to present itself was a total want of nervous power to keep the heart in action. Why this manifested itself so suddenly it is difficult to say, but upon looking back upon the case I can call to mind symptoms that rather puzzled me at the time, and which I now see probably pointed to the true state of affairs. Thus during convalescence she could only swallow in very small quantities or the fluid returned by the nostrils, and I looked in the throat in vain for any soreness or swelling to account for this dysphagia; therefore there probably was some paralysis of the soft palate; moreover, she certainly seemed weaker on the legs a few days before death than during the acute stage of the disease, but this was attributed to confinement in bed and general debility. I was present during a severe epidemic of diphtheria in a country village, and saw many cases at the time, but none of them terminated in the manner above described. Other Practitioners of greater experience than myself have probably seen such, and might throw a brighter light on the subject.

Kingston-on-Thames.

IRISH DISPENSARY JOTTINGS.

By JAMES J. TRAYER, M.B., T.C.D.

1.—The Ether Spray Auxiliary to the Reduction of strangulated Femoral Hernia.

On the 17th inst., at 9.30 a.m., I saw Mrs. G., a thin woman of about 50, mother of nine children, who had been suffering since 5 p.m. of the previous day from strangulation of an old femoral hernia. On examination, I found at the right side a femoral hernia as large as a hen's egg, very hard and tender. Such manipulation as could be borne proving quite ineffectual to its reduction, I had recourse to the ether spray. Having pumped away six drachms and a half of ether without actual congelation of the skin, though the swelling had plainly reduced in size, I again had recourse to the taxis, which was now borne without any pain, and in less than a minute, to my delight, succeeded in reducing the hernia.

I am inclined to think that, if I had placed my patient with the hips raised, so as to favour the return of the bowel, I might have trusted to the spray alone to effect reduction, as the tumour not only lessened visibly, but I heard a distinct gurgle as of air passing up under its influence.

2.—Paraphymosis reduced by the Aid of the Ether Spray.

Almost immediately after I became possessed of Dr. Richardson's ether spray producer a little boy was brought to my Dispensary with a severe paraphymosis, caused by self-abuse, this being the second time the like result had occurred. Though I almost grudged the little rascal the freedom from suffering such an experiment promised him, I decided on trying the effect of the spray, and after a few puffs, perceiving the tumefaction suddenly reduced with the greatest ease, completed the cure by the ordinary manipulation. I feel convinced that in this case the action of the spray continued to congelation would unaided have sufficed, but it was, I believe, the very first time I had used the instrument, and I was not acquainted with the appearances that follow its use. In common with many Medical men, I have had subsequently frequent occasion of gratitude to its talented inventor.

3.—The Removal of Foreign Bodies from the Œsophagus.

The report, in your impression of Saturday, March 18, of the removal from the stomach of a foreign body, by Dr. L. S. Little induces me to send you a brief description of an instrument which I improvised some years ago under the following rather embarrassing circumstances:—

A little girl aged 2½ was brought into my dispensary by her parents in a state of great alarm, caused by her having just swallowed a pin. The little creature was suffering some dyspnœa, and was quite unable to swallow even a drink. I at once passed down the coin-catcher, and easily hooked it on the pin, which was placed across the œsophagus and far down; but by no contrivance that past experience had taught me could I stir the pin, and indeed every effort to move it by the gentlest traction induced frightful dyspnœa.

I told the parents to try and get their child to take its usual day sleep, and if it could not swallow on awaking to come for me. In about two hours they reported matters *in statu quo*. Reflection meanwhile had prepared me for the difficulty, and

I had prepared a sponge probang with as large a ball of sponge as I deemed safe to pass down the child's throat.

I now again passed down the coin-catcher, at once hooked it on the pin, and rapidly passed down my new probang, and as soon as I reached the foreign body, with the greatest ease drew both up together, the large ball of sponge pioneering the way for the pin secured by the coin-catcher. All went well till I came to the upper pharynx, when my sponge probang flew aside, the hook slipped off, the pin turned, but now evidently head downwards, for it was swallowed at once, and never troubled the child afterwards.

This unhappy miss led me to improve my design, and I at once constructed a large soft probang with a ring in the centre of the sponge, and by slipping this over the handle of the coin-catcher, and running it down to the foreign body, previously hooked, feel sure I now have an instrument that makes me "master of the situation."

Bagenalstown, Co. Carlow.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

THREE CASES OF OPERATION FOR STRANGULATED HERNIA, FOLLOWED IN TWO INSTANCES BY DEATH—WITH REMARKS ON THE FATAL CASES.

(Under the care of Mr. HOLMES COOTE.)

Case 1.—On Feb. 25 a woman, aged 52, was admitted into the Hospital with strangulated femoral hernia of the right side. The symptoms of strangulation had existed over four days, and she was suffering, when first seen, from frequent vomiting, pain in the abdomen, and a considerable amount of collapse. The usual operation was performed without loss of time, the hernial sac was opened, Gimbernat's ligament was divided, and a knuckle of small intestine much congested was replaced. For three days after the operation the bowels remained constipated, but they then resumed their usual functions. The wound commenced to granulate and the patient was considered convalescent. On March 12 her appetite failed her, and in the course of the following day, the tongue became dry, and the pulse rose to 100 or more, temperature 101°. In this state she died March 20. The body was examined but no lesion found to account for death. The patient had been seen during life by Dr. Gee, Dr. Duckworth, and others, and it was their opinion that the symptoms proceeded from some form of typhus.

Case 2.—On Feb. 25 a second patient, a female, aged 40, was admitted into the Hospital with strangulated femoral hernia of the left side of four hours' duration. The usual operation was performed, but the sac was not opened. Recovery followed without a bad symptom.

Case 3.—On Monday, March 28, a young man was admitted with symptoms of strangulated hernia, and Mr. Coote was summoned to the Hospital at 11 a.m. The patient had a small tense inguinal hernia of the right side, extending to the testicle which lay below and just a little behind it. The intercolumnar bands were tightly stretched over the protrusion and felt hard and unyielding. No sensible impression had been made by taxis, but there was vomiting of the kind termed stercoraceous at the time of his admission, and complete constipation had existed for some days. The face was sunken and pallid, the pulse very feeble, the hands cold and clammy. This state of strangulation, with progressively increasing severity of symptoms, had been permitted to be continued six days and a half. The abdomen was tympanitic. Taking into consideration the moderate size of the swelling, the position of the testis, and the age of the patient, Mr. Coote diagnosed this as a case of hernia into a congenital sac — in which case he pointed out that the seat of stricture is almost invariably at the neck of the sac, so that any attempt to operate without opening the serous membrane is loss of time. An incision made down to the fibres of the external oblique was followed by the division of the intercolumnar fibres; next a small opening into the sac gave issue to a considerable quantity of darkish-brown fluid. Then, upon enlarging this opening, the sac, greatly thickened, was found to contain a knuckle of small intestine greatly congested, of dark-brown hue, and, as far as could be judged, in some parts of questionable vitality. Before exposure, it felt so firm that a gentleman present mistook it for omentum. The stricture situated at the internal ring was divided, the wound closed, a piece of dry lint applied, and the patient removed at once to bed. The case was one of the descent of the hernia into the funicular portion of the tunica vaginalis. A septum separated the testis from the cavity into which the intestine had passed. No change in the symptoms followed the operation. The state of extreme collapse, attended by pain in the abdomen, continued without intermission until 4 p.m., when the patient died. The post-mortem examination showed that the intestine had given way at the seat of stricture, and thus the escape of fæcal matter had been followed by a violent attack of acute peritonitis. This must have occurred many hours before his admission.

Remarks by Mr. Coote. — The frequency of strangulated hernia, and the high rate of mortality after the usual operation, give to the subject an interest which is acknowledged by all Surgeons. We must confess to the fact that the death-rate often mounts to 50 per cent., or even higher; and in making this assertion, couple with it our regret that the fault lies mainly with our patients, who delay too long the only measure which will afford them relief. In the year 1868 the operation was performed at St. Bartholomew's Hospital 18 times, and there were 9 deaths, or 1 in 2. In a former year there were 37 operations and 17 deaths, or 1 in 2·3; and this cannot be referred in any way to the condition of London atmosphere, for, according to Mr. Nunneley, at the General Hospital at Leeds, out of 73 operations over a number of years, there were 38 deaths, or a death-rate slightly higher. Such a case as the last of the three mentioned above can scarcely be said to illustrate the dangers attendant on herniotomy. It was an instance of life lost by delay—an occurrence in every way inexcusable.

LITHOTOMY.

(By Mr. HOLDEN.)

On April 5 Mr. Holden performed lithotomy on a healthy man, aged 28, in this Hospital. The symptoms had existed, but without pain, for nearly four years. The chief trouble was sudden stoppage to the flow of water. The calculus, when struck by the sound, gave a sharp ringing sound. It was small and very light, and composed apparently of lithic acid.

THE MIDDLESEX HOSPITAL.

MALIGNANT PUSTULES FOLLOWING CONTACT WITH A HORSE AFFECTED WITH GLANDERS—DEATH.

(Under the care of Mr. DE MORGAN.)

We are indebted to the senior House-Surgeon, Mr. R. H. Lucas, for the notes of the following case:—Richard M., a cabman, aged 53, was admitted into Clayton Ward under the care of Mr. De Morgan, on March 1, 1870. Three weeks previously the man had been attending a horse suffering from glanders, and his wife stated that he was often in the habit of wiping the horse's nose with a cloth and putting the cloth into his pocket with his pocket-handkerchief. Fourteen days before admission he went to bed in his usual health, but woke up in the night feeling chilly and unwell, and four days later he noticed a swelling on the inner side of the right forearm. He consulted a chemist, and was advised to go to the Hospital, but he kept about, feeling extremely ill with frequent rigors and sweatings, until the day of his admission.

On admission the countenance was flushed, skin hot and pulse very rapid and small. On the inner side of both forearms, about the centre, were two fluctuating swellings, that on the right arm as large as an egg, and very tender on pressure, the skin over them red, the whole arms being swollen and somewhat œdematous.

The abscesses were opened, and a large quantity of thick dirty-looking matter mixed with blood and bleed-clots was discharged, together with several shreds of slough. The cavities were then syringed out with solution of chloride of zinc (gr.x to f℥j.), and poulticed. To take two pints of strong beef-tea daily with milk, and ℥vj. of wine, and gr.xv. of Dover's powder at night. Two days later, much swelling with redness and tenderness over the third and fourth metacarpo-phalangeal articulation of the left hand were noted. Both the legs were swollen and œdematous, abscesses forming on outer side of right and in left calf, with red patches appearing on other parts of the legs. The morning temperature was 98°,

but this evening (March 3) it rose to 103·4°, respiration 36, and pulse 108. He was now ordered ʒx. of brandy, and ʒx. of best port. Also ℞ pot. chlor. sodæ hyposulphit. āā gr.xv., syrupi fʒij., aquæ fʒj. Misce. 4tis horis.

Two days afterwards (March 5), the pulse, temperature, and respirations still keeping up, the patient wandering in his mind and passing urine and fæces under him, and the abscess in the right arm continuing to discharge much dirty-looking matter mixed with blood, the appearance of a pustular eruption was first noted. Two pustules having bright red areolæ appeared on the left leg. Two or three similar pustules were seen on the face on the day following, the morning temperature being now 103°, with a pulse of 112 and respiration 52, and copious sweating. The joints of the great toes were red and swollen. Ordered ℞ Chloral. hydrat. gr.xxv., aquæ fʒj. 4tis horis.

Next day (March 7), at 10 a.m., the temperature was 104·4°, pulse 140, respiration 56. He had passed a restless night, with delirium. Several fresh pustules had appeared on the legs, belly and head, and there were some red patches on the feet. Tongue thickly coated. At 10 p.m. the pulse was so rapid and irregular that it could not be counted. The patient was breathing very heavily—40 in a minute—sweating profusely, and wandering a great deal. Temperature 104·6. He died at 3.20 a.m.

Autopsy at 2 p.m. on day following.—Marked lividity of all depending parts, face, ears, and lips, and on either side of spinous processes of vertebræ in dorsal region were numerous hard purplish ecchymoses. Pustules on toes, arms, and scalp of a purple colour. Abscesses in arms containing thick dirty pus. On reflecting scalp pustules were seen to extend through its whole thickness. There was some opacity of the brain membranes and lymph in the arachnoid, with softening of the under surface of the anterior lobes and left middle lobes. The lungs were firmly and universally adherent, the bronchial tubes much inflamed, and containing muco-purulent fluid. The right cavities of the heart contained large firm post-mortem clots. The liver was large and fatty, the kidneys normal, spleen soft, and with a cavity near its upper surface containing bloody fluid. Numerous dark ecchymotic patches in stomach, chiefly at cardiac end.

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Medical Times and Gazette.

SATURDAY, APRIL 30, 1870.

SOME SUGGESTIONS FOR AMENDING THE GOVERNMENT MEDICAL ACT (1858) AMENDMENT BILL.

In our last number we drew attention to the indisputable excellencies and to the principal defects of the Lord President's Medical Reform Bill. We offer no apology for returning to the subject in our present number. We confess that we regard it as a matter of paramount importance that the Bill, after being purified by passing through the crucible of Professional and Parliamentary criticism, should be passed in the present session. These are our reasons:—First, because all parties are agreed that a consolidation of examinations, an abolition of half-qualifications, and a uniform licence for all Practioners of Medicine in any of its branches, are things to be specially desired by the Medical Profession. These benefits would be obtained by the Bill becoming law. Secondly, because the long and deeply felt want of a Medical Acts Amendment Act, if it is to be satisfied at all, can only be satisfied by Government aid. It is chimerical to hope to carry a Bill for Medical reform in the face of a lukewarm or opposing Government. At present two prominent members of the most powerful administration this country has for many years seen have given proof of their willingness not merely to inquire into the subject, but to act for the benefit of the Profession of Medicine. Thirdly, because however grave some of the objections which are rightly entertained to certain provisions of the measure may be, these obnoxious provisions do not appear to us to be of its essence, and, as we shall endeavour to show in this article, may be removed without any departure from its main principles. Fourthly, because if this Bill be not passed, all prospect of substantial and moderate Medical reform vanishes—at least, for an indefinite period. Next year sanitary legislation will occupy that part of the Government programme which is allotted in this session to the Lord President's Medical Bill. Moreover, we have no right to expect that any department of the Government will frame and introduce a second measure for the relief of the Medical Profession if the present one be hastily and factiously rejected. We shall, therefore, in our remaining space offer some few hints for removing those features of the Bill which are regarded with most disfavour. We are encouraged to attempt the task by the desire evinced by Earl de Grey, when moving the first reading of the Bill, that it should be thoroughly considered and canvassed by the Profession; and we venture to hope that a little friendly criticism in its present early stage may facilitate the ultimate success of a measure which we firmly believe is calculated in the main to confer lasting benefits on the Profession of Medicine in the United Kingdom.

The first suggestion we would offer is one for supplying a defect in the Bill. In our previous article we showed that the non-affiliation of the new Licentiates in Medicine and Surgery to any of the existing corporations might possibly bring about a grievous defection from a right standard of Professional ethics. In order to prevent such a state of things, we would propose that the powers conferred on the General Medical Council by the Act of 1858 of erasing from the register the name of any person judged, after due inquiry, to have been guilty of infamous conduct in any Professional respect should be more clearly defined, and no longer be merely permissive. We would also suggest that every Licentiate in Medicine and Surgery should, at the time of receiving his certificate of right to practise, be required to take an oath, or make a declaration to the effect that he will maintain an honourable Professional line of conduct. Ever since the time of Hippocrates, in every Medical Faculty in Europe candidates, on their admission, have been required to take oaths of this kind, and we are certain that this is by no means a time to throw away any of the safeguards against unprofessional practices. We would make any glaring infraction of such oath or declaration "infamous conduct in a Professional respect." Were this done, the safeguards against Professional immoralities would be at least as real as at present.

The next suggestion we have to offer is that all phrases in the Bill which seem intended to give the Privy Council the power of originating changes in matters of Professional education and examination should be at once expunged. We are not amongst those who say that the Government of the country should have no voice in the settlement of questions which, whilst they affect the Medical Profession on the one hand, affect also the public on the other. The legitimate practice of Medicine has since the reign of Henry VIII. been more or less a monopoly, secured

by royal charters and Acts of Parliament to certain persons who have complied with special regulations. Should this Bill pass, those persons—in other words, the whole Profession—will be secured the possession of that monopoly more surely than ever. When granting that monopoly, it is but reasonable that Parliament should, in the interests of the public, claim the power of confirming or disallowing the regulations for the admission of persons to share in that monopoly. This power can only be exercised by Parliament through a department of the Government which is itself responsible to Parliament. It is for this reason that we think the Profession cannot reasonably refuse to her Majesty's Privy Council the right of confirming or placing its veto on the schemes for Professional examination and education which are to be prepared by the Medical authorities and the General Medical Council. Again, our past experience of the Medical authorities does not encourage us to believe that perfect unanimity will always prevail amongst them. The Medical authorities will probably disagree amongst themselves, and they may, perhaps, all, or some of them, be found to disagree with the General Medical Council. In such a case, we maintain that a power of arbitration should be placed somewhere, and we ask to whom can it better be entrusted than to a department of Government responsible to Parliament? We would therefore give the Privy Council the power of confirming, the power of forbidding, and the power of arbitration. But here we stop. The Medical Profession is the best judge, after all, of the kind of training which will enable a man well to discharge its duties, and of the nature of the tests by which his fitness should be tried. No lay department of Government is competent to exercise the wide powers which this Bill confers on the Privy Council. The clauses which give the power of modification—a term which may include alteration or addition to any extent—should be at once frankly abandoned; and, lightened of this burden, the ship will be far less likely to go to pieces on the rocks and quicksands of opposition.

Next let the surplus of fees be more stringently tied up for the support of the Museums, Libraries, and Lectureships, which are or shall be established by the Medical authories. Let any corporation which receives part of the surplus be bound to spend it in public undertakings of this kind for the benefit of the Profession and of students. The expenses of the examinations should be strictly limited to one half of the fees received. The remainder, as we have said, should be distributed amongst the Medical authorities for purposes of public Medical instruction. No part of the examination fees should be applied to the expenses of the General Medical Council. If that body cannot subsist and do its work on the fees paid for registration, supplemented by the sale of the British Pharmacopœia, either the fee for registration must be raised—or, which would be far preferable—its debates must be shortened.

Next let the examination for the new licence be so full and exhaustive, especially in all practical points that, no Foreign or Colonial diploma shall prove the possession of a higher degree of knowledge of the actual duties of the Physician and Surgeon. The Bill as at present worded recognises a possibility that a Colonial diploma may be a higher stamp of a man's Professional capability than the licence of the United Kingdom. Such an admission we should regard as most disastrous. We would therefore suggest that in clause 21 of the Bill for the words "higher degree of knowledge in Medicine and Surgery than is" the words "equal degree of knowledge in Medicine and Surgery with that" be substituted.

Again, let the General Medical Council be bound to apply a percentage of the fees received for registration to the prosecution of offenders against the Act, and let it be obligatory on them to prosecute in all cases in which a reasonable amount of evidence of infraction of the law exists. We also cannot see why the right of prosecuting offenders should be taken from private individuals.

There are one or two other points on which we think clauses of amendment might be introduced without departure from the principles of the Bill. It is no secret that some of the Universities, whilst they willingly give up the right of licensing to practise conferred on them by the Act of 1858, strongly object to being debarred conferring Medical degrees except on persons who have passed the examination proposed by the Bill. A Doctor of Medicine who does not wish to practise is certainly an exceptional person; but there is no doubt that many a man who devotes himself to science and teaching would be glad of the status which a Medical degree gives, and yet has not the remotest idea of taking a fee. We think there are two courses open to the framers of the Bill to meet this objection. Either make a clause allowing the Universities to grant honorary Medical degrees with or without examination, but with the express enactment that such degrees do not give the right to practise, and bind the Universities or General Medical Council to prosecute the graduates who may offend this law; or, what we should think would be better, grant the licence to practise on easy terms to all men who have passed certain examinations in the Universities previously to their degrees being conferred.

Another point on which we think the Bill might be modified is the power given to all the Medical authorities to grant their minimum qualifications to Licentiates in Medicine and Surgery. We are by no means certain that this power could be wisely granted to the Universities as well as to the Corporations. It might lead to the flooding of the country with University graduates who have never attended a University course or passed a University examination.

Lastly, we should be glad to see a well-considered and carefully prepared clause introduced into the Act, providing some measure of representation of the Profession in the General Medical Council through the Medical authorities. We believe that a moderate representation of this kind might be of real benefit, as we are certain that any clause giving direct representation would do incalculable mischief.

We now leave for the present this Bill, started, as we hope, upon a prosperous course. If the suggestions we have thrown out be accepted, or similar but better alterations be introduced, we believe that the Bill will be of enormous advantage to the Profession of Medicine. Our Profession will no longer be a chaos—*rudis indigestaque moles*—but a compact, well-disciplined, and well-trained body, represented by a Minister of the Crown in the councils of the nation and commanding the respect of the public by its union and efficiency. We have no hesitation in affirming that the framers and supporters of a measure which shall confer these benefits will deserve the gratitude of the present and all succeeding generations of Medical men.

THE INSANE AND THEIR MANAGEMENT.

About this time of year we have poured into our hands shoals of Asylum reports, some interesting, others quite the reverse, but this year, various causes, into which we need not enter, have attracted a more general attention to the subject of insanity, which is being extensively discussed even in lay periodicals. One of the best and cleverest of these articles appears in the April number of the *Edinburgh Quarterly*, but even this is very far from satisfactory, although evidently written by one who well knows what he is writing about. Now let us see what are the points to be attended to. The first undoubtedly is the unceasing demand for increased accommodation for the insane. To what is this attributable, to the increase of insanity, or to some other less apparent cause? In a great majority of the asylum reports which have reached us this question has been considered, and all superintendents unite in pronouncing the actual increase illusory. Undoubtedly, however, there are more insane paupers than we can well manage. What then is to be done? Are we to increase the size of our already overgrown

asylums, or shall some other method be adopted for procuring sufficient accommodation?

The proposal to increase the size of our asylums is most objectionable; they are already too large for efficient supervision and classification, their cost has been enormous, and there is good reason for believing that in them the percentage of recoveries has diminished rather than increased. On the other hand, whenever any evil attracts general attention in this country, we are pretty sure to have some panacea thrust upon us as being the one efficient remedy, and recently we have heard far too much of Gheel. The system there adopted has long been known in this country. Men interested in the cure of the insane have long ago considered it, and, everything being taken into consideration, it has been emphatically condemned.

Here is the point of prime moment. In our enormous asylums we have collected together acute maniacs, melancholics, monomaniacs, general paralytics, idiots, demented; and we might still go on. Now, the management of an acute maniac, an insane epileptic, or a general paralytic is not that adapted for an idiot or a person demented from age. For the former, restraint in some form or other is necessary. The great majority of the latter are utterly harmless, and the further they are removed from the former the better for all. Asylum superintendents will say that 30 or 40 per cent. of those now under their charge might safely be left to the care of their friends, or even, as was the custom in the olden time, be allowed to wander nearly at large. But what has been the policy of the last few years? To congregate all these helpless wretches in palatial buildings, where their comforts are attended to and their condition otherwise greatly improved. People outside have found this out, and there is no longer any attempt to keep such patients out of asylums, but rather to obtain admission for unsuitable cases, and it is to this gradually spreading knowledge and inclination that a considerable proportion of the increased applications for admission is due. Improved sanitary arrangements have contributed probably to the patients' length of days, and so with a lower death rate and increased applications for admission, Asylums, which ought to be Hospitals for mental disease, have been choked up with improper cases, and have helped to give rise to the cry of the increased prevalence of insanity. Were there no actual increase of insanity, in course of time the balance would be attained. The death rate and the admission rate would become equal, for even pauper lunatics cannot live for ever; and from the reports before us this would seem in certain parts of the country to be even now nearly the case. Then of course no additional buildings would be required except for the natural increase depending on increased population. But the question still remains—Is this advisable? We, like most others, think not, and we are strongly in favour of segregating chronic and harmless patients from those suffering from acute disease or who are otherwise unmanageable.

The plan of forming insane colonies as at Gheel has been strongly advocated, but we are much more in favour of the cottage system as adopted in Scotland. As matters now stand, the labour of the insane pauper is not fully utilised. Most of them are capable of doing something; but they cannot be employed in many instances, because there is nothing for them to do. In the domestic life of the cottage there is always something to do—something which the patient can do; but it is essential that the care taker should be properly selected, and that his remuneration should be sufficient to make it an inducement for a respectable individual to receive a lunatic into his household. It is in these respects that the system has not perfectly succeeded in Scotland, as has been shown by Dr. J. B. Tuke. We further consider it of prime importance that patients should be separated; that they should not be farmed out in batches; above all, that there should be no colony, but that the separate patients should be well looked after by proper inspectors. And all this might be done at a smaller cost than each patient now implies, even excluding the interest of the money expended on buildings and grounds—a sum, by the bye, generally overlooked in asylum accounts. There will, however, be somewhat more difficulty in obtaining proper guardians for the chronic insane in England than in Scotland, for the average of education is decidedly lower among the agricultural population in the one country than in the other; and, of course, such a scheme implies a country residence, for chronic imbeciles of any class are sadly out of place in the bustle of town life.

Thus far, as regards the quiet insane pauper, the gentlemen who have been fighting for his partial release have to a certain extent been beating the air. No one, with perhaps the exception of the Lunacy Commissioners, who are mainly responsible for the present condition of things, would contend against the propriety of disposing of them otherwise than they now are. Will any one reflect for a moment on the fearful *tedium vitæ* which would oppress a man of active habits suddenly shut up, and having actually nothing to do? Why the traditional weaving of straws would be better than that. But these are only half truths! And most popular writers seem to forget that there are in our asylums men otherwise than gentle and tractable, and who may not be distinguishable from other men except by the existence of some crooked notion in a stray corner of their brain. Suppose, let us say, the inhabitants of Broadmoor were let loose in our midst; who would be the first to complain? The truth is that a certain number of lunatics must be kept in confinement (which most people seem to forget is *restraint*) either for our benefit, as in the case of insane murderers, or for their own, as in the case of those with a determined suicidal tendency; or yet again in the case of those who are acutely and recently insane—say women with puerperal mania, and for whom there is good hope of ultimate recovery. That all these are fit subjects for restraint—*i.e.*, confinement—either for their good or ours, few will venture to deny. One might suppose from certain of these writers that the position of an asylum superintendent was a perfect sinecure, beyond the running through a number of wards full of quiet and harmless patients, and occasionally prescribing for their little ailments. If any one will take the trouble to read the Colney Hatch report he will find things very different. In that enormous asylum, filled with the refuse of East London, most unmanageable cases are to be found, especially those who persistently tear up their clothing and bedding (will any one say that such cases are adapted for Gheel or any similar institution?); and the ingenuity of the able superintendent, Dr. Sheppard, has been taxed to the utmost to meet the difficulty. Some people have an easy mode of overcoming it, like the gentleman who ordered round more carriages, they say more attendants and fresh supplies of clothing. They seem to forget that this costs money, and that the money has ultimately to come out of their own or somebody else's pockets, and that the rates and taxes are already as heavy as can be borne. A line must be drawn somewhere. An insane pauper cannot be treated like a millionaire. The common principles of humanity apply to both; but the comfort of the pauper being secured, the authorities are not justified in going further with the public money. In treating this subject, there is far too much sentimentalism abroad. People will not look upon insanity as a disease, but still continue to look upon it as a special infliction of Heaven, and hold that the victims should be treated on special instead of general principles.

A cry has been raised that lunacy has been made a specialty, and that it would be far better to take men from the rank and file of the Profession to fill the post of superintendent. But who has made it so? The Profession has not studied lunacy; until the other day there were no lectures delivered on the subject in any of our schools; even now there is no satisfactory text-book on lunacy in the English language; and, finally, where have the Profession the means of studying the insane

(which is something different from insanity) save in asylums? Reading and writing may come by nature, but the powers of administration necessary to conduct a large institution are not instinctive. Here, as in every other department of Medicine, training is necessary, and, by rights, the training ought to come before a man is placed in authority. Had the same attention been paid to lunacy as to other departments of Medicine, it would have been now on a far better footing, but those who have devoted themselves to the subject are not to be blamed because others have not done the same. When those morbid conditions which are associated with insanity are studied like other lesions, as a branch of ordinary Medical education, the anomaly will cease.

THE ADJOURNED MEETING AT THE ROYAL COLLEGE OF SURGEONS.

As we anticipated, the revolutionary party was completely defeated at the meeting held at the Royal College of Surgeons on the 22nd instant. Not only did they not succeed in carrying a single one of their resolutions, but the amendments against them were all but unanimously voted. Thus, the resolution aimed directly at the very existence of the College—that it and similar corporations should be excluded from all power in the election of examiners for the joint board—was met by an amendment of Mr. Holmes. That amendment was as follows:—"That in the opinion of this meeting examiners in Anatomy and Surgery in the licensing boards for England ought to be nominated either wholly or in part by the Royal College of Surgeons." This amendment, appealing, as it did, not only to common sense, but to common justice, was carried amid great applause. A vehement attack made upon the Council by a gentleman whose facts were so loosely stated that every one of them was either flatly contradicted or shown to be capable of an entirely different interpretation from that intended by the speaker, caused some amusement. We cannot sympathise with the animus that pervaded his speech. The statements so completely refuted were of a character similar to many which have been made with great perseverance for some time past against the College. The thinking part of the meeting knew their real value. But they were calculated to mislead the many. The "tottering" College, as it has been called, showed, however, on Friday se'nnight a power and stability which must have astonished its assailants and would-be destroyers. We venture to reassert what we said on a former occasion, that, if the Members and Fellows of the College were canvassed, not one in twenty would vote for its destruction. It will be seen, on referring to the report of the meeting, that the main objection to the Bill before Parliament was the absolute power conferred on the Privy Council, and to this point the more prominent of the speakers directed their remarks. The conference of this power will undoubtedly meet with general opposition in the Profession. It is altogether so opposed to our principles and practice of self-government, and so novel a species of interference in regard to a learned Profession, that it would have been remarkable indeed if it had not met with the strong reprobation of the meeting. Apart from this power, and with acknowledged shortcomings, the Bill is an excellent one, and if the corporations and colleges do their duty and accept the invitation of the Privy Council, it will confer great advantages on the Profession. Under proper limitation, it would be a manifest advantage to us to have a Cabinet Minister as our representative in Parliament. In immediate communication with the Medical Council and the colleges, when these represent more fully the Profession at large, he could state our wants and requirements, and defend, if need be, our rights and privileges, such as they are. At all events, it has been long felt as a grievance that, whilst the other learned Professions are more than adequately represented in the Legislature, Medicine is all but ignored. It is true we send some four or five good and zealous of our members to the House of Commons, but with the best intentions and high abilities they are, as unconnected with "party," all but powerless.

That the Bill can be so modified as to remove the objection alluded to we cannot doubt, and the Lord President will not turn a deaf ear to the memorials and remonstrances of the Profession.

With respect to the opinion of the meeting at the College on the last two resolutions of the destructives, we must refer to our report. Signally defeated, it is to be hoped the revolutionary party will now retire from a contest in which their chance of success is hopeless.

THE WEEK.

TOPICS OF THE DAY.

We are glad to see that the General Medical Council have set to work in earnest on the consideration of the Lord President's Bill, and have adopted the practical course of discussing it clause by clause, instead of wasting time in canvassing what the members may consider the general bearings or principles of the measure. Next week we shall hope to lay before our readers the conclusions to which the General Council may have come—conclusions which it is clear must greatly affect, for good or evil, the course and ultimate fate of the Bill.

There can be no doubt that a deep feeling of discontent has been aroused amongst the Fellows and Members of the Royal College of Physicians at the position in which, as it now appears, the College has legally placed its new Licentiates. The Fellows and Members have relinquished the easy path to competence which the Profession of Surgeon and apothecary affords; they have paid large sums of money for the right of practising and holding office in public institutions as Physicians in the sense in which the term has always been understood in this country, and now they learn, on high legal authority, that their own College licenses gentlemen for a low fee and a moderate examination to practise as apothecaries and Surgeons, and that these gentlemen are as much Physicians as they themselves are, and have a right to compete with them for any public office which a Physician may hold. Certainly the Fellows and Members of the College have a right to complain. For ourselves, as real friends and supporters of the Royal College of Physicians, we can only hope that the Medical Bill before Parliament, when amended, will become law, and, sweeping away these artificial distinctions, merge all men who practise a common Profession in one rank, and make other distinctions purely honorary; or, in the event of this not coming to pass, we can only hope that the College of Physicians, in justice to its Fellows and Members, will retrace its steps. It can scarcely, we think, maintain its present anomalous policy.

All the licensing and examining bodies have been busily engaged in discussing the new Government Medical Bill. We are glad to announce that the Council of the Royal College of Surgeons have determined to give their powerful support to the Bill provided certain modifications—most of which, we believe, are in principle identical with some of those which we have suggested—are made in it. A Committee of the Royal College of Physicians appointed to consider the Bill have embodied their criticisms in a report, of which the following is a condensed account. The Committee objects to the creation of a new licence irrespective of enrolment by one of the recognised Medical authorities. They assert that in the Profession of Medicine and Surgery it is essential for the safety of the public and the character and honour of the Profession that some one or other of the established Medical authorities should exercise supervision and moral control over all its members. It will be seen that this is an objection which we ourselves have raised, and we thoroughly believe it is a valid one. But we have

suggested in our leading article of this week means by which a moral control quite as real as anything which exists now may be maintained over the members of the Profession without of necessity affiliating them to any existing Corporation. In the next place the Committee protests against the almost unlimited power to legislate for the Profession in the matters of Medical education and examination given in the Bill to the Privy Council. On this point we entirely agree with the Committee, and we can scarcely doubt that Earl De Grey will see the wisdom of substantially amending the objectionable clauses. The Committee then assert that the General Medical Council should be so constituted as to be a body fit to be entrusted with the power of framing rules for regulating the examinations under the Act—an assertion in which all will agree with them, but unfortunately they do not point out what reforms in the General Medical Council are necessary to make it such a body. The Committee think it an objection to the Bill that the Universities are precluded conferring honorary Medical distinctions on those not intending to practise; they moreover think that no Corporation should be compelled to admit Licentiates unless the Licentiates comply with the bye-laws and regulations of such Corporation, and they advise the College to refuse its consent to any repeal of the Acts affecting the Profession unless it sees that the future government of the Profession is substantially vested in the Profession. The report concludes with an inquiry why it is not proposed to repeal any of the Medical Acts relating to Scotland or Ireland. It will be seen that these latter objections leave untouched the main principle of the Bill, and we have no doubt they may all be satisfactorily disposed of in Committee.

The committee on the joint scheme of Medical examinations of the University of London, have also been busily engaged in considering this measure. They think that the "general object of the Bill is in complete harmony with the principle already adopted by the senate of the University," but they think that the provisions by which the principle is to be carried into effect, require full discussion at the hands of the General Medical Council and the Universities. In the matters directly affecting their University, the Committee recommend the Senate not to assent to the surrender of the power at present possessed by the University of granting a licence to practise, unless the University is left, by an alteration of clause 18 of the Bill, in full possession of its present power of granting its Medical degrees as the reward of a complete course of diligent study. In other words the Committee protest against the University being deprived of the power of granting Medical degrees, which shall give no licence to practise. They moreover think it very undesirable that any University should be enabled to grant its degrees of M.B. or B.S. as minimum qualifications without special tests. It will be seen from these various criticisms, that the course of the Bill through Parliament is by no means likely to be a smooth one, but it is evident that not one of them affects the essence of the measure, and this being the case, we believe that every one of the objections that has been raised against it, is capable by wise concessions of being removed without affecting its symmetry or its value.

We publish in another column a letter from Mr. Christopher Heath, in which that gentleman produces proof of his assertion that one of the officials of the College of Surgeons was sworn in as a special constable prior to the meeting of the Members and Fellows of the College on March 24. We were not aware that any one denied the truth of that statement. We understood the President of the College to say that some months before any meeting of Fellows and Members was talked of it was determined that a constable should be always present on the premises of the College, to prevent, as Colonel Henderson's letter states, felonies and disorder. It was a mere coincidence that the hall-porter was sworn in as a constable a few days before the meeting took place, and Mr. Cock indignantly repudiated the idea that the man was sworn in to keep order at the meeting. What Mr. Cock stated was evidently believed to be true by those present, and, we have no doubt, will be believed still.

The Annual Committee of Convocation of the University of London have lately been engaged in discussing the question of the entire removal of all existing restrictions on candidates for degrees in the Faculty of Medicine. The fact that all educational restrictions have been abolished in the Faculty of Arts prompted Mr. Edwin Hearne, M.B., of Southampton, to raise the question whether candidates for degrees in Medicine should not be allowed to obtain their Medical knowledge how they please and where they please without necessary attendance on Hospitals and Medical schools. The committee discuss the whole subject in a very temperate manner, and they conclude that, in their opinion, it would not, at the present time, be conducive to the interests of the University to abolish the existing regulations restricting the admission to the examinations for Medical degrees to the students of certain specified Medical schools. They request the Senate, however, to take into consideration whether attendance at the principal foreign schools and Hospitals might not with advantage be recognised by the University. We heartily agree with the general conclusions of the committee, and regard their report as so valuable that we shall probably make it the subject of a longer notice at some future time.

We publish in another column a copy of a petition addressed to the House of Lords, which was adopted by a meeting of the Profession at Liverpool on April 25. The meeting was presided over by Mr. Bickersteth, and about fifty gentlemen attended it. With the former part of the petition we heartily coincide. With regard to the latter part, which prays for the direct representation of the Profession in the General Medical Council, we can only say we think that the meeting takes a mistaken view of the question. We have no wish to see our Profession subjected to all the evils of an election every two or three years.

ILLNESS OF SIR THOMAS WATSON.

The entire Profession will hear with much concern that Sir Thomas Watson has been seriously ill. The attack began during the cold weather with severe muscular and neuralgic pains in the back and one thigh. This attack confined him to bed. Then, probably in consequence of a chill while sitting up in bed, he got inflammatory congestion of the lower part of both lungs. The pulmonary symptoms soon began to subside, and have now almost entirely disappeared. Sir Thomas is still confined to his bed, but there is every reason to hope that he will continue to make steady progress towards complete recovery. The Medical friends in attendance upon him are Dr. Burrows and Dr. George Johnson.

ARMY MEDICAL DEPARTMENT.

We understand that Dr. Rutherford, C.B., Deputy Inspector General of Hospitals, who has just returned to this country, from Gibraltar, on the expiration of a tour of service, as principal Medical officer at that station, is likely to succeed Dr. Crawford in the appointment of head of the Medical Branch of the Director General's office in Whitehall-yard. Whatever foundation there may have been for the anticipations expressed by the Military journals, that Staff Surgeon Fitzgerald was to be advanced to the important post about to be vacated by Dr. Crawford, we strongly doubted their ever being fulfilled, and accordingly refrained from noticing them. Our silence is now justified by the result.

FROM ABROAD.—RETURNS ON HYDROPHOBIA IN FRANCE DURING THE YEARS 1863-68—CHLORAL IN TETANUS.

M. Bouley communicated to the Académie des Sciences at one of its recent meetings some of the results that have accrued

from the investigation concerning hydrophobia during 1863-68, instituted by the Minister of Agriculture. 1. In 48 departments in which rabies was stated in 108 reports to have occurred, 320 persons were bitten. 2. These 320 persons furnished 129 cases of hydrophobia—*i.e.*, a mortality of 40·31 per cent. of those bitten. 3. In 123 known cases specified in the documents no hydrophobic accidents followed the bites. The 68 cases of which the subsequent history is unknown in all probability were also unattended by ill effects, as the occurrence of cases of hydrophobia almost always becomes known. 4. Of the 320 bitten persons 206 were males and 81 females, the sex of 33 not being indicated. 5. In the 206 males the mortality was 100, or a little less than half; while in the 81 females it was only 29, or a little more than a third. This difference M. Bouley regards as a statistical accident due to the small number of figures dealt with, but still one worthy of being noted. 6. The age of the persons bitten has been indicated only in 274 cases. The greatest number of cases (97) occurred between the ages of 5 and 15, but the occurrence of hydrophobia after the bite was noted only 26 times at that age, or 26·77 per cent; but in the subsequent decennial periods it rose to 48, 61, and 60 per cent. So that if children are more liable to be bitten they are less likely to have hydrophobia follow. 7. The bites were in the great number of instances inflicted by *male* dogs. In the 320 cases in question the bites were made by dogs in 284, by bitches in 26, by cats in 5, and by wolves in 5. 8. As regards season, 89 persons were bitten in March, April, and May; 74 in June, July, and August; 64 in September, October, and November; and 75 in December, January, and February. So that it is evident that mad dogs have to be equally guarded against in all times of the year and all seasons. 9. The inquiry furnishes some important results as regards the period of incubation, being in accordance with those derived from prior inquiries. Of the 129 cases in which the bites were followed by fatal consequences, the period of incubation has been verified in 106, with the result of determining that it is during the first 60 days after the bite that hydrophobia is most frequently manifested—viz., in 73 instances out of 106. The remaining 33 are distributed as far as the 240th day—*i.e.*, exactly six months, becoming, however, less and less numerous, so that after the 100th day there are only 1 and 2 cases, and at the sixth month only one. Hence the conclusion, that the chances of not contracting hydrophobia greatly increase when two months have elapsed, and that after the ninetieth day complete immunity becomes most highly probable. The present also confirms prior inquiries in establishing the conclusion that the period of incubation is shorter in proportion as the subject is younger. By ranging the cases under two periods—the one from 3 to 20 years of age, and the other from 20 to 72 years—it is found that the mean duration in the former was 44 days, and in the latter 75 days—a difference evidently of great consequence in relation to prognosis. 10. The duration of the disease was verified in 90 cases, and in 74 of these death occurred within the four first days, and especially on the second and third days. In 16 life was prolonged beyond the fourth day. 11. The inquiry furnished some interesting information as to the danger of the bites in relation to the regions on which they were inflicted. Comparing the wounds having the same seat, it is found that of 32 where this was on the face, hydrophobia followed in 29. In 73 cases in which the hands were bitten, hydrophobia followed in 46, and immunity in 27. The wounds of the upper and lower extremities, compared with those of the face and hands, gave a reverse proportion. Thus in 28 affecting the upper extremities (the hands excepted) the deaths were 8 and the immunities 20; and in 24 wounds of the lower extremities 7 were fatal, and 17 unfollowed by ill effects. In wounds of the trunk, generally multiple, the fatal cases again predominate, being 12 in number to 7 immunities. These figures, like those of former reports, attest the comparative protection of those parts that are clothed. 12. With regard to the important subject of prevention—recovery as yet being unknown—M. Bouley observes that the present documents, like all those which have preceded them, show that cauterisation of the wound, and especially with the red-hot iron, performed speedily and completely, is the best of all prophylactic measures. Of 134 rabic wounds which were cauterised, immunity followed in 92, and death in 42; while in 66 wounds which were not so treated, immunity occurred only in 10, and death in 56. Although the actual cautery used boldly and promptly is the means which gives the best chance of protection, it may not always be possible to have recourse to it, and in its absence, or before its adoption, immediate suction of the wound should be resorted to, the patient performing this office himself at once whenever possible, the fluid which is thus drawn out by the mouth being immediately spit out again. The wound, too, should be encouraged to bleed by pressure, and should be continuously washed with any fluid at hand, as the *eau de Javel*, or even urine. Whenever the form of the parts permits it, the region should be surrounded by a circular ligature, and this should not be removed until cauterisation has been performed, and after the evacuation by cupping of a good portion of the blood, the course of which it has suspended. M. Bouley makes no mention whatever of excision of the bitten parts, the means we usually resort to in this country.

At a recent meeting of the Société de Chirurgie, M. Verneuil furnished the full details of the case of tetanus cured by chloral, of which he had already given a short account at the Académie des Sciences, and his paper was followed by an interesting discussion on the disease. The subject was a robust mason, 20 years of age, who was brought into the Lariboisière January 29, having crushed his finger in a door a fortnight before. On admission he was found to have a clean, healing wound, which was not painful on pressure. There was considerable trismus present, but the jaws could be separated some millimetres. As this condition of the jaw had lasted a week without becoming more general, and as deglutition and respiration continued free, a favourable prognosis was given. We have not space to follow the case in detail, but may observe that its chief interest consists in the marked amelioration produced by chloral after the symptoms had become much more pronounced, and when they had resisted bromide of potassium and the hypodermic injection of morphia in large doses. In the course of the case relapse took place three times, and always when the chloral had been temporarily suspended. A gramme of chloral was given six times in the twenty-four hours, a double dose at night, and, after the third relapse, from ten to fourteen grammes were given in the twenty-four hours; and altogether more than 200 grammes were taken during thirty-eight days without any ill effect whatever resulting. M. Verneuil observed that the undoubted benefit accruing from chloral in this case was in harmony with its action as an antagonistic to strychnine, a gramme sufficing, in eight or ten minutes, to relieve the convulsions produced by this substance.

M. Desprès, while not contesting the hypnotic action of chloral, which has been now amply proved, cannot admit that it possesses any specific properties for combating tetanus and puerperal eclampsia. Numerous cases of cure of tetanus when slow in its course by a great variety of means are on record; for more than fifty medicinal agents of the most varied and opposite nature have been said to produce this result. In all these cases, as in that of M. Verneuil, the cure is produced after treatment for a month, this kind of tetanus always requiring this time. M. Desprès believes, in fact, that this is a benign form of tetanus that would even have got well without any medicine at all, and tetanus that lasts longer than seven or eight days he regards as benign. The chloral in such a case is useful in obtaining some hours' sleep, but it has no special action on the tetanic pains and convulsions. M. Giraldès could not agree in this conclusion, for chloral in M. Verneuil's case subdued

symptoms which morphia and other means failed to relieve. It is true that we do not know how chloral acts, but we do know that it relieves pain, and that it procures sleep without the cerebral congestion consequent on opium. It is true that rapid tetanus is not curable, and that after the fifth day the chance of cure is greatly increased; but in the present case the disease, slow at first, took on an accelerated action of an alarming character until arrested by chloral. M. Liégeois agrees with M. Verneuil that traumatic tetanus is due to an exaltation of the excito-motory properties of the medulla, and certain substances given in suitable doses diminish or even abolish the excito-motory power, and the reflex actions due to its activity. Chloral, chloroform, bromide of potassium, etc., act in this way, and it is rational to employ them in tetanus. M. Demarquay admitted that these cases which are so slow in developing assume a benign character, and have been cured by a great variety of means. He himself has found large doses of aconite useful; but he thinks that for the future chloral will occupy the first rank as a curative agent. M. Larrey, also, while allowing the general curability of chronic tetanus, believes the case of M. Verneuil to have been a very serious one, and that its recovery is due to chloral. The symptoms had become alarming, and among these were the violent epigastric pains first noticed by his father, and attributed by him to the contraction of the abdominal muscles, especially the recti, which, indeed, are sometimes torn by the contractions.

At a subsequent meeting of the Society M. Giraldès went at considerable length into the question of the statistics of tetanus; and M. Brown-Séquard gave an interesting exposition of his views respecting the nature of the affection. These addresses are too long for the space at our command, but they will be found reported in the *Gazette des Hôpitaux* of April 21. M. Broca stated that he had had occasion to make autopsies in seven cases of traumatic tetanus, especially with the view of ascertaining the direction of the lesions in the medulla. He finds that there are two very different orders of lesions; one of these is *general*, consisting in congestion of the whole tissue of the medulla, and the other is *local*, and infinitely more important in its character. It is characterised at first by ramollissement and afterwards by a true diffluence of the substance of the medulla, assuming a reddish colour and resembling strawberries bruised in milk. If the point of departure of the tetanus is in the lower extremities the lumbar enlargement of the medulla is alone the seat of this change, while the lesion is met with in the cervical enlargement when the upper portion of the body is in question.

THE MEETING OF THE GENERAL MEDICAL COUNCIL.

A session of this Council, held for the purpose of discussing the provisions of the Medical Act (1858) Amendment Bill recently introduced into the House of Lords, commenced on Thursday afternoon. The proceedings took place at the Royal College of Surgeons, Lincoln's-inn-fields. Dr. Paget, the President of the Council, occupied the chair. All the members were present, with the exception of Dr. Rumsey.

The Registrar (Dr. Hawkins) read the minutes of the last meeting.

In opening the business of the session, the President said: Most of the members of the Council perhaps are aware that the rooms in which we have been so often kindly received at the College of Physicians are occupied to-day by the ordinary business of the College, and it is impossible for the Council to meet there. That was no sooner made known by one or two of our members who are connected with this College of Surgeons to the authorities of the College than these rooms were very courteously offered for the use of the Council as long as they could be spared from the ordinary business of the College—namely, for four days—up to Monday. After Monday they will be wanted for the College examinations. We have met to consider the Bill which has been presented to the House of Lords by the Lord President of the Privy Council; and it is important, for the thorough and expeditious discussion of the Bill, that we should follow some order in doing so. This matter was talked over yesterday by the Executive Committee, and the opinion I am going to state now is the opinion of the Executive Committee as to the mode of proceeding in the matter. There are three things which it may be desirable to do in the discussion of this Bill. One is to go over the clauses *seriatim*, discussing them clause by clause. Another thing would be that, if any member of the Council considers that there has been any omission in the Bill, and that there should be something in the Bill which is not to be found there, he should be at liberty to draw attention to it, and propose a resolution accordingly. And then there is another matter. Some members of the Council might wish to propose either an approbation or a modified approbation. Those three things occurred to the Executive Committee and myself as three things that might be desired by many, or all, or some, at all events of the members of the Council. And then the question would be, in what order we should take these three proceedings. Perhaps the most obvious way would be, first, to discuss the question of a general approbation of the principles of the Bill. But to that there is a practical objection on the score of economy of time. A discussion of that kind is almost sure to go into a discussion of particular clauses of the Bill, and so to lead to a repetition of a like discussion. It was thought, therefore, by the Executive Committee that the greatest economy of time would be to enter at once upon the discussion of the Bill, clause by clause, and to take the other two measures afterwards—after the discussion of the Bill clause by clause. Any member of the Council might suggest any new matter which he thought ought to be in an amended Medical Act. If that is the wish of the Council, we will proceed in that way. The first resolution on the programme of the business will be in accordance with this proceeding. It is a notice of motion by Dr. Acland—"That the Council do now resolve itself into committee for consideration clause by clause of the Bill." I will now only mention one other thing—a suggestion which was made to me by one of the members, which I think worth drawing your attention to. It is that members of the Council who have a particular amendment with relation to any one or more of the clauses of the Bill should express their opinion in the form of a notice of motion in the programme. They will by that means give more time to other members of the Council to consider the objection that they raise or the amendment they have to propose, and they will have their views more thoroughly considered, and no doubt will save time and facilitate business. That is, I think, all that I should have said on the matter but for a communication that was made to me about an hour ago, drawing attention to a certain point. It was a communication expressing an opinion that there had been some exaggerated notions entertained on one point in the Bill—an important part of the Bill—that part which confers the powers upon the Privy Council in reference to the Medical examining board and the examination room. This communication made to me was an unofficial one, but the opinion was expressed that exaggerated notions had been entertained, though not by this Council as a body, as to the extent of the powers conferred or proposed to be conferred on the Privy Council by this Bill. Of course in this matter I am expressing no opinion of my own whatever, because I do not think that this would be a suitable time to express any such opinion, but I was requested to make some explanation upon this point, and I think it is reasonable, as far as I can, to make the explanation. I am enabled to do that partly from what passed at a conference between Lord De Grey and the Executive Committee on April 8, and partly from the unofficial communication I have received to-day. Perhaps you will turn to page 2, clause 7 of the Bill, the second paragraph. There was a good deal of conversation with Lord De Grey as to the powers of the Privy Council, and particularly in reference to that word "modification," the power to be given to the Privy Council of modifying the scheme put before them. I may say at once it was distinctly stated by Lord De Grey, and confirmed as a matter of legal interpretation by the gentleman who was the draughtsman of the Bill, that the words in this Bill would give to the Privy Council no power whatever to originate any scheme, or of modifying what was not (to adopt the expression that was used in the consultation) "within the four corners of the scheme brought forward by the Medical Council." That

was distinctly stated more than once by Lord De Grey, and by the legal gentleman, the draughtsman of the Bill. The opinion then expressed amounted to this, that it was impossible to construe, according to the words of his Bill, the power of the Privy Council to make modifications in the scheme proposed to them, and conferring a power to convert the scheme proposed to them into something entirely different. It would be a wrong interpretation to construe the power of the Privy Council to make modifications on the scheme proposed to them as conferring a power to convert the scheme into something entirely different, because that would be a power of making a scheme, which power is withheld by the Bill from the Privy Council, and would not be merely the power of making modifications. Under the Bill the Privy Council would be obliged to leave the main features of the scheme untouched. That is substantially the opinion of those who have been concerned in drawing up this Bill. I mention it merely as a matter of explanation, not, of course, as an argument for our being or not being satisfied with the Bill as it stands. I think it is due to Lord De Grey and to those who drew up the Bill to make so much explanation; but of course you will understand that what I have said—and I have been guarded in the words I have used—is not based upon an official communication. In fact, it is known probably to most of you that the shocking calamity which has befallen Lord De Grey's family within the last few days would render it almost impracticable to have any communication with him at this moment. I presume it will be the pleasure of the Council to appoint a Business Committee. It may be convenient to have a Business Committee, although our work may be merely continuous from day to day. Will it be your pleasure to appoint the same Business Committee that was appointed on the last occasion of our meeting? If there is no objection to that, I will ask you to hold up your hands in favour of it.

The proposal was carried unanimously, and the late Business Committee was according reappointed.

Dr. Andrew Wood moved the reappointment of the Registration Committee, consisting of Dr. Embleton (chairman), Dr. Fleming, and Dr. Aquilla Smith.

Mr. Hargrave seconded the motion, and it was carried unanimously.

Dr. Acland moved "That the Council do now resolve itself into Committee for the consideration clause by clause of the Medical Act Amendment Bill, presented to the House of Lords by the Lord President." He said that in making this proposition he would discharge almost a formal duty in consequence of the lucid statement which had been made by the President. The Executive Committee which met the previous day, considered the question of what would be the best mode of procedure in order to ascertain the wishes of the Council on the Bill, and in order to save what was most precious to all of them—their time. Having been one of the original members of the Council, who now constituted only about half of the number, he would take the liberty of referring to the fact that the last meeting of the Council, which was held in the room in which they were now met, was held in the year 1859, eleven years ago. The Council had then recently been appointed by the Government, and he could not help being struck with the fact, which must strike any one who reflected upon it, that an extraordinary change had, since that time, come over the spirit in which Medical affairs were discussed at that Council. At that time, discussion took place of a character which could not take place now. The Council now met as a combined body with two main objects only—those two objects being, first, the good of the public at large and of the whole Medical Profession, and secondly, the equally worthy object of the maintenance of the character for usefulness, and of the value, of the several bodies which sent representatives to the Council. It had sometimes been imputed in discussion that took place that the members of the Council advocated the interests of the bodies that sent them. They were there for that purpose, but they subordinated that purpose to the first and larger one of performing their duty to the whole country. It was a ground of thankfulness and satisfaction that the members of the Council could now meet in harmony with a common desire for the good of the public, which now prevailed.

The motion was seconded by Dr. Aquilla Smith and carried unanimously.

The Registrar then proceeded to read the clauses of the Bill, the first two of which passed without comment.

Clause 3, which was as follows, was then read:—"After the date fixed for the commencement of examinations by the first Medical Examining Board appointed under this Act no person who is not at that date qualified to be registered under the principal Act shall be registered under that Act unless he has, after examination by a Medical Examining Board appointed under this Act, obtained a licence to practise in Medicine and Surgery under this Act."

Mr. Cæsar Hawkins said that the third clause of the Bill involved a point of vital importance to the whole of the universities and corporations represented in that room. It introduced a most serious change in the constitution of the Medical Profession. Hitherto the qualification for registration had consisted of a degree or diploma from one of the bodies mentioned in the schedule to the Medical Act of 1858; and in the resolutions of last February the Council expressed an opinion that this system should be continued, but with the addition of a certificate of having been examined by a new body. The clause now under consideration went completely contrary to that resolution, for the licence to practise under this new Act would be given without reference to any examination by the universities and Medical corporations. The resolution of the Council, on the contrary, was that any person desiring to be registered should have passed an examination by one of the universities or corporations. There was a most important difference between the two, for according to the Bill proposed a man might become a registered Practitioner without belonging to any Medical body whatever. By the subsequent clauses of the Bill the power of granting licences would be taken away from all the bodies now possessing it. They must at once consider the question whether they could agree to allow all licensing powers to be taken from the existing bodies and conferred exclusively upon the examining board to be constituted under the Act. He should therefore propose:—"That it is desirable that the word 'licence' be omitted from the third clause of the Bill, and that the words 'certificate of competency' be substituted for it."

Mr. Cooper and Mr. Hargrave seconded the motion simultaneously.

Dr. Embleton said that the course proposed by Mr. Hawkins would involve two examinations instead of one.

Mr. Hawkins said that that would not be the case, as any of the existing bodies could grant their diploma if they were satisfied with the examination of the Government board.

Dr. Bennett said that, according to the clause, a person holding the Government licence could claim to be registered although he might take no notice whatever of any of the existing boards. He therefore thought Mr. Hawkins's observations were well timed.

Dr. Christison urged the great importance of the point which had been raised, and said that all other questions were immeasurably inferior to it. It was, in fact, the main question in the matter. The great demand which had been made was that the persons admitted to practise should possess all needful qualifications, and this was the end which the Government had sought to secure. He believed that with a very little deliberation the Medical Council could devise a scheme for a joint examining board which would secure to the Government all that it was aiming at, and at the same time leave the rights of the universities and corporations unimpaired. He regretted that the opinion of the Council on some of the details of the Bill had not been sought by the Government before the Bill was introduced into Parliament.

Mr. Hargrave considered that persons would consider that their title was reduced in importance if they were regarded as merely *certificated* instead of being *licentiates*.

Dr. Alexander Wood said that the clause was not at all in accordance with the resolution which the Council had passed after considerable discussion about six weeks ago. The fact was that the Bill completely disfranchised all the present existing bodies scheduled in the Medical Act. The only thing that was held out to them as a means of preservation was that there should be in the Medical Register a column in which gentlemen who wished it might register what was called a higher qualification, and it was thought probably by the Government that gentlemen on the Register would not wish to see that column blank. Upon that desire would entirely depend the question whether gentlemen placed themselves under the control of the existing colleges and corporations. The question was one which was of the utmost importance to the existing licensing bodies, and he hoped that they would not perform the "happy despatch" upon themselves without knowing what they were about. He had always understood that all honours proceeded from the Throne, and that Medical honours were really given by her Majesty, who, however, deputed certain Medical corporations to confer them for her. But the clause under discussion in the proposed

Act would sweep away from those bodies all the licensing powers which they held under their charters, many of which charters were of very ancient date, and it proposed to give to a new body, which was neither a college nor a corporation, the power to confer all the needful honours to entitle a man to practise, if, indeed, the licences of such a body could be regarded as an honour. With regard to the registration of the higher qualification, there would probably be many gentlemen who would not have the ambition which the Government anticipated, and who would be content to leave that column blank. They might, indeed, in accordance with the present fashion of levelling down, even go so far as to wish to strike out that column altogether, so that other gentlemen who had higher qualifications might not be able to exhibit them.

Dr. Parkes suggested that the opinion of the Lord President of the Privy Council, or his advisers, should be sought upon the question whether the Government thought that the point which had been attacked by the Medical Council was a vital one, or would be prepared to give it up.

Dr. Andrew Wood disagreed with Dr. Parkes's suggestion, and considered that it was undignified on the part of the Medical Council to adopt it. A Bill had been brought into the House of Lords, the provisions of which had not been previously submitted to the Medical Council. The question involved in the present discussion was a vital one with regard to the universities and corporations. If the Government crippled the corporations and universities, there would be no guarantee that the high state which the Profession had attained through those bodies would be kept up.

Dr. Bennett said that the Government had brought the Bill in not for the purpose of meeting the views of the Medical Council, but to cover the ground which they thought important. He believed, however, that if there were a unanimous expression of opinion on the part of the Council, the Government might reconsider the Bill.

After some further discussion,

Mr. Cooper asked whether the licence to be granted under the Bill would supersede the licence of the body he represented, that of the Apothecaries.

Dr. Alexander Wood: It will not only supersede it, but extinguish it.

Dr. Macrobin considered that the tendency of the third clause of the Bill as it stood would be to lower Medical education.

Mr. Cooper said that he believed that the Bill as projected would inflict a very great injustice on the body he represented. That body had studiously endeavoured to do the duty which it undertook, and he could confidently state that it had never allowed to pass any person who was not qualified for the licence which it gave as to the science and practice of Medicine. He protested against Parliament throwing over licensing bodies which had faithfully done their duty.

Dr. Humphry felt that the question before the Council was one which the Council must themselves decide without first asking the opinion of the Government. If the Council seemed to be clearly of opinion that they could not accept the proposal of the Government, that would, it appeared, be an end of the Bill for the present. It seemed obvious that the view of the Government was that after it had examined and passed a man it ought not to compel him to pass any other examination than that which they considered sufficient. That was the clear and distinct view of the Government, and he hardly thought that the Government would be likely to depart from it.

Dr. Storrar said he could not hold up his hand for Mr. Hawkins's resolution. Still, if it were carried, he would cordially support any scheme on the basis of the originally proposed plan which the Government might be willing to adopt.

The President pointed out that clause 20 afforded such facilities for all licentiates becoming associates or members of one of the corporate bodies that it was presumable every ordinary person would do so.

Drs. Alexander Wood, Thompson, and Hawkins continued the discussion.

Dr. Andrew Wood said all difficulty would be removed if Mr. Hawkins would consent to insert the words, "No person shall be registered under any qualifications in Schedule (A) to that Act unless he has passed the general examination."

Mr. Hawkins had no objection to adopt that suggestion.

Dr. Parkes said the interests of the corporation were carefully preserved by the Government measure, and, therefore, it would be much better not to commit the Council to the expression of a decided opinion upon this point, but to ascertain first the views of the Government, and the reasons which had led them to the conclusion at which they had arrived. They had shown a desire to protect the interests represented by the Council, and he thought an interview with the authorities—the Lord President or his advisers—upon the subject would be wise. He therefore moved, as an amendment—"That a Committee of eight members be appointed to form a deputation to wait upon the Lord President or his advisers, and consult with them upon the matter."

Dr. Alexander Wood strongly reprobated such a course as undignified on the part of the Council, whose duty was to protect the interests of the Profession, and not to place its neck under the heel of the Government.

Dr. Christison seconded Dr. Parkes' amendment. It simply asked the Council to pause before it committed itself one way or another.

After some further remarks by Mr. Hawkins, Sir D. Corrigan, the President, Dr. Quain, and Dr. Andrew Wood,

Dr. Parkes withdrew his amendment.

Dr. Aquilla Smith then moved—"That after the date fixed for the commencement of the examinations by the first Medical examining board appointed by this Act, no person who is not by that Act qualified to be registered under the principal Act, shall be registered under that Act unless after examination in Medicine and Surgery and approval by a Medical board appointed under this Act."

This amendment was lost, and the resolution moved by Mr. Hawkins was put to the vote and carried.

(To be continued.)

THE ADJOURNED MEETING OF FELLOWS AND MEMBERS AT THE ROYAL COLLEGE OF SURGEONS.

Friday, April 22.

The meeting, adjourned from the 24th ult., was held at the Royal College of Surgeons, Lincoln's Inn, on Friday last, Mr. Cock, the President, in the Chair. It was not so numerously attended as the last meeting, but the Profession was, upon the whole, fairly represented.

The Chairman called upon Mr. T. Holmes, who had moved the adjournment of the meeting, to continue the debate.

Mr. T. Holmes said that his reason for adjourning the debate was, that he felt strongly that neither the motion nor the amendment which were before the meeting exactly coincided with the sentiment of the majority. The motion proposed to put the great function of the formation of licensing bodies entirely in the hands of some department of the Government. That he was quite sure would not be approved of by the majority of the Members of the College, who, he was satisfied, did not intend to abdicate the chief functions for which it was established and to hand them over to the Government. Neither could he agree with the seconder of the motion, Mr. Carter, who proposed that the Profession should be taken into partnership with the Government in the matter. He did not exactly understand the proposition, but, as far as he understood it, he dissented from it. With reference to Mr. Rogers Harrison's amendment, as far as it was directly negative to the motion, he would have been content to hold up his hand in its favour; but it became a different matter when they were asked to affirm a proposition like this—that the formation and arrangement of the proposed examining and licensing boards be left in the hands of the existing corporations. (Applause.) He could not take upon himself to affirm that opinion, and therefore he had asked the meeting to suspend its judgment upon both the original motion and the amendment until after further discussion. When that amendment was negatived, as he trusted it would be, he proposed to substitute one in the following terms:—"That, in the opinion of this meeting, examiners in anatomy and Surgery in the licensing board for England ought to be nominated either wholly or in great part by the Royal College of Surgeons." Nothing would be satisfactory to the Profession, and nothing would afford an adequate safeguard to the public, unless the College took under its own management, subject to the regulations of the Government Bill, that part of the examinations which related to anatomy and Surgery. Many things had been said, not perhaps in the most courteous spirit, about the action of the College. (Applause.) It was to be regretted that so much time was occupied on the last occasion in reflec-

tions which, he could not help thinking, were undeserved. It was natural, being met together under such peculiar circumstances, with very little idea of who had called the meeting together, that, to some extent, there should be a misunderstanding as to what the proper course of action on the part of the Members of the College was. But certain observations had been made about holes and corners, which were not very appropriate, because the meeting had been called in a very proper manner, and managed in a very proper spirit. Again, there had been reflections cast upon the course of action which this College had taken in times past. These reflections were in no way relevant to the matter in hand, which was to provide some guarantee that the interests of the Profession and of the public should be guarded by proper guarantees for the minimum qualification. He could not see what any little intrigues which might have taken place in times past with parties who were entire strangers to the College had to do with the question. One thing could not be denied—namely, that the College had never failed to provide the Profession with a board of examiners of whom the Profession had reason to be proud. There had never been a period at which the *élite* of the Profession had not been included in the Court of Examiners of the College. (Applause.) What has been, will be in future, and there was no reason to doubt that the examiners who would be nominated to the Board by the College would be such as they had been in times past. No such guarantee attached to any other scheme of appointment either by the Government or otherwise. Our experience of Government action in times past had not been such as to lead us to wish to recur to it; but the Profession did know who they were dealing with when they had the College of Surgeons to look to. He had strictly left out of the question any future action which the constituency of the College might take to modify its internal arrangements, or to make better arrangements between the Examining Board and the Council. The amendment he proposed would leave Members and Fellows perfectly free to modify any regulations which appeared to them to be unwise or capable of improvement, whereas, in fact, if either the resolution or the amendment were passed, action would be entirely fettered, and there would be no power in future to make any such reforms as might become necessary in the constitution of the College, or in its relation to the Government or to the examining boards.

Mr. Christopher Heath said that as Mr. Holmes was unable to understand how such a Board could be formed as that proposed by the resolution, he would call his attention to the existence of a body of exactly similar character—namely, the Senate of the University of London. Gentlemen who had taken any interest in the subject of Medical education during the last thirty years would allow that the body had done more than any other to forward the cause of Medical education. Those who had the honour of being the Graduates of the University were proud of their degrees; knowing well that they had been obliged to pass a stiff examination in order to win them; and he would venture to say that those degrees were able to hold their own against those of any of the ancient Universities however great their prestige might be. It was the Senate of the University made up of a mixed body of Government nomines and representatives of the graduates, which always nominated the examiners, and they had always taken good care to appoint good ones. Therefore it was clear such a body could perform its functions with success. He trusted, with Mr. Holmes, that the day would soon come when the Members of the Royal College would be enabled to influence the Council in a greater degree than they were at the present time. Since the last meeting the Lord President of the Council had brought in his Bill; and as to any provision for the representation of the Profession in that Bill, it was a nullity. There was no more representation than by the former Bill. The interests of the Medical Council and of the Corporations were perfectly taken care of—the Corporations were left in just the same position as they were by the Act of 1858. Now everybody admitted that the Corporations had departed from the course which they ought to have adhered to in times past. Turning to another subject he felt that the existing relations of the members towards the Council were not satisfactory. He (Mr. Heath) had found on looking over the minutes of the last meeting but one (on the Tuesday preceding the last meeting) that an extraordinary step had been taken. There appeared to be a good deal of tremor and doubt as to what would happen on the next Thursday, and under those auspices it was thought that there would be such a stormy meeting as no gentleman would care to take part in. In fact when he announced that one of the officers of the College was sworn in as a special constable they might have some idea of the feeling which existed. (Loud laughter.)

The Chairman: I must entirely deny that. It is months and months ago when it was thought right that one of our servants should be a constable. But as to the idea that the man was sworn in to keep this meeting in order, it is absurd. (Applause.)

Mr. Heath: However, it is a comfort to think that we have a special constable on the premises. (Laughter.) Returning to the meeting of the Council, he found that a resolution had been passed to the effect that at least half of the Court of Examiners should consist of gentlemen who have not been, and who are not, members of the Council. It had been felt in the Profession for many years that it was most undesirable, however eminent gentlemen might be, that they should inevitably come to the office of examiners simply by seniority. But he attributed that resolution on the part of the Council to the influence of the coming meeting; and no doubt it was a step which was highly approved of in the Profession. But there was another meeting of the Council last week, and gentlemen would be surprised to find that the resolution was not affirmed, and that the members of the Council had retracted their opinions within a month. (Loud cries of "No, no.") Well, all he could do was to go by the written documents, and certainly the motion was stated to be postponed, and gentlemen knew what postponement meant. A motion once postponed, unless something very extraordinary occurred, would be shelved. (Cries of "No.") How could members support a Council which did things of that kind? The time had come when any diversity of interest between the Fellows and members of the Council ought to be put an end to; and steps should be taken to make the feelings of the members felt within the Council in a manner that they were not at present. If Mr. Holmes would add to his amendment something like that proposed by Mr. Humphrey, of Cambridge—namely, the separation of examiners into two classes—he would be disposed to support it.

Mr. Quain said he could not with honesty remain silent in the face of statements such as those of the last speaker. First he had stated that the University of London had its Senate in part appointed by the Government. That was true, but it was not the whole truth. The Government supported the University of London, while the College of Surgeons had spent for the public benefit a quarter of a million of money upon its Museum without any Government assistance. True, the Government bought the Museum and gave contributions towards the building, but in addition to that the College had spent £248,000 up to last year upon it. It cost the State something like £60 to examine a Bachelor of Medicine, and of that sum the candidate himself gave £15. Thus the State spent several thousands a year in support of the University of London, and so long as that was the case it was entitled to have persons on the Senate to look after the pecuniary interests of the State. But he ventured to say that if the University of London was self-supporting the Graduates of that University would no longer permit the State to have anything to do with the matter. (Hear, hear, and applause.) He had received a good part of his Professional education in Paris, and he since observed that whenever there was liberty in the State, the Profession regulated its own affairs; but, whenever absolute Monarchy or Empire was dominant, then there was an interference with the schools of Medicine by the State. Were we to imitate France in its worst days, or were we to remember that the prosperity and independence of this country were intimately connected with the great principle of self-government? What would the Lawyers say if the State were to claim a voice in the appointment of their examiners? What would the Clergy say if the State were to come in and insist upon appointing their examiners in Theology? (Applause.) It was evident that for the Government to interfere with Medical education in the way proposed, would be contrary to the spirit in which all the other institutions in this country were carried on. Again Mr. Heath had said that the proposal for a new regulation as to the appointment of examiners was made in fear of the late general meeting, and that there was in the Council of the College a "tremor" about the meeting. It so happened that he himself was the proposer of the resolution in the Council, and he knew nothing whatever of any meeting when he brought it forward, nor was any meeting contemplated at that time. He had, moreover, placed his resignation in the hands of the Chairman in order to make one vacancy for such an appointment as that contemplated by the resolution, and that resignation was in the hands of the President at the present time. (Applause.) Mr. Heath charged that that resolution had been swerved from

at the next meeting of the Council. There again, the whole truth had not been stated, for the resolution was merely postponed for reconsideration; and at that very same meeting an additional motion was carried that the examiners in Anatomy and Physiology should in future be different from the examiners in Surgery. (Applause.) He in great part agreed with the observations of Mr. Holmes, but he regretted to see the spirit in which Mr. Heath had spoken. His speech throughout was pervaded with a something very like that "special constable" story.

Mr. Heath, in explanation, stated that he believed the motion he was speaking of was Mr. Humphry's motion. Would Mr. Quain state what the date of his motion was?

The Chairman: It was Mr. Quain's motion from the very beginning, altered at the suggestion of Mr. Humphry by a single word. Mr. Quain suggested the words "four out of ten examiners," while Mr. Humphry wished to substitute "at least half of the examiners." Mr. Quain adopted Mr. Humphry's motion, but it still was Mr. Quain's motion, not Mr. Humphry's.

Mr. Heath was sorry that he had been misled by the official documents.

Mr. George Busk replied to a remark of Mr. Heath's that the Members and Fellows of the College constitute the Corporation as distinguished from the Council. That was an entirely wrong idea, and the animus with which it was spoken was quite evident. He had also insinuated that the Council had some private interest in what they had done on various subjects diverse from the interests of the Members. He should be very glad to hear upon what grounds Mr. Heath could venture to make such an assertion.

Dr. Crisp said that he felt perfectly astonished at the speeches made by Mr. Holmes and Mr. Quain. He had not breathed freely since he entered the room, for the College elements were too numerous, and he believed that no good would result until a large meeting of the Profession was held out of the College. Mr. Quain had alluded to money matters, and he was thoroughly astonished to hear his statement that the Royal College of Surgeons had spent two and a half millions on the Museum. (Loud laughter and cries of "Question.")

The Chairman reminded Dr. Crisp that his remarks were not relevant to the amendment.

Dr. Crisp said: You decided, sir, at our last meeting that I should not introduce the financial condition of this College, but as it is our business to consider the position of the College in relation to the proposed Bill, surely the monetary matters of the institution are fit subjects of inquiry, and as you have allowed Mr. Quain to allude to them, surely you will not deny me the right. The fact is, the College is "going to the bad," and the pretended liberal measure of opening this hall is rather a matter of necessity than of choice. During the last few years the diplomas had fallen off to the amount of 127, and the income had considerably diminished. The accounts were first published in 1834, and then only imperfectly. He (Dr. Crisp) had written to the Council to know how the money had been spent, but he was refused the information, and not until 1865 did we know how much the examiners received. He had made a careful analysis of the published accounts, and found that from 1834 to 1869 £562,149 15s. 2d. had been received. Mr. Quain stated that the College had spent a quarter of a million on the Hunterian Museum, irrespective of Government grants for building, but he (Dr. Crisp) found that during the thirty-five years named only £88,916 16s. 8d. had been expended. This speaker, however, he supposed, was better acquainted with the subject. Mr. Quain's denunciation of the French system was most unjust. Nearly all English students who can afford it go to Paris, Berlin, or Vienna, but who ever heard of a foreign student visiting our schools? In Paris, like all English students, he (Dr. Crisp) attended the schools and received certificates without payment. What can better show the rottenness of our whole system than the absence of foreign students from our schools?

Mr. Heckstall Smith recalled the attention of the meeting to the point they were discussing. The Bill did not leave any portion of the examination for the entrance into the Profession in the hands of existing corporations. It took it from them; but it required that they unitedly should propose a scheme, that the Medical Council should consider that scheme, and that if those two bodies combined did not agree the Government would take it out of their own hands after a certain time and do it for them. It was a very simple question with reference to the College of Surgeons. The Bill would simply provide for what was called the portal examination; the College of Surgeons and other bodies would remain as before, and any who chose to offer themselves afterwards to the various corporations or authorities would be able to do so and to obtain from them all the honour that they could confer, whatever those honours might be worth. Was it not better to adopt such a scheme? He had felt from the first that it was a mistake to divide the kingdom into three parts: he believed there should be one common examination for the whole of the United Kingdom, and he had proposed an examination to that effect. That, however, had been negatived, and he would not again refer to it except to say that he feared, if such a course were not adopted, there would still be breakers ahead, and that all the work which had been gone through would have to be reundertaken in time to come. The proposal in the Government Bill struck him, upon examination, to be the best that was practicable at the present moment. He felt it was quite right that there should be some superior authority in case the corporations and the Medical Council could not agree. He hailed the fact that there was such an authority. They were simply told "You shall have three months to propose a scheme, and then, if you do not agree, we will take it out of your hands." There was one question, however, which did not come within the scope of the present motion, but which was one of vast importance—namely, to whom this great power is to be delegated. It was to be taken out of the hands of the present corporations and placed in the hands of the Medical Council. Now he thought they had much better remain as they were than to give the Medical Council (as the Government Bill proposed to give it), without the exercise of any franchise power on the part of the Profession, such large powers. Members would recollect that, marvellous to relate, the Medical Council itself a long time ago resolved that if large additional powers were placed in its hands, it would consent to a portion of its members being elected by the Profession. (Applause.) Now a large portion of the Profession had memorialised both the Council and the Government upon that subject. The great British Medical Association had again and again declared for it, and, in short, the general understanding seemed to be that this power was not to be placed in the Medical Council without direct representation of the Profession within it. Yet, strange to say, not one word of provision for that appeared in the Bill.

Dr. Edward Smith hoped that the present opportunity would not be lost. It was a most important crisis in the history of the Medical Profession. The real effect of the Bill was to throw the whole organisation of the great Medical Profession with its 18,000 members into the hands of the Government. It was not simply that the Government would establish the Licensing Board if the Profession did not establish it within three months, but the effect would be that the Government would take by the present Bill perfect control and power over all examinations and over the whole education of the Medical Profession. True the Corporations and the Medical Council were to propose certain schemes to be submitted to the Privy Council, but the Privy Council had taken power to alter and amend at its pleasure. Was it not perfectly clear that in acceding to that the Profession was abrogating the whole of its powers? Now was the Profession or were the Colleges prepared to throw the whole power with regard to examination and registration into the hands of a central authority—the Government? He could understand such a proposal if there were a minister of education who would have the supervision over all such matters; but to single out the Medical Profession which had done more to improve its education within the last twenty years than any other body, and to make the Government supreme in the control of it, alone, was what he could not understand. He hoped this view of the case would be distinctly brought out and discussed by the Profession. There were only a few days left, whereas those who had the matter in hand had long matured their plans, and unless there was a distinct expression of opinion by the Profession the Bill would be read a second time. In his judgment the proper course was simply to negative the resolution. He did not like the first amendment; he doubted whether the second would cover the ground to any extent, but if the meeting simply negatived the first resolution it would affirm that these great powers should not be placed in the hands of the Government.

Mr. Baxter Langley regretted that the first resolution had been carried in the words in which it was adopted, because to some extent it committed the meeting to the approval of a principle which, if narrowly inquired into, he believed they would have hesitated to adopt. The two last speakers had brought the meeting back to the question really before them. It was idle to talk of what the College had neglected to do in times past, when they stood in the presence of such great danger of Government interference. His view of the matter was that the College should maintain its integrity whatever

scheme the Government might pass with reference to a uniform examination as a portal to practice; that should be regarded simply as the minimum qualification, and the existing corporations should be allowed to continue their competition and their activity not by selling their degrees cheaply—he believed they never would do that again—but by competition, to make their degrees as valuable as they possibly could by increasing the difficulty of the examinations. One thing was necessary at the present moment in order to give such vigour to this and other corporations as they never had before, and that was direct representation of the Profession. (Applause.) He would suggest the following amendment:—"That, in the opinion of this meeting, such State license to practise should be regarded as a minimum qualification, and shall not be taken to supersede or annul the right of existing corporations to grant diplomas to persons already possessed of State licenses; that the board of examiners for the State licenses shall be appointed by a Medical council composed of representatives of the Medical corporations, and that the governing bodies of such corporations shall be elected by the members thereof, with such regard to the gradations of rank existing among them as they shall severally determine."

Mr. Webster defended the College from the attacks which had been made upon it, and remarked that when he looked at home and abroad, and saw the number of gentlemen who were proud to write "M.R.C.S." after their names, the College could not be such a very bad institution after all, notwithstanding the unwarrantable attacks that were made upon it. He believed some erratic gentlemen would be glad to see the College brought to bankruptcy, and the auctioneers' placards on the pillars outside.

Mr. J. F. Clarke reminded the meeting that it had been owing to the quarrels of Medical men, and the great animosity which had prevailed amongst corporations and members, that the Government on all occasions had been able to take advantage of them. He would be very sorry if it should go forth to the world that any such feeling existed at the present juncture. He would vote for neither the resolution nor the amendment because neither of them, as he believed, went to the real question. They had a foreshadowing of the manner in which the Government would treat them in the terms of the proposed Bill. Why should the Medical Profession be singled out as the only learned profession to be subjected to State interference? He would tell them why—because they did not agree among themselves. Instead of fighting the common enemy when he was at their very walls, they were quarrelling amongst themselves as to who should open the gates to let him in. He did not believe that any power they could bring to bear upon the Government would prevent the Bill from being passed, but he did believe that some modifications might be introduced, and he thought that inasmuch as the framing of the laws and regulations would come from the corporations originally, it would be a bold ministry indeed that would dare to interfere with the choice of the Profession; for he now spoke on the assumption that the representative system would be adopted—(Applause)—and he trusted that this would lead all to see the necessity of bringing into the body politic and the body corporate, a large number of Members to be Fellows. He would suggest every man who had been a Member twenty years and who had lived in the world without a blemish on his character. Invigorated by this means he would ask in the words of the old Cornishman—

> And shall the College die?
> Then twenty thousand Englishmen will ask the reason why!

Mr. Rogers Harrison saw no reason to depart from the amendment he had moved on the present occasion, and he would press it to a division. If the amendment were withdrawn or lost other amendments would be made, for there were several Members present who had amendments to move, and there would be no end to it. The amendment which he proposed would negative the proposition, which, as had been said, struck at the root of the corporate authority of the College. It was preposterous that such a proposal should be made, and although he hoped that there were no snakes in the grass amongst them, yet he feared there must be some who had great leanings in favour of the Privy Council. He called upon the meeting to reject a proposition which would place them in a position in which no other learned Profession was placed.

The Chairman then read the original motion and the amendment to the meeting, and, a vote being taken, the amendment was negatived by a large majority.

Mr. Holmes then moved—"That in the opinion of this meeting the examiners in Anatomy and Surgery ought to be nominated wholly or in part by the Royal College of Surgeons."

Dr. Carr seconded the motion, and contended that the present constitution of the College was representative; that any Member who chose might become a Fellow, and thus have a voice in the election of the Council. Attacks had been made upon the Council, but he believed they were as anxious as any Member could be, to maintain the integrity of the Profession and to raise it to its highest position. With these feelings he gave the amendment of Mr. Holmes his hearty support, in the assurance that if confidence were placed in the Council of the College there would be elected on to the future governing board men who would do justice to the College and justice to the Profession at large.

The amendment was put to the meeting, and carried.

Mr. Edward Smith then moved—"That this meeting protests most strongly against the power which the Medical Bill proposes to confer upon the Privy Council; and that a copy of this resolution be signed by the Chairman and forwarded to the Lord President."

Mr. J. F. Clarke seconded the resolution.

Mr. Heckstall Smith affirmed that the Bill as it stood did not place the Profession in the hands of the Privy Council, and further that we had no right to assume the Privy Council would encroach in any way beyond the provisions of the Act. A certain time was given to the Corporations and Medical Council to arrange a scheme, and for his part, if they did not do it within that time, he hailed with all his heart the power conferred upon the Privy Council to do it for them.

Mr. Liddell thought it would be unwise to object to one clause only in the Bill because it would appear that the meeting acquiesced in all the rest.

Mr. Edward Smith called attention to the fact that after the expiration of the three months, the Act provided that "the Medical Council may make, order, or confirm the scheme with or without any modifications therein as they may think fit." That he apprehended was absolute legislation. Again, Clause 11 provided—"That after the expiration of such month, the Privy Council may confirm such rules with or without modification as they may think fit." Was it not clear as noonday, therefore, that the Profession would be entirely in the hands of the Privy Council as representing the Government? The Profession might propose what they pleased, but there was that power to modify given to the Privy Council. The exercise of it would depend upon the opinion of the adviser to the Lord President for the time being; but it was plain that the Bill transferred to the Government absolutely the whole arrangement for examination and education.

Some discussion arose upon the exact power conferred by the Bill, and,

The Solicitor was called upon to give his opinion. He said the obvious fact was that the Privy Council have power not only to regulate what the Medical Council may do, to regulate the scheme sent up, but to modify it. It came, in fact, to this, that the ultimate power of legislation would be in the hands of the Privy Council. The other sections with reference to the rules as to education were framed upon the same footing, with the addition that the Privy Council should give notice.

Mr. Baxter Langley asked whether the bill would give the Privy Council power to interfere with the management of the corporations themselves, or any plan of action which they might think fit to adopt.

The Solicitor replied that it gave the Privy Council no such powers in a general way; but there were many provisions in the bill which did interfere in a very practical way.

The motion was put to the meeting, and carried by a large majority.

Mr. Gant then moved—"That this meeting regrets the omission from the proposed Medical Act of any amended scheme of representation in the Medical Council, and that to secure the representation of the general body of the Fellows and Members of the Royal College of Surgeons, provision should be made distinctly empowering them to elect the representative of the College in the said Council."

Mr. Rogers Harrison seconded the resolution.

The Chairman was doubtful whether the resolution came within the terms of the requisition convening the meeting.

The resolution was withdrawn, and Mr. Heath moved the third resolution, "That if the representatives of the Medical College should be continued by a new Medical Act, the Fellows and Members of the Royal College of Surgeon have as a corporation the right to elect a representative." He said the resolution was in that affirmative form because he believed that in the charters of the College the Members had already that

right. Lord Campbell's decision in the case of the University of London did not touch the case of the College of Surgeons. He was therefore for asserting the right which members undoubtedly possessed of electing a representative in any General Medical Council which may be assembled.

Mr. Rugg seconded the resolution.

Mr. Baxter Langley proposed to substitute the following resolution:—"That the Board of Examiners for the State Licence shall be appointed by a Medical Council composed of representatives of the existing Medical corporations; and that the governing bodies of such corporations shall be elected by the members of such corporations, with such regard to the gradations of rank existing among them as they may severally determine."

This resolution was afterwards withdrawn.

Dr. O'Connor said that the fellows and members of the College had already the right to elect their representatives on the Medical Council; and if a writ of *quo warranto* were taken to the Queen's Bench, the present system of election would be set aside. The Charter distinctly affirmed that the body corporate of the College is composed of fellows and members; and if a case were submitted to competent legal advisers, it would be found that they had a perfect right to elect their representative, and that all previous representatives had held their seats illegally.

Mr. Edward Smith suggested that as the College numbered 12,000 members, the word "representatives" should be substituted for "representative." (Loud applause.)

This suggestion was adopted.

A Member suggested that there would be no difficulty in finding gentlemen patriotic enough to try the question raised by Dr. O'Connor.

The Chairman stated that the Council had already obtained a very high legal opinion signed by Sir Hugh Cairns and Sir James Wilde in favour of the present system of election. (A Voice: "Who drew up the case?")

The Solicitor: I did. (Laughter.)

Mr. Heckstall Smith regarded the point as one of great importance. Supposing the views of the majority of the meeting were carried out by the Government Bill, the effect would be to place still greater power in the hands of the Medical Council, and render it still more absolutely necessary that a considerable portion of it should be a representative body, representing fairly the great body of the Profession. He was satisfied that the amendment represented the feelings of the Profession as a body, and he trusted the meeting would adopt it with unanimity.

The Secretary having read the resolution moved by Mr. Heath, seconded by Mr. Rugg, and the amendment moved by Mr. F. J. Gant, seconded by Mr. Rogers Harrison; the latter was put to the vote and carried almost unanimously.

On the motion of Mr. Holmes, the following resolution was then passed:—"That a copy of the foregoing resolutions be forwarded to the Lord President of the Privy Council."

A vote of thanks to the Chairman terminated the proceedings.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

April 26.

A meeting of the Profession of this town and its neighbourhood was held last evening in the large theatre of the Medical Institution, under the presidency of Mr. Bickersteth, to take into consideration the Medical Acts Amendment Bill. Unfortunately, the attendance was not so large as might have been anticipated from the importance of the subject.

After some introductory remarks by the Chairman, the following resolution was moved by Dr. Steele:—"That this meeting regards with much satisfaction the introduction by Government of a Bill to amend the Medical Acts; and, without pledging itself to concur in every detail of the Bill, strongly approves the establishment of one joint Examining Board for each division of the kingdom, and of investing the General Medical Council with the power of controlling and, if necessary, of enforcing the formation of such Boards, and also of revising and regulating the details of Medical education and examination." The motion was carried, after the rejection of an amendment proposed by Dr. Cameron. The amendment, while approving of the power given by the Bill to the Council to regulate the details of Medical education, objected to the "further subdivision of the Profession by the institution of a new grade of Practitioners, to be termed Licentiates in Medicine and Surgery, especially as this licence, which represents the lowest qualification, will not entitle its possessor to claim affiliation with any of the existing Corporations."

The next motion, proposed by Mr. Hamilton, was carried unanimously—"That this meeting is convinced that no enactment will give satisfaction to the Profession at large which does not provide for a more direct representation of the general body of Practitioners on the General Medical Council."

The opinion here, as elsewhere, seems to be unanimous; that the absence of any clause providing for the reorganisation of the Medical Council on a much broader and more liberal basis is to be regarded as a radical defect in the Bill as it at present stands.

On Thursday, the 21st inst., was held the last general meeting of one of the most successful sessions which the Medical Institution of this town has had for many years past. The session terminated by a very able and well-digested paper by Dr. Oxley on "Hydrate of Chloral," in which the uses and probable future position of the drug in the Medical *armamentarium* were discussed with much ability. The paper was illustrated by a valuable printed table, drawn up by its author, of forty-three cases of all kinds of disease in which the action of the hydrate of chloral had been carefully observed. Its value as a hypnotic, as well as the safety with which it can be administered at all ages, was abundantly proved. The writer of the paper considered that five grains was a sufficiently large dose to begin with for an adult, and that this should be increased if, at the end of half an hour, no effect were produced.

It would be a somewhat invidious task to select from the numerous and really good papers submitted to the Society during the session any for special comment. For its practical value, however, one read by Dr. A. T. H. Waters, in which were reviewed all the cases of uncomplicated pneumonia which had come under his observation during the years that he had been connected with the Northern Hospital as Physician, was conspicuous.

The Medical School has sustained a very serious loss by the retirement of Mr. Bickersteth from the chair of Surgery. Mr. Bickersteth has for years been one of the steadiest and most energetic supporters of the School, to the museum of which he has liberally contributed. Certain changes in the lecture hours, which it was thought advisable in the interests of the students to make a short time since, interfered so seriously with his Professional engagements that he was compelled to resign.

GENERAL CORRESPONDENCE.

THE SPECIAL CONSTABLE AT THE COLLEGE OF SURGEONS.

Letter from Mr. Christopher Heath.

[To the Editor of the Medical Times and Gazette.]

Sir,—As the President of the College of Surgeons did not hesitate to deny publicly the accuracy of my statement that one of the porters of the College had been sworn in a special constable prior to the meeting of the Fellows and Members on March 24, I took the trouble to call in at Bow-street on Monday last, and ascertained from Mr. Burnaby, the chief clerk, that Mr. Stone came to him three days before the meeting, and stated the wish of the College authorities that a constable should be sworn in, as a disturbance was anticipated. Mr. Burnaby referred the College to Scotland-yard, and I have today, in answer to an inquiry addressed to the Chief Commissioner, received an official letter, signed by Colonel Henderson, of which the following is a copy:—

"4, Whitehall-place, April 27, 1870.

"Sir,—I have to acknowledge the receipt of your letter of the 26th inst., and to acquaint you in reply that at the request of the President of the Royal College of Surgeons the resident porter was sworn in as a special constable on March 22 last to prevent felonies and disorder."

Comment upon the above is unnecessary. I merely request that you will enable the members of the Profession to appreciate the facts of the case. I am, &c.

Christopher Heath, F.R.C.S.

Cavendish-place, April 27.

A VACCINE FAMINE.

Letter from Dr. Trayer.

[To the Editor of the Medical Times and Gazette.]

Sir,—Has it ever occurred to you to propose, as a remedy for

the "vaccine famine," which now causes such dismay in Paris, that application should be made to the Medical officers of Irish dispensaries, who could easily, and, I doubt not, would willingly, furnish large supplies of fresh pure lymph, if officially applied to in this emergency? Ireland, in so many other respects an object of pity to other nations, is happily, through the operation of the compulsory Vaccination Act, practically free from the curse of small-pox. It is our boast that, in days of intellectual darkness, we dispensed *largo manu* of our mental stores to nations in need, and it would surprise me much if my brethren were now slow to offer their share of material help to those who are in such dire need. I am, &c.

Bagenalstown, Co. Carlow. J. J. Trayer, M.B., T.C.D.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY.

Friday, April 8.

Dr. C. J. B. Williams, Vice-President, in the Chair.

Mr. Holthouse related a case of Inguino-crural Rupture, a name he proposed to apply to that variety of inguinal hernia in which the protrusion, after emerging from the external abdominal ring, turned outwards into the groin instead of descending into the scrotum, thus resembling in form and position a femoral hernia. Mr. Holthouse believed it to be nearly always a congenital affection, and associated in the male with an imperfect descent of the testis and an undeveloped scrotum on the side of the protrusion; whereas the determining cause in the female was an abnormal separation of the columns of the external ring. He then referred to examples of this rupture which had been recorded by Lawrence and Birkett, on the authority of Monro, Scarpa, and Fano, as well as to two of more recent date, by Dr. Humphry, of Cambridge, and Mr. Paget. Mr. Holthouse had met with two such—one in the male, and the other in the female—details of the former of which he related to the Society. The tumour, which had become suddenly larger and painful under a violent muscular effort, disappeared within twenty-four hours, under the influence of rest, opium, and the application of ice to the tumour, leaving behind nothing but the testis, which occupied a large adventitious pouch (the vaginal sac) between the skin and aponeurosis of the external oblique muscle.

Mr. Croft said a similar case had occurred at St. Thomas's Hospital. A lad came in with strangulated hernia, and the same position of parts. It could not be reduced, so they cut down on the neck of the tumour without opening the sac and replaced the gut. It returned in twelve months; this time the sac had to be opened, and the position of the parts was discovered.

Dr. Williams asked what the influence of chloroform had been on the employment of the taxis.

Mr. Holthouse said few had not seen the good effects of chloroform, especially when the patient had been placed on the table for operation, which by chloroform was often rendered unnecessary. It was much better than ice. Opium he also thought very useful.

Mr. Barwell read a case of Local Paralysis successfully treated by hypodermic injections of strychnia. The patient, a tailor, aged 58, had lost the use of the extensors and supinators of the right forearm fifteen weeks before coming under Mr. Barwell's notice. The condition resembled painters' wrist-drop; but there was no sign of lead-poisoning; the muscles were not appreciably shrivelled, nor did they respond to faradisation. On December 6, 1869, Mr. Barwell injected hypodermically 3½ minims of a solution of strychnia, containing 1 grain in 50 minims—*i.e.*, 0·07 of a grain. On the 13th he injected 5 minims—*i.e.*, 0·1 of a grain. Each injection was followed by marked increase of power. An interval of seven days occurred, and during that time the patient remained in the same state as two days after the second injection. On the 30th, 6 minims—0·12 of a grain—was injected, and three days afterwards the patient had quite recovered.

An interesting discussion was maintained regarding the strength of the solution and the unusual magnitude of the dose.

Mr. Barwell affirmed that the concentrated state of the solution was the condition which made the dose safe.

Dr. Buzzard thought the dose first employed, say one-fourteenth of a grain of strychnine, very large. Was the solution made accurately? As a rule the hypodermic injection dose ought to be half that by the mouth; the Committee of the Royal Medical and Chirurgical Society had showed this. It was not commonly used in more than one twenty-fourth of a grain by the mouth. He had been called to a lady in opisthotonos from one-twelfth of a grain subcutaneously.

Dr. Langdon Down thought it very serious to give one-twelfth of a grain hypodermically. He had to try the drug in a case of aphonia, and gave one-twenty-fourth of a grain. He gradually went up to one-twelfth of a grain, when spasms came on. How could Mr. Barwell be sure it acted topically and not generally?

Mr. Barwell was quite sure of the strength, and detailed how the solution was made. He thought the action merely topical in this case.

Dr. Burdon Sanderson said it was a very remarkable fact that one-twelfth of a grain gave rise to no physiological effect. He still thought the preparation very doubtful.

Mr. T. Smith said there was very strong *prima facie* evidence that this solution does not contain one-twelfth, otherwise it would kill.

Dr. Sanderson thought the strychnine must have been thrown down in the preparation.

Dr. John Harley thoroughly agreed with Dr. Sanderson. Otherwise there would have been physiological action.

Dr. Williams thought they might well appoint a committee to examine the solution. He always ordered strychnine in solution, never in pill; he never gave more than the one-thirtieth of a grain to begin with, and he had known of tetanic effects even from this; in one case even opisthotonos, but the patient had albuminuria.

Drs. Sanderson and John Harley and Mr. Barwell were appointed to examine the solution.

Dr. Bäumler said Ziemssen had given as much as a quarter of a grain, but began with one-twelfth.

Dr. Hughlings-Jackson described the case of a woman who had double optic neuritis, together with convulsions beginning in the little finger of the right hand, a variety due, he thinks, to disease of convolutions in the region of the Sylvian artery. The hemiplegia, usually transitory, left by such seizures, is sometimes exactly like that consequent on plugging of that vessel. Epileptic hemiplegia depends, it is presumable, on the excessive discharge, which for a time destroys the conducting power of the nerve-fibres to the muscles. In three cases of the kind he has found disease in the vascular region mentioned post-mortem. The double optic neuritis is, he thinks, very strong, but not decisive, evidence of the existence of a gross lesion, but it furnishes no evidence as to the particular nature of that gross lesion. It may be glioma, syphiloma, abscess, etc. It furnishes no evidence as to the exact locality of the lesion, for it occurs with gross disease in several parts of either hemisphere, and with gross disease of either lobe of the cerebellum. The association of the two things is, Dr. Hughlings-Jackson believes, good empirical evidence towards the diagnosis of syphilis. There was, however, in this case, a very clear history of a blow on the left side of the head, and this led to the inference of cerebral abscess. But the subsequent occurrence of numbness on the left side of the body, and afterwards the appearance of a node on the forehead, led to the conclusion that the disease was syphiloma of the brain. The fact that double optic neuritis may exist, when the patient can read the smallest type, was strongly insisted on.

Mr. B. Carter confirmed the statement that optic neuritis was often present when the patient could see quite well. He hardly knew what we called optic neuritis; at all events, there were evidences of some effusion on the optic disc. There were cases of diseased brain where there was no optic neuritis.

Dr. Silver asked Dr. Hughlings-Jackson if he had seen optic neuritis the result of or accompanying disease of the heart or aorta, with pulsating or turgid jugulars and signs of intracranial blood-pressure. He had observed such more than once.

In reply, Dr. Hughlings-Jackson said that he had only wished to point out incidentally in his paper some of the empirical associations of those changes seen in the discs which are usually called optic neuritis. He did not think that, as yet, it could be shown that optic neuritis was associated with lesions in certain parts of the cerebrum rather than in others. It seems to occur from *gross* lesions in almost any part of the encephalon. The fact mentioned by Mr. Carter that tumour of the brain sometimes does, and sometimes does not, produce optic neuritis he considered very significant. Dr. Hughlings-Jackson's speculation is that optic neuritis results by changes spreading by arteries and their vasomotor nerves. The occur-

rence of optic neuritis in the cases mentioned by Dr. Silver was interesting, but he (Dr. Hughlings-Jackson) had not yet seen it in association with valvular disease of the heart.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 6.

Dr. GRAILY HEWITT, President, in the Chair.

THE following gentlemen were elected Fellows of the Society: F. P. Atkinson, M.D., Bessborough-gardens; John Bately, M.R.C.S., Great Yarmouth; David C. Burdett, M.R.C.S., Ontario, Canada; John M. Butler, M.D., Woolwich; William Saul, M.D., Charlotte-street, Fitzroy-square; Arthur Taylor M.B., Kennington Park-road.

Dr. MADGE exhibited an Umbilical Cord which had prolapsed in the course of labour, and on the prolapsed portion of which a curious and complicated knot was found.

Dr. HEYWOOD SMITH showed a cast of a Fœtal Head which had been delivered by cephalotripsy.

Dr. MEADOWS showed a new form of Speculum invented by him, which was a modification of one he had formerly exhibited.

The PRESIDENT narrated the particulars of a remarkable case of true Hydatids expelled from the uterus of a patient under his care at University College Hospital, in which the nature of the cysts had been demonstrated by careful microscopic examination.

Dr. ROUTH read a paper on "Fundal Endo-metritis." After referring to three papers formerly read to the Society by Drs. Tilt, Meadows, and the President, on Gooch's irritable uterus, and showing how the three authors differed in their views, he stated that the disease in most of these cases was inflammation of the lining membrane of the fundus, and not flexions, or merely uterine congestions or inflammations.

Dr. ROUTH then proceeded to explain Dr. Snow Beck's Anatomical Arrangement of the Nerves of the Uterus, showing that the fundus was supplied by a distinct set of nerves in direct relation with the semi-lunar ganglia, and showed how their arrangements explained the radiations of pain. He then pointed out the gravity of fundal endo-metritis as compared to affections of the cervix, and specified the symptoms. After a short reference to the microscopical character of the discharge, he stated that there were four varieties of the disease which he had observed. 1. The convulsive form, in which the fundal pain, passing down one of the thighs, increased by passing the sound, etc., was accompanied by a variety of convulsive seizures, such as spasmodic vomiting, tetanus, hysterical fits, with or without mania, up to epileptoid fits and catalepsy, these symptoms persisting for some time until the catamenial function was fully established, or flooding occurred. 2. Inflammation of the fundal membrane with increased secretion, accumulation of this in the cavity from obstruction at the inner os, giving rise to symptoms of pregnancy, or even labour, with intense fundal pain, all relieved by a sudden gush of discharge, persisting for months, and often recurring. 3. Chronic cases of Gooch's irritable uterus with more or less complete loss of the power of walking. Here also the inflammation of the fundus was unmistakable. 4. Cases of acute fundal endo-metritis, which sometimes rapidly passed into metro-peritonitis generally fatal, although sometimes assuming a more chronic type. Cases of all these varieties were given, and the treatment of each was passed in review, being mainly local depletion by leeches, blisters, and occasionally dilatation by sponge tents, use of the hysterotome, anodynes, and measures locally antiphlogistic and calculated to produce a copious catamenial flow.

Mr. GASKOIN was particularly struck with that part of Dr. Routh's paper which referred to coxalgia as a symptom of endo-metritis, and related the particulars of a case he had observed in which it had been well marked.

Dr. TILT strongly contested Dr. Routh's claim to originality in describing this disease, and said that he himself had devoted no less than seven chapters to it in his work on uterine inflammations. Dr. Tilt agreed with Dr. Routh as to the frequency and importance of endo-metritis, and said that it was generally confounded with inflammation of the cervix. He thought that for all practical purposes it was sufficient to derive the disease into acute, sub-acute, and chronic. He had found acute endo-metritis to be very rare, and his worst cases had occurred in young unmarried women. He considered a sudden gush of fluid, after sharp uterine pain, to be the best sign of sub-acute or chronic endo-metritis, and that when the gentlest pressure of the finger to the enlarged fundus gave exquisite pain, the wall of the womb should be considered diseased as well as the lining membrane. Dr. Tilt was convinced that many cases of sub-acute or chronic endo-metritis were best cured by the leeches, injections, etc., adopted to cure the coinciding inflammation of the cervix. The next indication was to secure free exit of the discharge which would permit the safe injection into the uterus, of a solution of nitrate of silver or tincture of iodine, in cases that would not otherwise get well.

Dr. GERVIS was hardly prepared at once to accept the classification proposed by Dr. Routh. The differences, for example, between the two varieties of fundal endo-metritis termed convulsive and obstructive appeared to depend on circumstances accidental rather than essential. The local disease in each case was the same, but occurring in the one in an individual of a highly susceptible nervous system, it induced various nervous disorders; while in the other, owing to a closure of the internal os the fluid products of the endo-metritis accumulated in the uterine cavity, and gave rise to those symptoms so ably described by the author of the paper. But it could hardly be said that it was the metritis which was either convulsive or obstructive. With respect to the tendency of acute metritis to become associated with pelvi-peritonitis and on the extreme gravity of the symptoms Dr. Gervis could fully corroborate Dr. Routh, and mentioned the particulars of a case of recent occurrence which bore out the author's views.

Dr. ROGERS had observed with Dr. Routh some of the cases narrated, and believed that there was reliable evidence for Dr. Routh's conclusions, which he thought explained the symptoms of many otherwise inexplicable cases.

Dr. ROUTH said that Dr. Tilt in his work had not distinguished between general endo-metritis and inflammation confined to the fundus, to which he (Dr. Routh) limited his four varieties of the disease. With regard to Dr. Gervis's observations he said that it was true the first and second varieties were only modifications of the same disease but in different phases, just as endo-pericarditis and rheumatic ophthalmia were modifications of the same disease, but had different symptoms and required different treatment. The first three varieties were seldom fatal, so that post-mortem examinations could not be had. The fourth variety was so, but, as an accoucheur, he felt strongly that he ought not to make post-mortem examinations of peritonitic cases, and so he had not asked for them in the cases he had met with.

NEW BOOKS, WITH SHORT CRITIQUES.

Notes on Asthma, its Nature, Form, and Treatment. By JOHN C. THOROWGOOD, M.D., Lond., M.R.C.P, Assistant Physician to the City of London Hospital for Diseases of the Chest, etc. London: John Churchill and Sons. Pp. 134.

*** Dr. Thorowgood rightly terms this a volume of notes, for it is very different in its character from the exhaustive work of Dr. Salter. Still as notes they may be useful, especially as Dr. Thorowgood's *armamentarium* seems an exceedingly ample one. There are some good practical hints scattered through the volume. As to the causation of asthma, Dr. Thorowgood believes in spasm of the bronchial muscular fibres as the true cause, and partly relies on the paralysing effects of stramonium as a proof of this doctrine.

Prolapsus, Fistula in Ano, and other Diseases of the Rectum, their Pathology and Treatment. By T. J. ASHTON, Consulting Surgeon to the Marylebone Infirmary. Third Edition. London: John Churchill and Sons. Pp. 175.

*** Mr. Ashton is so well known as an authority on diseases of the rectum, that it would be useless to say more than that this little volume consists of a carefully condensed account of the more common diseases of the rectum, as prolapse, fistula, hæmorrhoids, fissure, and malignant disease. It is intended for such Practitioners as may not have the author's large work within reach.

A Geographical Handbook of all the known Ferns; with Tables to show their Distribution. By K. M. LYELL. London: J. Murray. Pp. 225.

*** A somewhat curious kind of book, but likely to prove of great service to the botanist who finds himself in a new region, for by it he will immediately recognise any *new* species or genus he may encounter. The foundation is Sir William Hooker's great work the "Synopsis Filicum;" but it contains a good deal of matter not introduced into that work.

Notes for Students in Chemistry; being a Syllabus of Chemistry and Practical Chemistry. By Albert J. Bernays, Ph.D., F.C.S., Professor of Chemistry at St. Thomas's Hospital, etc. Fifth Edition. London: John Churchill and Sons. Pp. 122.

*** In this edition of his well-known work Dr. Bernays has carried out a principle which is sometimes assumed as of the highest excellence: it is much smaller (at least in point of size) than was the original one. The book has undoubtedly been of value to the student: it has saved him much time and trouble in taking and reducing notes, thus allowing his whole attention to be fixed on the reactions going on before him. It is unnecessary to say more.

A Pharmaceutical Guide to the First and Second Examinations. By John Barker Smith. London: John Churchill and Sons. Pp. 194.

*** Mr. John Barker Smith is a bold man: he has set to work to include in these 194 pages the elements of Latin grammar, fractions vulgar and decimal, metrical measures, materia medica, botany, the Pharmacopœia, including both chemistry and pharmacy, with, finally, the Latin of prescriptions and a nosological table. We candidly confess our inability to tackle such a book so as to give satisfaction to ourselves and readers. We have no doubt, however, that all there is in it must be very good and very useful.

A Description of the Human Body; its Structure and Functions. Illustrated by nine physiological diagrams. By John Marshall, F.R.S., F.R.C.S., Professor of Surgery, University College, and Surgeon to University College Hospital. Second edition. London: Alfred Farrant.

*** The second edition of this well-known and valuable work is not so much a new edition as a reprint. Originally the work was so complete and so accurate as to require little alteration or revision. Of course the work is not like one intended for strict Professional use where every modification of doctrine requires to be noted; it deals with the broad principles of anatomy and physiology such as are adapted for the educated public rather than the purely Professional man, and general principles do not vary much. It is the best work of the kind we know, and, as a guide to the large diagrams published by the same individual, may be used with great advantage in our higher schools.

The Climate and Resources of Madeira as regarding chiefly the Necessities of Consumption and the Welfare of Invalids. By Michael C. Grabham, M.D., M.R.C.P., etc. London: John Churchill and Sons. Pp. 203.

*** Nowadays, when health resorts are so multiplied, Madeira has, perhaps, lost the pre-eminence it once enjoyed as an abode for *poitrinaires;* but what we hear of it leads us to think that it may have been somewhat too early neglected. Dr. Grabham's work will do good service as recalling to mind the excellences of the climate and the amenities of the place itself. A variety of useful information as to the voyage, etc., is given. Eight steamers from England now call every month.

The Philosophy of the Bath, with a History of Hydro-Therapeutics, and of the Hot Air Bath from the Earliest Ages. By Durham Dunlop, M.R.I.A. Dublin: Moffat and Co. Pp. 465.

*** Mr. Dunlop is one of those enthusiasts who, having mounted their hobby, fairly ride it to death. Should any one utter a disparaging word of said hobby, woe to him; but really Mr. Dunlop is hardly fair, he will insist on the Medical Profession being sworn foes to baths and bathing. Now really this is too hard on men who conscientiously employ and recommend both.

Lawyers and Doctors, Orphans and Guardians. By David Read.

*** This somewhat pretentious volume originated in some proceedings which lately occupied one of the courts of law. Dr. Clark, of St. Mark's-square, Regent's-park, sued the guardians of a young lady for Medical fees. These, we do not think, were exorbitant; but the guardians thought otherwise, and resisted the claim on two grounds—first, that some of the attendances (those, for instance, at the sea-side) were unnecessary, and that the charges were excessive. It is not necessary now to reopen the discussion of the whole of the case: suffice it to say we think Dr. Clark was harshly dealt with. But surely it was not necessary to publish this rather bulky volume to prove this. The writer is too minute and hair-splitting, and gives us such a mass of law papers, quotations from Shakespeare, special pleading and appeals to justice, common sense, and fair dealing, that we become bewildered. The few good suggestions in the book are so overladen with verbiage and irrelevant matter that they are scarcely worth the trouble you take to find them.

The Body and its Health; with Teachers' Aid and Questions.

*** This is the third edition of a book, by Dr. Mapother, for primary schools, and conveys, in simple and distinct language, a large amount of information respecting a sound mind in a sound body. It is a most useful and instructive little manual.

MEDICAL NEWS.

University of Aberdeen.—At the late Medical graduation term, the following candidates (Bachelors of Medicine) received promotion to the degree of M.D.:—

Collins, Alexander, M.B., Bervie.
Davidson, Alexander Dyce, M.A., M.B., C.M., M.R.C.S. Eng., Aberdeen.
Freeman, Alfred John, M.B., Southsea, Hants.
Jefferson, Thomas Jewison, M.B., Market-Weighton, Yorks.
Kennedy, William, M.B., L.R.C.S., Canisbay, Wick.
Lyle, John Vacy, M.B., M.R.C.S. Ed., Durban, Natal.
Morgan, Lewis Wayne, M.B., C.M., The Hafod, Glamorganshire.
Philpots, Edward Payne, M.B., C.M., Leamington.
Rayner, Henry, M.B., C.M., Hythe, Kent.
Smith, Joseph Hume, M.A., M.B., C.M., Methlick.
Thomas, John Lewis, M.B., C.M., L.S.A. Lond., Nottingham.
Watson, William, M.B., Indian Army.
Whyte, John, M.B., C.M., H.M.S. *Scylla.*

And the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

The Degree of M.B.

Anderson, Alexander Thomas, Marnoch, Huntley.
Blacklock, Arthur Woolsey, Brighton.
Blake, Edward Thomas, M.R.C.S.L., Taunton.
Bodman, Francis Henry, Calne, Wiltshire.
Cullen, James, Calcutta.
Davidson, Christopher James, Barbadoes.
Davidson, John, Aberdeen.
Duncan, James, Aberdeen.
Ellis, Henry Vause, Crowle, Doncaster.
Hay, Peter Grant, Ellon.
Letters, Patrick, Aberdeen.
Mair, Edward, Aberdeen.
Manson, David, Aberdeen.
Matheson, John, Urray, Ross-shire.
Merson, John, M.A., Cabrach.
Morison, George, Aberdeen.
Munro, Alexander Begg, Melrose.
Orchard, Thomas Nathaniel, Kingussie, Inverness-shire.
Ostlere, Robert, Halifax.
Simpson, William, Fochabers.
Smith, Patrick Blaikie, Aberdeen.
Thomson, George, Belhelvie.
Walker, Alexander, M.A., Udny.
Whitelaw, William, Dunfermline.
Yeats, William, Aberdeen.

The Degree of C.M.

Anderson, Alex. Thomas.
Blacklock, Arthur Woolsey.
Cullen, James.
Davidson, John.
Davis, Christopher James.
Duncan, James.
Ellis, Henry Vause.
Hay, Peter Orant.
Letters, Patrick.
Mair, Edward.
Manson, David.
Matheson, John.
Merson, John.
Morison, George.
Munro, Alexander B.
Orehard, Thomas N.
Ostlere, Robert.
Simpson, William.
Smith, Patrick B.
Thomson, George.
Walker, Alexander.
Whitelaw, William.
Yeats, William.

Of the above-mentioned candidates, John Davidson, Edward Mair, John Merson, Patrick Blaikie Smith, and Alexander Walker received their degrees in Medicine and Surgery with highest academical honours; John Matheson, Alexander Begg Munro, and George Thomson their degrees in Surgery with academical honours; and William Yeats his degree in Medicine with academical honours. At the same time, James Stewart Orchard was certified as having passed all the examinations, and is entitled to receive degrees on his attaining the necessary age; and the following were declared to have passed part of their examinations:—

Campbell, William.
Carless, Ed. Nicolls.
Carless, William.
Carmichael, Archibald.
Cooke, Edleston H.
Creighton, Charles.
Crombie, Charles M.
Davidson, Charles.
Davidson, Geo. F.
Dewar, James.
Edwardes, Lewis.
Edwards, Wm. Henry.
Fasken, Wm. A. D.
Fowler, Geo. W.
Garden, Robert John.
Gibb, Robert Shirra.
Gibbes, Cuthbert C.
Inglis, James.
Jotham, Geo. W.
King, Walter G.
Lawrence, Nathaniel.
Lowson, David.
Lyon, John.
Maclean, John C. B.
M'Calman, Hugh.
M'Kenzie, Duncan J.
Milne, John.
Patterson, David A.
Philpots, John R.
Pringle, John.
Raitt, Thomas.
Reid, James A.
Reid, Robert W.
Rennie, Thomas.
Robertson, George.
Smith, George W.
Snaith, John.
Swaine, Fred. R.
Walker, Alex.
Walker, James.
Wharry, Chas. John.
Wright, Francis Jas.
Wyness, James D.

The next Professional examination for degrees in Medicine commences on Saturday, July 23.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At an extraordinary meeting of the College on Thursday, the 21st inst, the following gentlemen, having conformed to the by-laws and regulations, and passed the required examinations, were granted licences to practise Physic, including therein the practice of Medicine, Surgery, and Midwifery:—

Cox, William Ashley, 54, New King-street, Bath.
Derry, Bartholomew Gidley, 36, St. James's-square, Notting-hill, W.
Lowe, Walter George, Burton-on-Trent.
Male, Henry Davis, St. Thomas's Hospital, S.E.
Oldham, Charles James, Guy's Hospital, S.E.
Powell, Josiah Taylor, M.D. St. And.; 347, City-road, E.C.
Ring, Edward Cuthbert, 8, Foxley-road, Kensington, W.
Simon, Maximilian Frank, Blackheath, S.E.
Thomas, Andrew Appleby, Jamaica.
Tindale, Wentworth Raynes, M.B. and M.C. Aber., Hampton, Middlesex.
Waddy, Henry Edward, Guy's Hospital, S.E.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Court of Examiners held on the 26th inst., and when eligible will be admitted to the pass examination:—

Blok, Moses, of Amsterdam and Charing-cross Hospital.
Brookfield, John Storrs, of Edinburgh.
Brown, Joseph John, of Edinburgh.
Dickinson, William Wood, of Guy's Hospital.
Duncan, Andrew, of King's College.
Fothergill, Charles Burnett, of Newcastle.
Griffin, Charles Thomas, of University College.
Hodgkinson, Alexander, of Edinburgh.
Hutchinson, Robinson James, of Edinburgh.
Jackson, Charles, of Guy's Hospital.
Livesay, William, of Edinburgh.
Meredith, William Appleton, of University College and Edinburgh.
Murray, Edward, of Newcastle.
Perkins, Henry Alleine, of Edinburgh.
Ritchie, William, of Belfast.
Routh, Richard Laycock, of Charing-cross Hospital.
Thompson, William, of Edinburgh.
Thompson, William, of University College.
Whitelam, Richard, of Charing-cross Hospital.
Wiskin, Henry, of Manchester.

The following gentlemen passed on the 27th inst.:—

Barfoot, George Harry, of University College.
Blackshaw, Thomas Wilkinson, of Edinburgh.
Brown, William, of Edinburgh.
Burgess, Edward Arthur, of Guy's Hospital.
Clarke, John Clelland, of Edinburgh.
Cole, William James, of St. Mary's Hospital.
Cook, Joseph Belcher, of the Charing-cross Hospital.
Duke, Maurice Smelt, of Guy's Hospital.
Garrett, John, of the London Hospital.
Godlee, Rickman John, of University College.
Goodchild, Nathaniel, of St. Bartholomew's Hospital.
Hodson, William Edward, of the Charing-cross Hospital.
Macpherson, George Gordon, of Edinburgh.
Nankivell, Charles Atkinson, of University College.
Norbury, Thomas William, of University College.
Ottley, Walter, of University College.
Parry, Thomas William, of Edinburgh.
Pitman, Robert, of the Charing-cross Hospital.
Reid, Frank, of St. Bartholomew's Hospital.
Roberts, Owen Ellis, of University College.
Smith, George John Malcolm, of Edinburgh.
Wilks, Charles, of St. Bartholomew's Hospital.
Williams, William Venables, of the Dublin School.

The following passed on the 28th inst.:—

Armstrong, Thomas Britten, of the Leeds School.
Bowman, George, of Edinburgh.
Coke, William Harry, of St. George's Hospital.
Conolly, Beaumont Rawley, of the Middlesex Hospital.
Dinnen, William Thomas, of St. Bartholomew's Hospital.
Donkin, Horace Bryan, B.A. Oxon., of St. Thomas's Hospital.
Garstang, Edward Morton, of the Manchester School.
Holland, Neville, of St. Bartholomew's Hospital.
Hope, Thomas Murray, of the Newcastle School.
Marley, William Lane, of the Middlesex Hospital.
Parker, James Coles, of the Charing-cross Hospital.
Reckitt, William Burt, of Birmingham.
Robinson, James, of the Manchester School.
Scott, John Walter, of Guy's Hospital.
Stradling, William Arthur, of St. George's Hospital.
Sturge, William Allen, of Bristol School.
Watson, Charles Russell, of University College.
Widdas, George David, of the London Hospital.

Our readers will perhaps be surprised to learn that on the first day of the examination 16 candidates out of the 36 examined were referred, on the second day there were 13 out of the same number, and on the last day 13 out of 31, making a total of 42 out of the 103 examined, and who will have to pursue their anatomical and physiological studies for an additional period of three months. The final or pass examination for the diploma of Membership will commence this day.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, April 21, 1870:—

Fitzgerald, Conrad, Bristol Infirmary.
Galpin, Richard, Dorchester, Dorset.
Oldham, Charles James, Norfolk-square, Brighton.

In the pass-list of the 14th inst., the address of Mr. H. H. D. Lewis should have been Drummond-street, Euston-square, and *not* Somerset-street.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

WORTHINGTON, JAMES C.—Surgeon to the Lowestoft Infirmary, *vice* W. C. Worthington, resigned.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—James Gibson Thompson Forbes has been promoted to the rank of Staff-Surgeon in her Majesty's Fleet, with seniority of April 7, 1870. Dr. John A. Macdonald has been appointed Assistant-Surgeon to the *Nassau*.

MEDICAL DEPARTMENT.—Inspector-General of Hospitals James Mouat, C.B., V.C., from half-pay, to be Inspector-General of Hospitals; Assist.-Surgeon John Murray, M.B., from 93rd Foot, to be Staff Assistant-Surgeon, *vice* Richard Hall, M.D., deceased.

BIRTHS.

CARTER.—On April 21, at Richmond, Yorkshire, the wife of Thomas Carter, L.R.C.P. Lond., of twins—son and daughter.

CLAPTON.—On April 21, at 6, Lansdowne-villas, Lee, Kent, the wife of Edward Clapton, M.D., prematurely of a daughter, which survived its birth thirty hours.

GRAVES.—On April 22, at 14, Chichester-road, Bayswater, W., the wife of Frederick George Graves, M.D., of a son.

PHILLIPS.—On April 16, at Lancaster-gate, the wife of Charles D. F. Phillips, M.D., of a daughter.

ROBERTSON.—On April 12, at Pickering, Yorkshire, the wife of B. W. Robertson, Surgeon, of a son.

MARRIAGES.

BELLEW—MACGREGOR.—On March 14, at St. George's Cathedral, Madras, Henry Walter Bellew, Bengal Medical Service, to Isabella Jane, second daughter of the late Major R. G. MacGregor, late Bengal Artillery.

CLARKE—WALKER.—On April 21, at Walcot Church, Bath, Wm. Fairlie Clarke, F.R.C.S., of Curzon-street, Mayfair, London, to Caroline Selina, youngest daughter of the late John Walker, Esq., of Crawfordton, N.B.

DUCKWORTH—SMITH.—On April 26, at St. Margaret's Church, Westminster, Dyce Duckworth, M.D., of 11, Grafton-street, Bond-street, Assistant-Physician to St. Bartholomew's Hospital, to Annie Alicia, widow of the late John Smith, Esq., of Bombay and Prince's Gate.

GAIRDNER—WRIGHT.—On April 26, at Norwich Cathedral, by the Rev. Thomas Dix, uncle of the bride, assisted by the Rev. J. C. Matchett, William Tennant Gairdner, M.D., Professor of Medicine in Glasgow University, to Helen Bridget, eldest daughter of Robert John Wright, Esq., of Norwich.

GREENE—COARE.—On April 21, at Kilgobbin Rectory, Joseph Reay Greene, M.D., Professor, Queen's College, Cork, to Cecilia Rose, youngest daughter of George Coare, Esq., of Mont-le-Grand, Heavitree, near Exeter.

HEWBY—RYOTT.—On April 26, at St. George's, Hanover-square, William Cooke Hewby, M.R.C.P., M.R.C.S., of Huddersfield, to Elizabeth Anne, daughter of William Hall Ryott, M.D., of Thirsk. And at the same time and place, the Rev. John Sheepshanks, M.A., vicar of Bilton, Harrogate, to Margaret, daughter of William Hall Ryott, M.D., of Thirsk.

HUNTER—CALLANDAR.—On April 26, at St. Paul's, Edinburgh, Dr. John Gilland Hunter, of Stobbhouse, county of Durham, second son of the late R. H. A. Hunter, Staff Surgeon, H.M.'s Forces, to Elizabeth Georgina, eldest daughter of Randall Callandar, H.B.M.'s Consul at Rio Grande de Sul and Santa Catharina.

JAMIESON—ROBERTSON.—On April 21, at Berwick Church, William Allan Jamieson, M.D., to Christiana Anne, eldest daughter of Alex. Robertson, Esq., J.P., of Wellington-terrace, Berwick.

KELLETT—MORGAN.—On April 19, at Talgarth, Brecknockshire, Robert Kellett, Surgeon, of Bilston, Staffordshire, to Anna Maria, second daughter of the Rev. James Morgan.

LEWIS—INNES.—On March 15, at Meerut, East India, Alfred Lewis, M.D., 4th (Q.O.) Hussars, to Annie, only daughter of Lieutenant-Colonel P. R. Innes, Retired List.

PATERSON—TENNENT.—On April 20, at 14, Hamilton-drive, Glasgow, Joshua Paterson, M.D., to Mary Brown, daughter of the late John Tennent, Esq., merchant, Glasgow.

RENNER—WRAY.—On April 20, at Christ Church, Highbury, Fred. Renner, Esq., Frankfort-on-the-Maine, Prussia, to Elizabeth, third daughter of William Wray, M.R.C.S., March, Cambridgeshire.

ROPER—WINKWORTH.—On April 20, at Neuchâtel, William Augustus Roper, M.D., to Augusta Maude, fourth daughter of Stephen Winkworth, Esq., late of Purbrook Lodge, Hants.

TARLETON—WARBURTON.—On March 13, at St. Werburgh's, Western Australia, the Rev. Waldve Willington Tarleton, B.A., of St. Catherine's College, Cambridge, third son of the late William Tarleton, Surgeon, Birmingham, to Alice, eldest daughter of George Edward Egerton Warburton, Esq.

TORRANCE—DAINTY.—On April 20, at St. Peter's Church, Kettering, David Torrance, M.D., of Dunchurch, Warwickshire, to Laura Elizabeth Pell, younger daughter of the late J. P. Dainty, Esq., of Loddington Hall, Northamptonshire.

WALKER—NIMMO.—On April 21, at Sephton Church, George E. Walker, F.R.C.S., Rodney-street, Liverpool, to Louisa, daughter of William Nimmo, Esq., Blundell Sands.

WHITTING—JEWEL.—On April 19, at St. John's Church, Truro, Charles Edward Whitting, B.A., eldest son of Charles Whitting, Esq., of Sandcroft, Uphill, captain of the 6th Somersetshire V.R.C., to Maria Elizabeth, only child of Henry Jewel, M.D., of The Grove, Mylor, late of Tregoney, Cornwall.

DEATHS.

GREENHOW, JANE FRANCES, widow of the late Edward Greenhow, M.D., at Humshaugh House, Hexham, on April 19, aged 76.

HUNTER, MARY ELIZABETH, the wife of William Guyer Hunter, M.D., Surgeon Indian Army, and Principal of Grant Medical College, Bombay, on April 22.

RIDGE, ARTHUR HENRY, the only and deeply lamented son of Joseph Ridge, M.D., of 39, Dorset-square, drowned by a boat accident, near Hammersmith, on April 21.

THOMSON, FRANCIS HAY, M.D., Glasgow, at 23, St. James's-street, Loudon, on April 21.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BRENTFORD UNION.—Medical Officer for the Eighth District. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to W. Ruston, Clerk to the Union, New Brentford, on or before May 3. Election on the 4th.

CITY OF LONDON LYING-IN HOSPITAL, CITY-ROAD.—Surgeon-Accoucheur. Candidates must reside in the neighbourhood of the Hospital. Applications and testimonials to the Secretary on or before May 17. Election on the 18th.

CORK SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL.—Medical Officer for the Intern Department, and Surgeon for the Extern Department. Candidates must hold the licences of the King's and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland. Applications and testimonials to the Board of Trustees on or before May 12. Election on the 13th.

CRANBROOK UNION.—Medical Officer for Hawkhurst Parish. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Henry J. Farrar, Clerk, Cranbrook, Kent, on or before May 10. Election on the 11th.

HALIFAX INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to Dr. Alexander, Halifax, on or before May 10.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.—Resident Clinical Assistants; must have some qualification. Applications and testimonials to the Secretary on or before April 30.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician; must be M.R.C.P. Lond. Testimonials to the Secretary on or before May 11.

LIVERPOOL NORTHERN HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Chairman of the Committee, on or before May 7. Election on the 11th.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Chair of Surgery. Applications and testimonials to R. Harrison, Registrar, on or before April 30.

LIVERPOOL ROYAL INFIRMARY.—Junior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee, on or before May 28.

LONDON FEVER HOSPITAL. — Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, Islington, on or before May 9. Election on the 13th.

RETFORD GENERAL DISPENSARY.—House-Surgeon and Apothecary; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Dispensary Committee on or before May 1. The duties will commence at the end of June.

ST. PANCRAS AND NORTHERN DISPENSARY, 126, EUSTON-ROAD.—Honorary Physician; must be M.R.C.P.L., or be a Graduate in Medicine of one of the Universities of Great Britain or Ireland, and not be engaged in the practice of pharmacy. Applications and testimonials to the Hon. Sec., S. S. Wigg, Esq., 33, Gordon-square, on or before April 30.

SALFORD UNION.—Assistant Medical Officer for the Workhouse. Candidates must have both Medical and Surgical qaalifications, and be registered. Applications and testimonials to S. H. Bagshaw, Clerk to the Guardians, Eccles, New-road, Salford, on or before May 2. Election on the 6th.

SEAMEN'S HOSPITAL SOCIETY, GREENWICH (LATE THE "DREADNOUGHT").—Physician; must be M. or F.R.C.P.L. Applications and testimonials to the House-Surgeon and Secretary, at the office of the Hospital, Greenwich, on or before May 4.

SUNDERLAND INFIRMARY.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

WARNEFORD, LEAMINGTON, AND SOUTH WARWICKSHIRE HOSPITAL.—Physician; must have a Medical qualification and be registered, and not practising Surgery, Pharmacy, Midwifery, Hydropathy, or Homœopathy. Applications and testimonials to the Secretary, on or before May 3. Election on the 13th.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, W.—Physician; must be M. or F.R.C.P. Eng. Applications and testimonials to the Secretary, on or before May 9. Election on May 11.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, W.—Surgeon in Ordinary; must be M. or F.R.C.S. Eng., and be registered. Applications and testimonials to the Secretary, on or before May 9. Election on the 11th.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Dover Union.—The Second Division of the Haugham District is vacant; area 6738; population 1089; salary £25 per annum.

East Grinstead Union.—Mr. W. J. Potts has resigned the Fifth District; area 10,632; population 2608; salary £62 13s. 8d. per annum.

APPOINTMENTS.

Dunmow Union.—William R. Macauley, L.K. and Q.C.P. Ire., and L.R.C.S. Ire., to the Hatfield District.

Neath Union.—Moses Morgan, M.R.C.S.E., L.S.A., M.D. St. And., to the Second Central District.

Tenterden Union.—Lewis R. K. Rouse, M.R.C.S.E., to the High Halden District.

Upton-on-Severn Union.—Henry B. Marsh, M.R.C.S.E., L.S.A., to the Third District.

THE Bishop of Manchester laid the corner-stone of the new Infirmary for Oldham on Saturday last.

THE Hospital for diseases of the chest in the City-road, has just received a munificent anonymous donation of £1000.

CONTAGIOUS DISEASES ACT.—The Committee of the Association for extending the Act to the civil population will meet on Tuesday, May 3, at 12, Cavendish-square, at 2 p.m., to discuss the annual report and other business.

THE SMALL-POX EPIDEMIC IN PARIS.—The number of cases of small-pox in Paris is still on the increase, there having been registered 132 deaths from this cause for the week ending April 23, the total mortality for last week being 1199.

WEST LONDON HOSPITAL, HAMMERSMITH.—Mr. Richd. H. Barker, M.R.C.S. Eng., has been appointed House-Surgeon, *vice* Mr. George Herbert Wade, M.R.C.S. Eng., resigned, and Mr. Arthur Francis Greenhill, L.R.C.P. Lond., M.R.C.S. Eng., Assistant House-Surgeon, *vice* Barker.

BRISTOL HOSPITAL FOR SICK CHILDREN AND THE OUTDOOR TREATMENT OF WOMEN.—In consequence of the large increase in the number of patients the committee have added a Physician and Surgeon to the staff. The former appointment has been conferred on Dr. Stephen Winter Fisher, and the latter on Mr. Thomas Webster.

PROCEEDINGS OF THE COLLEGE OF SURGEONS.—The following is an abstract of the unconfirmed minutes of the Council of the Royal College of Surgeons, on the 14th inst., just exhibited in the Hall, and to which reference was made by one of the speakers at the last public meeting of the Fellows and Members, a report of which appears in another page. On the motion of Mr. Hilton, seconded by Mr. Hancock, it was resolved that the consideration of the confirmation of the following resolution be postponed to the next meeting of the Council—viz., that it is desirable that not less than half of the Members of the Court of Examiners shall be Fellows, who are not and have not been members of the Council, and that this resolution shall be carried out as soon as practicable. A letter was read from Mr. John Simon, the Medical officer of the Privy Council, forwarding by direction of the Lord President a copy of the Government proposed Medical Acts Amendment Bill, and requesting the opinion of the Council in reference to certain of its provisions; whereupon the letter and accompanying Bill was referred to the Committee on the conjoint Examining Board to consider the same and to report thereon to the Council. Mr. Charles Bird Boast, of Natal, South Africa, a member of the College, drew the attention of the Council to the annual tax of £5 imposed on Members of the College there practising, and suggesting that the same was contrary to the spirit of the College Charter, and requesting the Council to exert its influence with the Colonial Secretary to prevent the tax being enforced; whereupon it was resolved that the President and Vice-Presidents be requested to communicate with the Secretary of State for the Colonies on the subject of Mr. Boast's letter, and to take such steps thereon as they might think proper. It was moved by Mr. Curling, seconded by Mr. Hancock, and resolved, that it be referred to a committee to consider and report to the Council on the additional By-laws to carry out the resolution of the Council of the 22nd ult., that in future the election of Examiners in Anatomy and Physiology shall be distinct from those on Surgery, for the Fellowship as well as for the Membership of the College. The following gentlemen were elected members of the Committee:—Messrs. Hancock, Curling, Clark, James Paget, and Mr. Hewett, with the President and Vice-Presidents. Mr. Junius

Hardwicke, of Rotherham, a Member of the College of 1844, requested he might be elected to the Fellowship, when it was resolved that he be informed that the Charter and By-laws precluded compliance with his request.

Collegiate Examinations.—The following were the questions in anatomy and physiology submitted to the candidates for the diploma of Membership of the Royal College of Surgeons on the 23rd inst.—viz.:—1. Describe the situation, attachments, and structure of the urinary bladder. Mention the portions of the bladder which are not covered by peritoneum, and the structures with which those portions are contiguous. 2. Describe the iris; its position, attachments, and structure. Mention its blood-vessels and nerves, and state the function it exercises in vision. 3. The thumb. Describe the position of the thumb, its bones, its articulations, its capability of motion, and the muscles by which its movements are effected. 4. Mention the muscles which enlarge the capacity of the chest during ordinary inspiration. Explain the mode by which ordinary expiration is effected. 5. Describe the changes which take place in the circulation of the blood after the birth of the child. 6. Describe the position and attachments (origin and insertion) of the biceps flexor cubiti, the brachialis anticus, the supinator radii, longus and brevis, the pronator radii teres, and the pronator quadratus. Mention the precise action of each muscle, and the nerve by which each is supplied.

St. Mark's Hospital.—A public dinner, on behalf of the funds of this Hospital, was held at the Albion Tavern on Monday, the 25th inst., Mr. Sheriff Paterson in the chair. The funds, which were rather low, were reinforced to the amount of upwards of £1400, a considerable sum having been raised by the senior-Surgeon, Mr. Peter Gowland. In reply to the toast of the volunteers, Mr. Alfred Cooper made a short but very amusing speech.

A Liberal Offer.—Mr. Joshua Fielden, M.P., and his two brothers, have addressed a letter to the Todmordén Board of Guardians, offering to hand over to trustees of their own choice, £3000, for the erection of cottage Hospitals for the use of the poor and infirm, and not as tests of destitution. Amongst other things, they state that they feel satisfied if a workhouse be erected as proposed, the poor-rates will be increased in amount, and the result will be more paupers, more vagrants, more crime, and more policemen.

Entertainment and Presentation at the Worcester Asylum.—Last Thursday evening an entertainment took place at the County and City of Worcester Asylum. In addition to the usual dances, songs were sung by the officers, and also by Lieutenant-Colonel Moncrieff, of the Scots Fusilier Guards, whose fine baritone voice and artistic singing were highly applauded and gained him many encores. An interesting event in the evening was the presentation of a very handsome silver cup to Dr. George Stanley Elliott, assistant Medical officer, who is leaving the asylum. The cup was the gift of the officers and attendants of the establishment as a token of esteem and respect.

Out-patient Hospital Administration.—On Monday evening a meeting of the Committee appointed by the public meeting of the various Hospital staffs was held at the Hospital for Women, Soho-square, Mr. T. Holmes in the chair. There was a good attendance of members, and the names of Drs. Hawksley and Montague Thomas, and of Messrs. Rivington and Hill, were added to the Committee. After some discussion, it was resolved to appoint four sub-committees to make special investigations, and to report on the out-patient department of (1) the General Hospitals, (2) the Special Hospitals, (3) the Dispensaries, including provident Dispensaries, and (4) the Poor-law; each committee to consist of five members, two having connexion with the class of institutions into which inquiries will be made. The following gentlemen were then nominated:—1. On General Hospitals: Dr. Anstie, Dr. Meadows, Mr. C. Heath, Mr. Gant, and Mr. Teevan. 2. On Special Hospitals: Dr. Clapton, Dr. Morell Mackenzie, Dr. Pollock, Mr. Rivington, and Mr. J. D. Hill. 3. On Dispensaries: Dr. Stewart, Dr. Buzzard, Dr. Murray, Mr. Curgenven, and Mr. Ebsworth. 4. On Poor-law: Dr. Hawksley, Dr. Dudfield, Mr. Spencer Wells, Mr. T. Holmes, and Dr. M. Thomas. Dr. Stallard undertook to act as secretary to the sub-committees on General Hospitals and Poor-law; and Dr. Heywood Smith to the others. The sub-committees were authorised to fill up any vacancies which might arise, and were requested to report progress on July 19. The Secretaries will be happy to receive the names of any gentlemen who would desire to express their opinions, or afford any information, to the above sub-committees, which will assemble not less frequently than once a fortnight.

The Contagious Diseases Acts (Women).—Several women were summoned at the Canterbury Police-court on Monday last. In the first case the woman was charged with being a common prostitute, and not submitting herself for examination: the Inspector of Police admitted in cross-examination that he had never seen the defendant solicit men, and had never known her to visit a bad house; but it was urged on the part of the prosecution that the oath of the Inspector "that he had good cause to believe the woman to be a prostitute" was sufficient, in which view the magistrates appeared to concur, for they made an order for her to appear periodically for examination during the next twelve months. In the next case the woman had signed a consent to submit herself for Medical examination under the Acts, and had been examined accordingly; she now complained that she had then been locked up, with others, in a room from half-past twelve till six, and then removed to Shorncliffe, arriving there at half-past eight, had no food given to her all that time, and had suffered great pain; notwithstanding which, the Bench sentenced her to seven days' imprisonment in Maidstone gaol; but upon promising to submit to future examination, the sentence was withdrawn. In the next case the woman also complained of harsh treatment and consequent pain, and said she would rather "do" twelve months than be examined again; she was sentenced to seven days' imprisonment in Maidstone Gaol. The last case was not gone into, the defendant being (as was stated) drunk.

Diseased Bacon.—In his last monthly report of the the Health of Marylebone, Dr. Whitmore says:—"A piece of bacon, purchased recently from a shop in the parish, was sent to me by a lady for my inspection. On examination I found it to contain several specimens of the Cysticercus cellulosa, or bladder worm. This bacon was the cured flesh of a measly pig, and if eaten without being thoroughly cooked, would probably produce tapeworm in those who might happen to partake of it. It is seldom that bacon in this state is brought to the London market, although it occasionally does find its way here from Ireland. A little care will readily detect the presence of these parasites; they are to be seen in the muscular or lean portions of the bacon, as small white specks, about the size of a pin's head; some of these, where the salt has not penetrated, appear, when viewed through a magnifying glass, like small, oval, semi-transparent bladders, but where the salt has penetrated, they are opaque. Salting and smoking generally destroy them, but this is more effectually done by the bacon being thoroughly cooked."

Results of Vaccination in the French Army.—M. Champouillion, of the Val de Grâce Hospital, states that during the year 1867-68, 3319 soldiers of the French Army had either variola or varioloid, and of this number 2432 had been previously vaccinated, 720 had been revaccinated, 58 had formerly had the small-pox, and 109 had neither had the small-pox or been vaccinated. Of the 3319 soldiers, 2188 had been vaccinated in infancy, and 1135 had been vaccinated for the first time or revaccinated between the 21st and 23rd year. The mean age at which variola was contracted was 23 years and 9 months. As to the question of antagonism between variola and typhoid fever, Professor Champouillion can offer no opinion, but he contributes this remarkable fact, that of 2200 Turcos brought from Algeria and barracked in Paris, not a single one had typhoid fever—an extraordinary thing quite unexampled; while 61 per cent. of their number had had variola previously to their incorporation.—*Gazette Hebdomadaire*, April 22.

Anthropological Society of London, April 19.—Dr. Berthold Seemann, V.P., in the chair. John Colam, Esq., 105, Jermyn-street, St. James's, and David Mitchell Henderson, Esq., 1, Carden-place, Aberdeen, and Old Calabar, West Africa, were elected Fellows. Dr. D. Lubach, of Kampen, Holland, was elected a Corresponding Member. A paper, by Mr. Alfred Sanders, was read "On Mr. Darwin's Hypothesis of Pangenesis as applied to the Faculty of Memory." The first question to be asked was—Is thought a function of the brain? The author answered it in the affirmative, and cited facts and appearances in physiology, anatomy, pathology, and physics in support of his opinion. Thought could not be considered as a product of the brain-cells any more than light could be produced by the cells of the retina, yet the brain-cells were necessary for the communication between the mind and the external and internal world, and were exhausted in the process of thinking and willing in the same manner as the cells of the retina were exhausted and required renewal in the

process of seeing. Passing to the consideration of the faculty of memory, the author combated the theory of Mr. John Stuart Mill, that the mind is a series of feelings and nothing more, and that memory is an ultimate fact incapable of explanation. The remainder of the paper was devoted to the application of Mr. Darwin's hypothesis of Pangenesis, which the author maintained was capable of explaining the difficulty raised by Mr. Mill; it being granted that the mental faculties depend upon the brain, and that the brain-cells give off self-propagating gemmules indefinitely, everything becomes plain. After describing in detail the action of external impressions on the brain at different times in the life of an individual, some of the many conditions favourable or the reverse to the retention of such impressions, and the dormant and active states of the brain-cells, the author entered into a consideration of the growth of the supposed gemmules, their action at maturity, and their power of self-propagation. Mr. W. B. Kesteven supplemented the paper by a speech of some length in general support of Mr. Darwin's hypothesis, but not of its treatment by Mr. Sanders, and by the exhibition of a series of microscopic anatomical preparations in illustration of his remarks. The discussion was further sustained by Dr. Langdon Down, Rev. Dunbar Heath, Mr. Dendy, Dr. Ellis, M. Robert Des Ruffières, Mr. George St. Clair, the Chairman, and others. Mr. George C. Thompson contributed a note on "Consanguineous Marriages," urging upon the Society an investigation into the following questions:—1. When the defects commonly attributed to relationship of the parents are exhibited, are the germs of these defects traceable in the parents or their families? 2. When the Medical pedigree of the parents is faultless, are their children sound and healthy? 3. When any particular excellence occurs in the parents' family, is it transmitted to the children in increased force? Dr. Langdon Down said that after an examination of some five thousand cases of interbreeding, he had arrived at the conclusion that the practice was not only not necessarily injurious, but that a methodical and judicious selection in the marriage of close relations would be of enormous value to the community in the improved race of men that would by that means be obtained. Captain Blair cited in support of that view the case of a people on the Ganges, while other speakers adduced conflicting evidence. The papers for the next meeting, May 3, were announced—viz.:—1. "The Aboriginal Tribes of the Nilgiri Hills," by Major Ross King. 2. "The Armenians of Southern India," by Dr. John Shortt. 3. "The Kojahs of Southern India," by Dr. John Shortt.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Spa.—Send them by all means.

L.—"Stat magni nominis umbra," may well apply to him.

The Bradford Daily Telegraph, we think, puts the question of women Doctors in a fair light. The race will soon run itself out.

A Fellow.—At the adjourned meeting of the Fellows and Members of the Royal College of Surgeons on Friday last there were fifty-three Fellows and eighty Members, with nine representatives of the press, making a total of only 142 against 231 at the former meeting.

The Pioneer (Allahabad) contains in some late numbers some excellent articles on Dr. Macnamara's views respecting cholera in India, its origin and propagation. These consist mainly in the impurity of the water drank. The remedy suggests itself.

One of the Old School.—The race of cuppers is almost extinct; but there is still one in practice, active enough and skilful enough. He is one of the well-known family of Mapleson, who have been cuppers for generations. Mr. Mapleson's address is 9, Upper John-street, Golden-square, W.

We hear that the nursing in the South Devon and Cornwall Hospital might be improved, but that the Committee of the Hospital fear to offend prejudices by placing the nursing under the supervision of a local sisterhood. All we can say is that the experience of the London Hospitals, which are nursed by sisterhoods, is completely in favour of the arrangement. But as is suggested in the *Western Morning News* there is no reason why trained nurses should not be obtained from the Nightingale Institution. It is a disgrace to a town like Plymouth that its Hospital should be badly nursed.

The Deathless Germs.

(From a Correspondent.)

In the sheets of a powerful contemporary during the last week we note the continuance of a discussion which has given glimpses to the general public of such very recondite and difficult themes as equivocal generation, germs of diseases, etc. The able chemist and physicist, whose original and brilliant experiments (which lay open a wide field for speculation) have given new vigour to this class of inquiry, seems now to have taken up ground in physiology, and even with Surgery he would appear less unacquainted than is generally the case outside the Profession. In this point, however, he would seem to err, that we are not all of us consentient with Lister. By an equally strange contrariety, the Physician, his opponent, will not be restrained within the limits of biology: in the qualities of the elements, in the capacities of the inorganic kingdom to dichotomise and fructify, he would show himself the better informed. We are promised putrefaction *in vacuo*. Pray God it may not be Torricellian! As is common in these appeals to the public, we fail to find anything new or suggestive. Had the arena of discussion been Medical, the writers would have been reminded of what has been done elsewhere. The experiments of Cantoni, of Pavia, during the last few years, which are very far in advance of anything mentioned in this debate, would have been referred to. Excluding air by a variety of ingenious experiments from organic solutions and subjecting them in a Papin's digester to a most intense heat, it was found by this physicist that even this did not always impede the supervention of certain definite extraneous growths, and the supposition of germs as their factors was immensely invalidated by the circumstance that an equal degree of heat did not impair these results in all solutions alike. Nor were all solutions subject to the same laws. If Dr. Bastian has anything to show in advance of these experiments we shall be pleased; at present they appear most unaccountably overlooked. To our mind they bring into strong doubt if the question of spontaneous generation will be ever finally decided by heat as a single agent employed experimentally.

Copy of Memorial Adopted at a Meeting of the Medical Profession in Liverpool.

To the Right Honourable the Lords Spiritual and Temporal in Parliament assembled.

The humble petition of the registered Medical Practitioners, practising in the Borough of Liverpool, in the County of Lancaster, in public meeting assembled showeth—

That your petitioners regard with much satisfaction the introduction into your right honourable House, of a Medical Bill, to establish a single joint examining board for each division of the kingdom, and to invest the General Medical Council with adequate powers to control and, if necessary, to enforce the formation of such boards, and also to revise and regulate the details of Medical education and examination.

This petition further showeth that your petitioners are nevertheless fully convinced that no legislation will be acceptable to the general body of the Medical Profession, which does not provide for the direct representation of the members of the Profession upon the General Medical Council, and they therefore regret that no such provision is included in the Medical Bill now before your right honourable House.

Your petitioners therefore humbly pray that your Lordships will be pleased to introduce into the Medical Bill such alterations as may be necessary to secure the direct representation of the Profession upon the Medical Council, and your petitioners will ever pray.

Signed on behalf of the Meeting,

April 25, 1870.

Indian Furlough Rules as they Apply to Medical Officers.

Extracts from the Indian Military Furlough Rules of 1868, as approved by the Secretary of State, and published in the official *Gazette of India*, as Government General Order No. 1064 of 1868; showing that Medical officers, as hitherto always the practice (*vide* the Furlough Rules of 1792 and 1854) were included among those to whom the rules were intended to apply.

"These rules will be applicable to all officers who may elect to adopt them, belonging to the several staff corps or to the Indian Army." . . .

"*Para.* 2.—Leave taken under the rules now presented will not involve forfeiture of appointment." . . .

"*Para.* 5.—An officer drawing staff pay in addition to pay of rank proceeding on furlough will be allowed pay at the rate of 50 per cent. of the salary of his substantive office. But an officer on civil employ, and drawing consolidated salary will be allowed 50 per cent. of the average salary drawn by him for three years prior to his proceeding on furlough." . .

"*Para.* 7.—The maximum amount of furlough to be taken at any one time, carrying pay and retention of appointment, will be two years."

"*Para.* 34.—Officers of the Indian Military and Medical services will be required generally to notify their intention to accept these rules or to adhere to those now existing on the first occasion of their taking furlough." . .

Extract from after Orders;

Showing Medical officers have since been debarred from the principal advantages of the Furlough Rules—viz., retention of appointment during furlough, and 50 per cent. of salary.

Military department! General order 1869.

No. 5.—Furlough—Medical Department.

"The following letter from the Secretary to the Government of India, military department, to the Inspector-General of Hospitals, Indian Medical Service Lower Provinces, No. 1175, dated 29th December last, is published for general information:—

"In reply to your letter No. 583, dated 28th November, 1868, I am directed to acquaint you that regimental Medical charges are not considered appointments in the sense of Clauses 2, 7, 13, and 16 of Government General Order No. 1064 of 1868 [S. O. No. 358 of 1868.]."

"2. Medical Officers, like all others who may accept the Furlough Rules of 1868, and who are holding appointments, will continue to hold them on furlough under the provisions of the order above referred to."

Also republished with additional specific ruling, on the subject of salary, *vide* Bombay *Government Gazette*, February 4, 1869.

"Under a recent decision of the Government of India it has been ruled, that regimental Medical charges are not considered appointments in the sense of Clauses 2, 7, and 13 of G. G. O., No. 1064 of 1868, and consequently Medical Officers holding such charges have no claim to any portion of the allowance attached thereto when absent on furlough to Europe, nor any lien on the appointment, after departure from India. Medical Officers, like all others holding staff appointments other than regimental, who may accept the Furlough Rules of 1868, and who are holding appointments will continue to hold them, on furlough, under the provisions of the order above referred to."

But a still more recent order prevents Medical Officers holding charges other than regimental, taking the benefit of the Furlough Rules of 1868, *vide Gazette of India*, 17th June, 1869, No. 660 of 1869.

"The following resolution in the Home Department is published for general information."

"The Governor General in Council . . . . is of opinion, that a Medical Officer in charge of a civil station should, when proceeding on furlough, retain a lien on some similar appointment—*i.e.*, the charge of a civil station of the same class, or some other civil charge of equal emoluments. He should not as a general rule have any claim to re-appointment to the same station."

COMMUNICATIONS have been received from—

Mr. J. C. Worthington; Dr. McNab; Mr. J. E. Kershaw; Dr. H. S. Kane; Mr. J. S. Brazier; Mr. J. Pike; Mr. P. Le Neve Foster; Mr. Hayes; Dr. Edwards Crisp; Dr. Greenhow; Dr. J. Whitmore; Dr. M. G. B. Oxley; A Village Surgeon; Mr. G. Jenkins; Mr. W. H. Goodsall; Dr. J. W. Ogle; Dr. T. Spencer Cobbold; Dr. Buzzaro; Mr. H. Arnott; Dr. J. W. Moore: Mr. T. Vincent Jackson; Professor Erasmus Wilson; Dr. Day; Mr. J. Chatto; Dr. Trayer; Dr. J. Hughlings-Jackson; Dr. T. Carter; E. W. G.; Mr. Christopher Heath.

BOOKS RECEIVED—

Moore's Review of the Progress of Sanitation in India—Report of the South Lambeth, Stockwell, and North Brixton Dispensary—A few Brief Remarks on Cambridge University and College Reform, by a Member of the Senate—Ilkley Hospital Report—Black's Observations on Therapeutics and Disease—American Journal of Syphilography and Dermatology, vol. i. No. 2—Journal of the Gynæcological Society of Boston—Sussex County Lunatic Asylum Report—Report of the Southport Convalescent Hospital—Zur Geschichte der Syphilis, von Dr. Finckenstein—County of Warwick Pauper Lunatic Asylum Report.

NEWSPAPERS RECEIVED—

Nature—Australian Medical Gazette—Bradford Daily Telegraph—Aris's Birmingham Gazette—New York Medical Gazette—Liverpool Daily Courier—Medical Press—Western Morning News.

APPOINTMENTS FOR THE WEEK.

April 30. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Prof. Grant, "Astronomy of Comets."

May 2. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Medical Society of London, 8 p.m. Annual Oration and Conversazione.

Odontological Society, 8 p.m. Mr. Bridgman (of Norwich), "The Electric Chemical Action of Amalgam Stoppings in the Mouth."

3. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Pathological Society, 8 p.m. The following Specimens will be exhibited:—Mr. Maunder, "Larynx after Croup." Dr. Crisp, "Calculus from Cloaca of Pelican; Fatty Degenerations in the Lower Animals." Dr. Whipham, "Syphilitic Affections of the Heart; Tumour in Liver of a Turkey." Dr. C. T. Williams, "Cancer of Luog." Mr. Bellamy, "Tumour removed from the Tendon of Transversalis Abdominis." Sir H. Thompson, "Cystic Oxide and Phosphatic Calculi removed by Lithotrity." Dr. Dickinson, "Lymphoid Growth in Spleen; Glandular Tumour in a Child." Mr. H. Arnott, "Cancer of Uterus." Dr. Wiltshire, "Rupture of Heart." Dr. L. Down, "Pseudo-hypertrophic Paralysis."

4. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Obstetrical Society. 7 p.m.: Special Council Meeting. 8 p.m.: Dr. W. Squire, "On some Temperature Variations in Diseases of Children." And other Papers by Dr. Brunton and Dr. Wynn Williams.

Society of Arts, 8 p.m. Meeting.

5. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

Harveian Society, 7½ p.m. Special Council Meeting.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

6. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Medical Society of London, 8 p.m. Meeting of Council.

Western Medical and Surgical Society, 8 p.m. Nomination of Officers for ensuing Session. Practical Evening, for the Narration of Cases and Exhibition of Specimens.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 23, 1870.

BIRTHS.

Births of Boys, 1169; Girls, 1148; Total, 2317.
Average of 10 corresponding weeks, 1860-69, 2078·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	755	732	1487
Average of the ten years 1860-69	707·9	671·9	1379·8
Average corrected to increased population	...	...	1518
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	6	10	...	13	...	3	2	2
North ...	618210	6	4	26	2	11	4	5	1	5
Central ...	383321	...	6	5	...	4	...	1	1	2
East	571158	2	10	16	...	10	4	3	3	4
South	773175	2	6	20	1	13	2	6	3	4
Total	2803989	10	32	77	3	51	10	18	10	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·031 in.
Mean temperature	55·0
Highest point of thermometer	78·7
Lowest point of thermometer	36·2
Mean dew-point temperature	41·1
General direction of wind	Variable.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 23, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending April 23.	Deaths Registered during the week ending April 23.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2317	1487	78·7	36·2	55·0	12·78	0·00	0·00
Portsmouth ...	122084	12·8	74	56	71·6	38·9	51·0	10·56	0·00	0·00
Norwich	81087	1·09	59	31	76·5	38·0	51·9	11·06	0·10	0·25
Bristol	171382	36·6	129	107	73·9	34·4	51·2	10·67	0·01	0·03
Wolverhampton ...	72990	21·5	53	23	75·8	38·2	51·9	11·06	0·00	0·00
Birmingham ...	369604	47·2	290	130	77·6	36·9	52·7	11·50	0·00	0·00
Leicester	97427	30·4	85	36	79·0	35·7	53·0	11·67	0·00	0·00
Nottingham ...	88888	44·5	47	42	77·0	37·9	53·2	11·78	0·00	0·00
Liverpool	517567	101·3	447	250	73·9	40·0	52·5	11·39	0·05	0·13
Manchester ...	374993	83·6	269	225	76·3	34·7	53·7	12·06	0·11	0·28
Salford	121580	23·5	94	67	76·1	32·4	52·8	11·56	0·14	0·35
Bradford	143197	21·7	118	91	74·0	40·0	53·1	11·73	0·04	0·10
Leeds	259527	12·0	234	158	78·0	38·0	53·4	11·89	0·04	0·10
Sheffield	247378	10·8	179	115	75·5	37·0	52·2	11·22	0·01	0·03
Hull	130869	36·7	101	57	70·0	30·0	47·8	8·78	0·01	0·03
Sunderland ...	94257	30·5	62	37	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	91	59	74·0	42·0	52·2	11·22	0·10	0·25
Edinburgh	178970	40·4	149	92	72·7	40·0	52·7	11·50	0·10	0·25
Glasgow	468189	92·5	434	274	72·0	37·2	52·1	11·17	0·59	1·50
Dublin (City, etc.*)	321540	33·0	196	146	68·4	33·2	51·6	10·90	0·00	0·00
Total of 20 Towns in United Kingd'm	7209603	33·8	5428	3483	79·0	30·0	52·3	11·28	0·07	0·18
Paris—Week ending April 23	1889842	242	...	1119	...	...	...	...	...	...
Vienna—Week ending April 16 ...	605200	167	...	413	...	...	47·3	8·50	...	...
Berlin—Week ending April 21 ...	702437	112	506	459	...	...	50·0	10·00	...	...

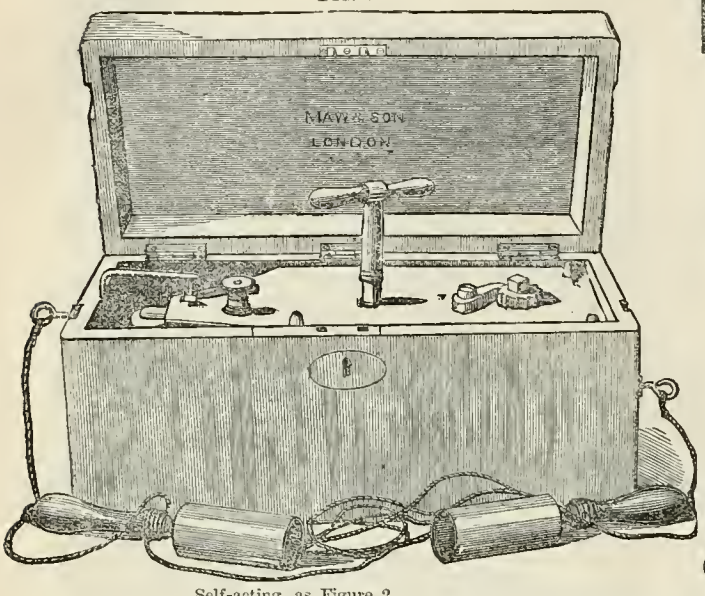
At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·031 in. The highest barometrical reading was 30·29 in. at the beginning of the week, and the lowest was 29·83 in. on Tuesday and Wednesday.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

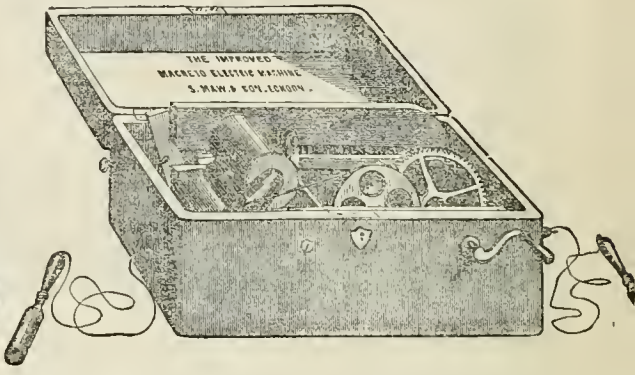
* Inclusive of some suburbs.

Fig. 2.



MAGNETO-ELECTRIC MACHINES.

Fig. 6.



Self-acting, as Figure 2	£2 2 0
Rotary, with handle for turning, as Figure 6	1 4 0
Ditto ditto with double magnet, very powerful	1 13 0

The following Appliances can be supplied with either of the above, or separately:—

For the Teeth	3s.	For the Ear	3s.
,, Throat	7s.	,, Feet	3s.
,, Uterus	2s. 6d.	,, Spine	3s. 6d.
,, Bladder...	6s. 6d.		

S. MAW, SON, & THOMPSON, 11 & 12, ALDERSGATE-ST., LONDON, E.C.

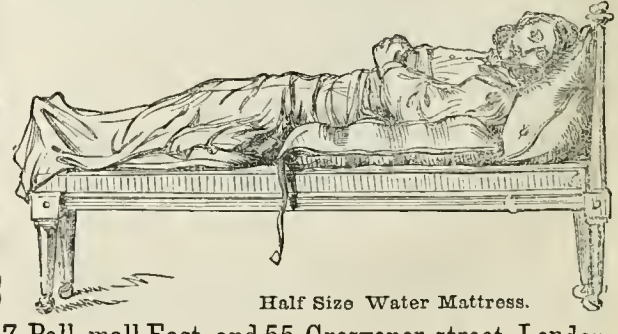
HOOPER'S
WATER BEDS AND CUSHIONS,
(obtained the only Prize Medal, 1862).

USED BY THE ROYAL FAMILY AND ALL CLASSES OF INVALIDS.

ALSO IN H.M. ARMY AND NAVY, AND THE INDIAN PRESIDENCIES.

Full Length Water Mattress.
In sending an order the Width of the Bedstead should be stated.

Three-quarter Size Water Mattress.



Half Size Water Mattress.

HOOPER, Operative and Manufacturing Chemist, 7, Pall-mall East, and 55, Grosvenor-street, London.

ORIGINAL LECTURES.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
Lecturer on Clinical Medicine in the University of Berlin.

I.—Cardiac Neuralgia (Angina Pectoris).

(*Continued from page* 433.)

We have now to consider to what extent the sympathetic nerves participate in the phenomena of angina pectoris.

The sympathetic fibres to the heart proceed partly along the cervical part of the sympathetic (as cardiac nerves taking origin from the ganglia) towards the heart, and partly proceed from the cerebrum along the cervical part and upper part of the dorsal region of the spinal cord towards the ganglion stellatum (inferior cervical ganglion) in order to join the cardiac plexus.(a) The cardiac fibres within the sympathetic are excited by the centrum, *i.e.*, the brain (excitirendes Herznervensystem von Bezold); their function consists, therefore, in the conveyance of irritation from the centres to the cardiac ganglia. Hence we imagine that the innervation of the heart is so arranged that the ganglia which regulate rhythmic action are influenced by two kinds of cardiac fibres—those of the vagus, which, when irritated, arrest the action of the ganglia, and those of the sympathetic, which excite the same.(b) Both are in connexion with the nervous centre, and are, therefore, excited by psychical action.

From this consideration we may explain the increased action of the heart in angina pectoris as dependent on increased action of the cardiac ganglia influenced by the sympathetic, and, since all the sympathetic fibres to the heart are connected in the cardiac plexus, we may look upon this latter as the source of the abnormal action of the heart.

Any further application of our physiological knowledge to the pathogenesis of angina pectoris is not possible. The influence of the sympathetic on the heart, as made out by v. Bezold's investigations, which form a new era in the subject, has been experimentally studied by many observers; but with an increasing number of new and partly contradictory experimental results obtained of late, especially concerning the influence of the pressure of blood on the heart's action, the influence of the sympathetic on the heart seems to become more and more complicated, and a knowledge of the part it plays in the innervation of the heart seems far distant still.

The view that the cardiac plexus, and through it the sympathetic, which takes part in the formation of the plexus, are affected in angina pectoris gains some support from a post-mortem examination made by Lancereaux.(c) The case was that of a patient, 45 years old, who during life had the usual symptoms of angina pectoris, and who died in one such attack. At the post-mortem examination, besides narrowing of the coronary arteries and alterations in the aorta at that part on which the cardiac plexus lies, vascularity of the latter was also found, some of its fasciculi being enveloped in exudation, and their external sheath thickened. On microscopic examination, an extensive accumulation of round nuclei was found which separated the nerve-fibres and compressed them; the contents of the nerve-sheaths had a greyish hue and a granulated appearance. In two other cases of angina pectoris, Lancereaux found alterations in the aorta at the same spot and of similar character, connected also with considerable narrowing of the coronary arteries, so that, according to his report, possibly an analogous affection of the cardiac plexus may have existed, as in the former case, but the plexus was not, however, examined.

The sympathetic may participate in the changes of the heart's action in angina pectoris in another way—without any affection of the sympathetic fibres in the neck—for the vaso-motor nerves have their course within the sympathetic trunks; alterations in these will cause change of tone in the vessels, and hereby modify the pressure of the blood; this will be reflected on the heart with two different effects; for irritation of the vaso-motor nerves will cause contraction and a more paretic state dilatation of the vessels; in the former the increased impediment to the emptying of the heart into the peripheric channels will increase the pressure of the blood in the aortic system, and the heart's action will therefore be accelerated; in the latter (diminished resistance to the circulation) the pressure on the aorta will decrease, and the action of heart therefore become feebler.(d)

That certain cases of angina pectoris are perhaps somewhat dependent on the vaso-motor nerves of the sympathetic has previously been pointed out by Cahen,(e) who classified the disease as altogether belonging to the neuroses, without, however, adducing any important evidence in favour of his view. Recently Nothnagel (f) has published cases in which attacks of angina pectoris have occurred in patients with undiseased hearts, the attacks being consequent on general (often produced by influence of cold) arterial spasm, the initial symptoms of abnormal sensations in the extremities, numbness, cold, etc., being followed by anxiety, palpitation, and even by pain arising in the cardiac region, and radiating over the left half of the thorax. Other objective symptoms, pallor, decrease of temperature, diminished sensibility of skin, and cyanotic colour of the extremities coexisted; the radial artery was sometimes contracted, the sounds of the heart distinct, the heart's action rhythmical, sometimes stronger than usual, but the number of beats was not raised. The paroxysms were allayed by conditions which relieve arterial spasm, such as increased flow of blood to the skin by means of counter-irritants and the application of heat.

As a *résumé* of the foregoing considerations, we find that the complex series of symptoms of angina pectoris may be produced by various influences even external to the heart itself, that all the cardiac nerves are probably more or less implicated, and that the variations in its phenomena in different patients may be referred to the greater or lesser participation of the nerves which compose the cardiac plexus, the sympathetic being probably pre-eminent in this respect, since it takes the principal part in the formation of that plexus.

Of the *etiology* of angina pectoris we have little positive knowledge apart from its connexion with certain anomalies of the heart and vessels already mentioned. Crasiology has dilated largely on the subject, and to almost every case of angina pectoris has ascribed an arthritic or hæmorrhoidal origin, and in these cases where arthritis and hæmorrhoids have not been found the disease has been attributed to hysterical hypochondriasis; in short it has been always stamped by some high-sounding name. One thing seems certain, that excessive smoking sometimes produces angina pectoris; it has been observed that the paroxysms did not continue to recur when the patient left off smoking, and that they returned when the smoking was resumed.(g) Mental and bodily overwork, particularly tiring exercise, mounting hills, etc., may occasionally produce an attack.

Advanced age, and the male sex render the subject more liable to the disease than are young females. This predisposition seems to be connected with the greater frequency of atheromatous changes in the arterial system in advanced age and in males.

The *course of the disease* is almost always very chronic; the attacks recur at extremely variable intervals, sometimes leaving the patient free for years, at other times tormenting him day after day with no apparent cause, and lastly some cases may get well spontaneously.

The *prognosis* is so far favourable that however dangerous the stenocardiac attacks may appear they do not end fatally. The prognosis is of course often worse in consequence of complicating affections of the circulatory organs (insufficiency of valves, fatty degeneration, senile sclerosis of the arteries). A permanent cure even in the uncomplicated cases can only seldom be obtained.

Treatment.—In those cases in which physical examination shows the existence of valvular disease or fatty degeneration of heart, or in which—consequent on senile changes, peripheric arterial sclerosis, and so on—atheromatous affections of the aorta and coronary arteries exist, the treatment of angina pectoris falls under that of the primary disease. In those cases, also, in which other causative indications exist—excessive smoking, for instance—we shall commence the treatment of angina pectoris by removing such known causes. But, as a rule, the causes of the affection are either not known or not distinctly understood; in these cases, therefore, causative treatment cannot be considered.

(a) v. Bezold, "Untersuchungen über die Innervation des Herzens und des Gefässe;" *Centralblatt*, 1867, Nos. 2 and 23.
(b) See E. Cyon, *Centralblatt*, 1866, No. 51; *Comptes rendus*, tome lxiv. No. 12; and v. Bezold, *Centralblatt*, 1866-67.
(c) Lancereaux, "De l'alteration de l'aorta et du plexus cardiaque dans l'angine de poitrine;" *Gaz. méd.*, 1867, p. 432.
(d) Ludwig and Théry, *l.c.*, and E. Cyon, *Centralblatt*, 1866, No. 51, f. 802.
(e) Cahen, "Des néuroses vasomotrices (angine de poitrine)."—*Arch. générales de Méd.* 1863, vol. ii. pp. 564-570, 696-698.
(f) *Deutsches Archives für klinische Med.*, 3 Band. pp. 309-322.
(g) Beau, *Comptes rendus*, 1862, vol. liv., p. 179. *Archives générales.* 1862, vol. ii., p. 122. Savalle, *Arch. gén.* 1862, vol. ii., p. 250. Championère, *Canstatt's Jahresbericht.* 1865, iii.

But in this, as in all other diseases, the pathogenesis and etiology of which are enveloped in natural or artificial obscurity, we possess a large number of empirical symptomatic or so-called specific remedies, the majority of which are, however, of no avail in given cases, whilst the influence of the rest is restricted to palliative action, effecting radical cures only exceptionally. No one will now think of resorting to the once renowned bleeding, whilst all sorts of so-called derivative remedies as friction, sinapisms, foot and hand-baths, irritative inunctions, etc., are still in much favour.

These last remedies are at any rate of greater avail than the internal use of so-called nervine tonics, antispasmodics (valeriana, moschus, castoreum, camphora, ammonia, and similar remedies), and the narcotics. There have likewise been recommended during an attack inhalation of ether and chloroform (in small doses, so as not to produce anæsthesia—Romberg), cold, compression, and so on. *Hypodermic injection of morphia*, employed during an attack, has often proved successful, not only with regard to the pain, but also to the changes in the circulation and the anxiety consequent on this. Duchenne checked an attack immediately by faradisation of the skin of chest and nipples. We must, on the whole, confess that we do not possess any reliable means of checking or alleviating the paroxysm—a fact which we should not so much regret if we were in a position to combat the general disease with better weapons; but in this we are no better situated. Many remedies there are, but little effect. Amongst other things have been recommended various metals, preparations of iron, sulphate and cyanate of zinc, nitrate of silver, and arsenic. I have tried the last-mentioned drug in several instances of uncomplicated angina, but have not seen any benefit from its use. Other authors have advised phosphoric acid, inhalation of oxygen, narcotics, and, in reference to the presumed arthritic origin of the disease, the arthritica. Erlenmeyer cured one case by hypodermic injection of conia. More reliance can be placed in the derivatives, applications of irritating plasters, issues, setons, over the cardiac region; some authors have seen benefit from these after all other methods of treatment have failed. Duchenne applied cutaneous faradisation in two cases, and claims to have cured them. Any method or attempt at treatment which is to be considered rational must keep the different forms of the disease more distinctly in view than has hitherto been done.

Counter-irritants—and amongst them the one which stands foremost as acting most rapidly, viz., cutaneous faradisation—may perhaps have an important therapeutic influence on some cases by their reflex influence on the cardiac nerves, and the vaso-motor system. This influence, as is well known, differs according to its strength; if weak it causes increased contraction of heart, acceleration of circulation, and contraction of the vessels, by reflex irritation of the excito-motor and vaso-motor nerves; if strong, on the other hand it weakens the force of the heart's contraction, retards the circulation, and dilates the vessels by reflex irritation of the regulatory nerves of the heart and paralysis of the vaso-motor centres. In the analysis of the symptoms we saw that the changes in the action of the heart and in the circulation in angina pectoris at one time exhibit the characters of vagus irritation, at another time the characters of irritation of the excito-motor cardiac nerves, and then finally of increased action of the vaso-motor nerve system (angina pectoris vaso-motoria). Of these three more or less distinct forms, the two last mentioned only admit of or justify the application of intense counter-irritation, *i.e.* those cases in which increased and violent action of heart, cord-like contraction of the arteries, and small tense pulse exist; in these cases, however, in which from the commencement the phenomena of vagus irritation and paralysis of the vessels are prominent, or in which during the course of the attack a tendency in this direction is early perceptible, counter-irritation is admissible either not at all or only in its mildest forms.

Similar considerations of the special symptomatology of the individual case must likewise guide us in the application of the *constant current*, the proper use of which forms probably our most important and, perhaps, our only remedy for angina pectoris. According to the nature of the symptoms, we shall have to choose the special method of application which will produce reflex irritation in part of the regulatory cardiac nerves at one time, and at another time immediate galvanisation of the cervical sympathetic.

I have only been able up to the present time to apply the first method (in three cases free from organic disease of the heart, but with increased cardiac action) in all the cases only for a short time. The result was apparently favourable. The attacks became slighter, and in one case ceased entirely, whilst up to the time of treatment they recurred daily. In a fourth case which recently came under my care a retardation and decrease in the intensity of the recurrence has been noticed. The application consisted of a strong constant current—up to thirty elements of Siemens; the positive pole being provided with a large surface for contact was applied to the sternum, the negative pole to the side of the lower cervical vertebræ.

ORIGINAL COMMUNICATIONS.

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
Physician to the Bristol Royal Infirmary.

(*With a coloured Diagram.*)

V.—TUBERCULAR MENINGITIS—ABSCESS OF BRAIN—MANIA—MELANCHOLIA—DEMENTIA—GENERAL PARALYSIS.

Tubercular Meningitis.

Having lately published some observations on this disease in *St. George's Hospital Reports*, vol. iv., a reference to them may be satisfactory. The lesion of the meninges so constantly occurs as a concomitant of tubercle in some other part of the body, that it is impossible to separate the temperature of the early stage from the temperature of tuberculosis in general. As, however, cerebral and meningeal symptoms develope themselves, the temperature generally reaches a point which, although higher than normal, is often below the high temperatures of tuberculosis. It is certainly uncommon in tubercular meningitis to meet with a temperature much above 103°. For the variable time, during which life persists in these cases, it is most usual to find the temperature keeping at or about 100° or 101°, with an irregular tendency to morning remissions and evening elevations by no means constant.

In case 28 the temperature, which until the day of death was only once or twice elevated above the normal point, sank one evening to 95⅗°. The general rule, however, is that it is maintained at from 2° to 4° Fahr. above the normal point during the whole course of the cerebral symptoms, and only changes its course just before death.

It may be (and some ophthalmoscopic observations of Dr. Clifford Allbutt on asylum cases seem to point to this acute condition sometimes becoming chronic) that this disease occasionally allows partial recovery, and therefore that the temperature owns a period of defervescence. I have never been fortunate enough to meet with an example of recovery; and the termination of the disease in death has seemed to be accompanied by two opposite conditions of temperature, one exemplified in case 29, in which the temperature fell rapidly for the forty-eight hours preceding death, and at the agony reached the very low point of 94°; the other, where the fatal event is preceded by a temperature higher than normal, but yet not very high, much lower than is usual in death during the exanthemata; and the fatal temperature may of course touch any point between these two extremes.

Hirtz makes a startling statement as to the value of the thermometer in the diagnosis of tubercular from simple meningitis. He says in the first there is no elevation of temperature, sometimes even a lowering of that which pre-exists, notwithstanding extreme rapidity of the pulse, whilst in simple meningitis the temperature rises rapidly to 104°—106°, and so remains when the pulse becomes lessened in the comatose period. In this remark all observers will, I think, disagree with him. At some period in the course of tubercular meningitis, if not all through the disease, the temperature will be higher than normal, though it certainly is not so high as in non-tubercular meningitis. As a contrast with these cases of tubercular meningitis, we may give an example of rheumatismal meningitis, where the evening temperature on the eighth day was 102°, and rose the next day to 109⅕°, when the patient died; the temperature reached 110⅗ twelve minutes after death. This case was noted by my friend, Mr. Freeman, of Bath. The meningeal lesions are often so slight in these cases of tubercular meningitis, and can have had so little to do with the causation of death, that we are compelled to own them merely accompaniments of a general disease, and the close relationship pathologically and clinically between cases of this disease

and cerebro-spinal meningitis renders the theory of the latter being a general rather than a local disease infinitely probable.

Is it allowable to go further, and to say that probably all meningitis is a local manifestation of a general disease? When we exclude the meningeal lesions dependent on tubercle, rheumatism, gout, syphilis, the exanthemata, alcohol, and uræmia, there will only remain, as causes of meningitis, diseases of the bones, wounds, and sunstroke, all more or less mechanical in their action. If this is the case, and clinical observation seems to lead to it, we must conclude that the temperature of meningitis will vary to some extent, according to the general disease with which it is connected. If there are exceptions to this idea, they are to be found in cases of chronic meningitis, such as we meet with in asylums, in some instances of chronic mania or general paralysis. I have never found any elevation of temperature in chronic meningitis.

Whether the existence of granular lymph round the medulla oblongata has somewhat a modifying influence on the height of the temperature is as yet a question; but it is very remarkable that the high temperature of acute tubercle seems to be decidedly lowered (though still above the normal point) when the disease has caused lesion of the vessels of the pia mater at the base of the brain.

Abscess of the Brain.

The condition of inflammation of the brain itself, leading to abscess, seems to differ from the pyrexial form of meningitis, mainly by the greater elevation of temperature and the greater intensity of symptoms.

Case 32 was a boy, aged 14, admitted into the Bristol Infirmary after a week's illness, which had commenced with symptoms similar to those of meningitis, headache, drowsiness, delirium, and vomiting. He showed great irritability of temper, and complained of intense pain in the head, pain which he was unable to bear without continual screaming. On the fourth day after admission there was observed a semi-rigid condition of the left side of the body; the leg was bent on the thigh, and the thigh on the abdomen; the flexors of the left arm were also rigid. Slight ptosis of the left eyelid occurred the day before his death, and coma did not supervene until the last twelve hours.

Post-mortem Examination.—The right cerebral hemisphere was paler than the left. In removing the brain a collection of pus was opened in the left hemisphere about the junction of the anterior and middle lobes; it contained about half an ounce of pus. On opening the brain another collection of pus was found in the substance of the left hemisphere, below the posterior corner of the ventricle, not communicating with the ventricle, nor with the other abscess. In the right hemisphere, just behind the corpus striatum, was another collection of thick viscid pus, which had found its way into the ventricle, and a considerable quantity of pus existed in each ventricle. The petrous portion of the left temporal bone was healthy, as was the internal ear and the membrana tympani.

In this case there was a diminution of temperature before death, but this is not always the case. The contrary may occur, and the patient die with a very high temperature.

The thermometer will assist in distinguishing this disease from syphilitic or other cerebral tumours, in which pain is often a prominent symptom, but in which there is no elevation of temperature. The persistence of a high temperature will serve to diagnose cerebral abscess from every form of mental alienation, whilst the greater height to which the mercury will rise in cerebral abscess—105° and upwards—will generally suffice to separate this disease from tubercular meningitis.

Mania.

Case 34.—Henry B., aged 35, had suffered for some months with pain in the forehead. On the day of admission into the Infirmary he had felt loss of power in the left arm and leg, with difficulty of speech, but he had not been unconscious. A fortnight ago he had had a similar attack, but rapidly recovered. The left pupil was larger than the right. He was able to answer Medical questions fairly, but sometimes gave incoherent answers to other questions. Four days after admission he had no trace of paralysis, spoke perfectly, but complained, causelessly, that the other patients were talking about him, and he became very difficult to manage. This mental delusion increased during the fortnight of his sojourn in Hospital, and one night he attempted to strangle himself, and afterwards to cut his throat, and was sent to an asylum. At the time of his suicidal attempt his temperature was normal. In this case the temperature on the second morning of the attack was 102°, but fell immediately, remaining at or about 100° for several days, and then gradually falling, with evening exacerbation, until it arrived at the normal point, whilst the mental phenomena became worse as the pyrexial symptoms diminished.

With one exception—viz., phthisical mania—the temperature of mania is not much removed from the normal. The temperature of maniacal patients during the intervals of quiescence, intervals that may persist for many months, will be somewhat lower than the normal point, and just before the maniacal attack there is often a considerable fall. When the condition of acute excitement supervenes, there will often be a slight elevation of temperature, as compared with that immediately preceding. This elevation is not long continued, may be absent altogether, and when present seems to be in no direct ratio with the intensity of the maniacal condition. In fact, the temperature is often not so high when the excitement is at its maximum, as it is somewhat before this point is reached. In Dr. Clouston's cases the difference between the temperature of excitement and that of quiescence averaged 2·2° Fahr. in periodic mania with long periods, and 1·1° Fah. in periodic mania with shorter intervals.

As the excitement tells upon the strength, the mercury generally falls; and if a patient dies in a maniacal attack, the temperature will be one of collapse, falling even 4 or 5 degrees below the normal.

In phthisical mania, however, the phenomena are very different. The temperature is very high, and continues so with little remission, seldom falling below 104°. It is evident that this elevation of temperature is due to the phthisis, and has nothing to do with the mental excitement, as the latter may vary exceedingly in degree, whilst the temperature remains the same. In the last case I had an opportunity of watching, the young lady was maniacal several weeks before her death, and the thermometer never registered any point below 103°, and was often one or two degrees higher. In this case the mania was accompanied by a peculiar phenomenon as to colour; everything seemed to her to be of a blood-red colour. I have met with this in other cases of prolonged phthisis.

Melancholia.

In melancholia there is generally a decided depression of temperature. The cycle of temperature may so far follow the normal condition, that the evening registrations are lower than the morning, but both are as a rule below what is met with in a healthy person.

Case 35 was a patient, aged 44, who had been affected with melancholia for four years, and was suicidal. During the fortnight in which his temperature was registered it only once reached the normal point, and that was the morning after a day spent in Bristol, by which he was somewhat interested and excited.

Dr. Williams has noticed a fall of some degrees before an attempt at suicide.

I believe the diminution of temperature, so constantly met with in melancholia, is quite irrespective of the amount of food taken; it certainly occurs when food is taken properly. Dr. Clouston believes that dementia is the only form of insanity in which the average temperature is below that of health, but a diminution is certainly met with not only in melancholia, but even in long continued chronic mania. Dr. Clouston also states that masturbation in the ordinary forms of insanity will cause an increase of temperature. This is not always the case. In case 33, a male patient, aged 45, the lowest temperatures 96⅛, 96¼, and 95⅝ were registered after intense masturbation.

Dementia,

the lowest form of human existence, owns also the lowest temperature, for a continuance, of any condition of life. The heat of the body too is in direct ratio with the extent of the dementia; as this becomes more and more complete the heat of the body falls to a lower and lower point.

Case 37 is an example of complete dementia, very chronic, following mania. The patient was 60 years of age. He took food well. The very low temperatures, however, usual in this disease, are sometimes interrupted by a slight elevation. In the *Journal of Mental Science*, January, 1868, a case of dementia is reported, in which the temperature occasionally reached 100°. It is probable that these elevations depend on some disturbance in the general health, and not on any condition of the brain.

General Paralysis,

however, seems to partake more of the character of an acute disease than any of the other forms of insanity.

Case 36 was a male patient, aged 45, who had been ill for three years, and in whom the disease had reached the third stage. Though habitually rather low, the temperature in this

case showed a tendency to exacerbation, coincident always with excitement and violence. The evening registrations too were generally higher than the morning, but this was not constant. A similar fact has been observed by Dr. Clouston; he states that in general paralysis the average evening temperature is higher in every case than the morning (the observations being taken over a sufficient period). This, however, is generally more marked in the earlier stages of the disease than in the later.

Dr. Gibson has found the temperature as high as 102⅔ during attacks of congestion in general paralysis, and he has seen no abnormal depression of temperature in such patients.

Dr. Williams, on the other hand, although noting similar observations of Ludwig Meyer, denies that any elevation of temperature occurs throughout the whole course of the disease, and considers that it is only in the later stages that any abnormality is found, and then "the tendency is downwards, and the temperature continues slowly to decrease as the dementia and the paralysis concurrently advance, and finally extinguish life." He goes on to say—"I can truly affirm that in no case of decided or even of incipient general paralysis have I ever registered an increase of temperature." Now, it is certain that the observations of Drs. Gibson and Clouston, with those of several foreign Physicians and my own, are equally accurate with Dr. Williams's researches; and the difference of opinion on this subject is another illustration of the accordance between clinical observation and pathological result. For this question as to the nature of general paralysis was fought out in the post-mortem room before the clinical differences were observed; and the real truth will be this—that the peculiar cerebral atrophy, the only tolerably constant pathological appearance belonging to general paralysis, is sometimes accompanied by more or less meningitis, and sometimes not. In a considerable number of cases there is thickening of the cerebral meninges, or at least some granulations of the membrane of the ventricles—evidences of some temporary stasis of blood with abnormal cell-growth; whilst in many others the meninges of the brain and cord are found perfectly healthy, and the substance of the nervous centres themselves shows no evidence of previous inflammatory action. It may happen to a Physician to meet with these non-inflammatory cases only, whilst in the practice of others occasional elevations of temperature coincident with great mental excitement will be the clinical evidences of the production of those meningeal lesions that are sometimes found after death.

The opportunity of making observations on insane patients has been afforded me through the kindness of my brother, Dr. Charles Fox, of Brislington House. The use of the thermometer, however, in these forms of mental derangement for purposes of diagnosis is mainly negative. It may assist us in determining that we have no abscess of the brain, no true cerebitis, no acute meningitis. By itself it tells us nothing as to distinguishing any insane condition from cerebral tumour, cerebral hæmorrhage, softening, embolism, etc. But it is useful to a certain extent with reference to treatment. It tells us that, in the majority of cases of mental alienation, our therapeutics should be of a stimulant and tonic character. Our aim should have a tendency to soothe and support, rather than to repress and restrain.

Radcliffe Infirmary, Oxford.—At a meeting of the Governors of the institution, held on Wednesday, it was resolved, on the motion of the Dean of Christ Church, to admit to the fever ward of the infirmary members of the University whose removal thereto might be desirable. The resolution was opposed by the Rev. J. Rigaud, of Magdalen College, who contended that the infirmary was never intended for the reception of such patients, it being founded for the benefit of the poor; but on a division the numbers were found to be equal, and the chairman gave his vote in favour of the Dean's motion.

Vaccination in France.—At the recent annual meeting of the delegates of the provincial learned societies, held at the Sorbonne, M. Chassagny, of Lyons, observed that "vaccinal syphilis" and "animal vaccination" had exerted a disastrous effect upon ordinary vaccination and the preservation of the virus. Without expressing any opinion as to the comparative merits of the two modes of vaccination, he stated that a universal complaint had issued from every part of France as to the difficulty of getting the vaccine virus, and of the little security derived from the practice of collecting this on glass. He thinks it is essential to recur to the use of tubes, and describes an improved tube of his own invention, which is easily charged, and vaccinates by merely pressing it on to the child's arm.—*Gaz. des Hôp.*, April 26.

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Medical Times and Gazette.

SATURDAY, MAY 7, 1870.

THE PRESENT POSITION OF THE GOVERNMENT MEDICAL BILL.

The past week has been a very eventful one for the Profession of Medicine in the United Kingdom. The General Medical Council has discussed and accepted in the main a Bill which undoubtedly if it become law will change irretrievably for better or worse, we believe for better, the whole constitution of the Profession of Medicine in this country. Of the examining and licensing bodies, several have applied directly to the Lord President of the Privy Council or to their Lordships' Medical Adviser for the solution of difficulties, or to obtain modifications in the measure. On the whole we believe that the result of these interviews has been satisfactory to those concerned, and consequently that the chances of the Bill becoming law have been greatly improved. The following we believe to be a true summary of the modifications in the Bill which the Government are willing to accept. In the first place, whilst they hold their determination to create a new order of licentiates in Medicine and Surgery, who shall not of necessity be affiliated to any existing institution, it is intended that a clause shall be introduced into the Bill, which shall provide for the maintenance of some moral and Professional standard of conduct amongst Medical men. It appears there may be some difficulties in the way of imposing an oath or declaration on candidates for the new licence; but if this cannot be done, some other mode will be adopted by which a check on immoral and unprofessional practices will be obtained. Next, with regard to the undue power generally believed to be given by the Bill as it at present stands to the Privy Council. It is understood that in the opinion of some legal authorities the phraseology of the Bill does not give the Privy Council the power of originating regulations for the examination and education of the Profession. On the other hand, it is well known that experienced lawyers have expressed an opposite opinion. We believe, however, that the Government are desirous that the point shall be finally set at rest, and that such amendments will be made in the Bill as shall leave it perfectly clear that the power to be vested in the Privy Council is one of confirmation, of giving a veto to any proposal which may be deemed inimical to public interests, and of arbitrating in the case of disagreements between the Medical authorities or between those bodies and the General Medical Council. Any semblance of giving any further powers will be removed. In the third place, the Universities will be allowed to grant degrees in Medicine which will not give the right to practise or, *per se*, the right of registration. It is clear that, however expedient

this alteration may be for special reasons, it is a departure from the general principle of the Bill. It will, therefore, be no doubt necessary to demand from graduates who take degrees on such terms a declaration that they will not engage in practice; and we would again suggest that some precautions be introduced against any infringement of the compact. If this be not done, we fear that a door will be left open for evading the Act, and the sacrifices on the part of many of the Medical authorities which the Bill involves will have been made in vain. Further, the Universities will not be permitted to grant their lowest Medical or Surgical degree to Licentiates without subjecting them to examination. The provisions of the twentieth clause of the Bill will, therefore, be made to apply to the corporations alone. The Universities will not receive any portion of the surplus income, and they will not, therefore, be called on or permitted to grant their inferior degrees to the new Licentiates without those Licentiates being submitted to special tests. It certainly is not desirable that a large proportion of the Medical Profession, who have never passed a university examination or fulfilled a university curriculum, should bear the university stamp. We believe also that the lower degrees granted by the corporations to Licentiates without examination will be registered together with any higher qualifications, but not in the same column with the licence in Medicine and Surgery.

There is one clause about which an alarm is felt in some quarters, and, as it appears to us, with reason. We hope that the Government will be willing to introduce some modification in it, for, as it stands, it seems open to great objection. We refer to clause 30 in the miscellaneous clauses at the end of the Bill. This clause enacts that "any power given by this Act to, and anything authorised or required by this Act to be done by, the Medical authorities of any one part of the United Kingdom, may be exercised and done by a majority of the Medical authorities of such part." Now, this clause seems to us to be a very dangerous one. Take, for instance, the case of England, where there are four Universities and three corporations. The four Universities might agree upon a scheme of examination which would be utterly repudiated by the three corporations, and they would have power to send it up to the Medical Council, where, if the university element were the stronger, it would be accepted. Or, suppose the case of Ireland, where there are three corporations and two Universities, the converse might be the case. In England, for instance, the Apothecaries' Society, representing, as it does, some eight thousand licentiates, would have less influence in the preparation of a scheme than the University of Durham, which, we believe, but rarely confers a degree in Medicine. In Ireland, the Apothecaries' Company, which is in an utterly different legal position from the Apothecaries' Society of England, not exercising its powers of examining under Act of Parliament, would exercise more influence over the scheme of examination than Trinity College, Dublin. In Scotland, again, the Universities would outnumber the corporations. It is clear, therefore, that the clause is open to considerable objection. Besides, it does not seem to us compatible with the power of arbitration which the Bill is confessedly intended to give the Privy Council. Government by majorities renders arbitration unnecessary. To any one body which happened to be in a minority—however it might have right on its side—the clause might do the greatest injustice. Of course, if it be clearly understood that the power of arbitration in the hands of the Privy Council will be exercised in every case of dispute or appeal, irrespective of the views of the majority of the Medical authorities, the objection would be considerably lessened; but it would be satisfactory to see this clearly stated in the clause.

Before this journal is in the hands of our readers the Bill will, in all probability, have been read a second time. The terrible calamity which has fallen on Earl De Grey's family has been the cause of a few days' delay in the matter. After the second reading the Bill will be committed *pro formâ*, and will then be reprinted, with alterations. If our expectations are well founded, in its altered form it will be a measure which ought to secure the active support of the Profession in its totality, as well as that of the various bodies into which Medicine is at present split.

GENERAL MEDICAL COUNCIL.

As our readers learned from our last week's number, the General Medical Council met in Special Session on Thursday, April 28, for the purpose of considering the Medical Acts Amendment Bill which has been introduced into the House of Lords by the Lord President of the Privy Council. The rooms which have been so constantly and courteously placed at their service by the Royal College of Physicians were unfortunately required for the ordinary business of the College, so that that body could not on this occasion act as the host of the Council, and as the Government have not yet seen fit to provide the Council with any local habitation, they might have been placed in a somewhat awkward and not very dignified position had not the Royal College of Surgeons kindly come forward and offered to receive them, though able to house them for only four days. This last circumstance may perhaps have been of benefit, by helping to restrain and concentrate the eloquence of the members of the Council, and so facilitating the completion of the work before them in a moderately short time.

As the Council had not met at the College of Surgeons since 1859 the President on opening the Session might have excusably yielded to a temptation to dilate on the history of the Council since that date, on the many changes in its members, on the Presidents who had ruled and guided its deliberations, and on the good works it had achieved. If the temptation was felt, however, it was judiciously resisted, and the President contented himself with shortly and clearly pointing out the work before the Council, and what seemed to him and the Executive Committee the best and quickest method to adopt for getting through it, and with making an explanation, authorised by the Lord President and the draftsman of the Government Bill, of the powers intended to be conferred by the Bill on the Privy Council, concerning which the Privy Council authorities thought that the Profession had taken up same exaggerated ideas. All this however we need not now dwell on, as we were able to publish last week the greater part of the Council's proceedings on the first day of the Session.

On going into Committee on the Bill the first amendment was moved on clause 3, which enacts that after a certain time, "no person who is not at that date qualified to be registered under the principal Act shall be registered under that Act unless he has, after examination by a Medical examining board appointed under this Act, obtained a licence to practise in Medicine and Surgery under this Act." Mr. Cæsar Hawkins observed that the clause involved a point of vital importance to all the universities and corporations represented in the Council, for by it and subsequent clauses the licence to practise would be given without reference to any examination by the universities and Medical corporations, and a man might become a registered Practitioner without belonging to any Medical body whatever. He thought they must at once consider whether they could agree to allow all licensing powers to be taken from the existing bodies and conferred exclusively on the examining board to be constituted under the Act; and he therefore proposed "That it is desirable that the word 'licence' be omitted from the third clause of the Bill, and that the words 'certificate of competency' be substituted for it." Several members of the Council spoke strongly against the clause, and, indeed, it could hardly be expected from human nature—certainly not from corporate human nature—that a clause so antagonistic to self-interest would be accepted without protest at the least; but we cannot think that the opposition to it was judiciously formulated, for the amendment served

to keep open the possibility, to say the least, of multiple examinations being still required, and to add to the existing examining bodies instead of contracting them. In this way, therefore, the amendment struck at the very principle of the Bill, and it could hardly be expected that Government would accept it. Dr. Parkes, who might well have been supposed to be acquainted with the views of the Government on the subject, suggested that it would be better for the Council to consult with the Lord President or his advisers before committing themselves to a decided opinion upon the point, and he proposed a resolution to that effect. He received some support, but the majority of the Council thought such a course would be "undignified," Dr. Alexander Wood remarking that the duty of the Council was "to protect the interests of the Profession, and not to place its neck under the heel of the Government." These were "prave 'ords," and Mr. Cæsar Hawkins's amendment was carried, as also was an amendment substituting the words "certificates of competency" for the word "licences" in clause 4; but on the morrow Fluellen presented the leek, and the Council ate it. When they met at 1 o'clock—an hour before the usual time—the President proposed, "for reasons which he had satisfied his mind were sufficient reasons," that the first portion of the day's sitting should be in private. The press accordingly retired, and were not readmitted till 2 o'clock, when Dr. Parkes said that having had an opportunity of seeing Mr. Simon, he had asked him to ascertain from Lord De Grey his opinion upon the importance of the principle of clause 3, and that he had just received a letter authorising him to state that Lord De Grey considered the principle of that clause and clause 13 quite fundamental, and would not consent to any alteration of it. On this Dr. Storrar moved "that the Council accept the principle of clauses 3 and 13 of the proposed Bill," this being, as we understand it, that the *testamur* of the examining board appointed under the Act shall entitle a man to a licence to practice in Medicine and Surgery, and to registration. The debate on Dr. Storrar's resolution was, naturally, somewhat stormy, strong things being said about inconsistency, humiliation, degradation, and so on. Sir Dominic Corrigan came out in great force, and enjoyed himself hugely, we should think. He was fierce in denunciation of the private sitting of the Council—we suspect that he had not been able to be present at it—was hot about the "humiliating" proceeding proposed, was ready apparently to contradict anybody and everybody, to defy the Government, and especially Mr. Simon as "a man who says he speaks for the Government," and who "was to frighten them, and make them bend their necks in abject humiliation," orated against tyranny, and a cowardly yielding to pressure, and declared that the best thing that could possibly happen would be that the Bill should not pass either this session or the next, for a worse Bill there could not possibly be.

Mr. Cæsar Hawkins supported the resolution on the ground that the Bill would do so much good that, if Government made it a *sine quâ non* that licences should be given to those who pass the new examining boards, "he would be quite willing to let his resolution of yesterday drop, and allow the Bill to pass with that in it which, although he did not think it desirable, sooner than lose the Bill altogether, he would consent to have included in it."

Dr. Christison, in reply to Sir D. Corrigan's strictures on the private sitting of the Council, observed that "it was in the power of every deliberative body to retire within itself for private consultation with reference either to its course of procedure or for the purpose of deliberation upon the resolutions which it had passed, in order that members might freely express their opinions in the first instance and put matters into a proper shape. That was what the Council had done, and it was a course pursued by every deliberative body, from the judges of the land downwards." He also said that he, amongst other members, had feared that great damage would be done by clauses 3 and 13 to the corporations and universities, but that fear had been removed. "He could now see how, with the consent of the Government, this Council could fill up what is called a scheme, and perfectly well adapt that scheme so as to secure the interests of the corporations and universities." Dr. Parkes, in seconding Dr. Storrar's resolution, remarked that the real question was whether or not the Council considered the acceptance of the Bill with those clauses to be better than throwing the whole subject into chaos. He hoped that the Council would vote for the resolution in the full conviction, not only that it was the best course, but that it was, in point of fact, the only practicable course open to it.

Eventually the motion was put to the vote and carried by a large majority. This we regard as a fortunate result of the debate; as we have remarked elsewhere more than once, we believe that the Bill can be made an exceedingly good Bill, and that almost the worst thing that could happen would be its rejection, and consequently the indefinite postponement of any Medical Acts Amendment Bill at all. But it is certainly to be regretted that the Council did not on the first day of their session accede to Dr. Parkes's proposition that they should consult with Lord De Grey or his adviser before committing themselves to any very important amendment; by so doing they would have saved much very valuable time, and would have been spared all these charges of inconsistency, humiliation, and the like; but, to draw upon what we learnt from that dear old plague the Eton Latin grammar, *nemo mortalium omnibus horis sapit*.

Dr. Bennett then proposed—"That it is desirable, when considering the formation and scope of the schemes contemplated by the Bill, that due care should be taken, whilst maintaining the principle of clauses 3 and 13, that in granting the licence to those who shall have passed the new conjoint board, provision should be made for securing, as far as possible, the co-operation of the Medical authorities." The object of the resolution is to afford "an opportunity of so arranging matters that those who pass this ultimate board and receive the requisite licence to appear on the register, shall be affiliated with one or other of the existing Medical authorities, and their relation to the Profession will be in that way maintained." Dr. Christison seconded the resolution, and, after much discussion, and a very close division on an amendment of Dr. Humphry's having much the same object, it was carried. Lord De Grey's attention is to be drawn to the resolution; and if the object of affiliating the new licentiates to some of the existing Medical authorities can be worked out, it will, we think, be a good result. If not, the resolution will, at any rate, probably be harmless. During the discussion some members went back again to the previous subject of debate. Dr. Alexander Wood made some amusing remarks on the influences acting on the Council—"that there was a Government normal school already in existence; that it met in the evening after the Council rose; that certain members were not privileged to partake of the instruction which it afforded; but that there were certain good and obedient boys who went there, and were educated up to the proper point, and who then came back and attempted to indoctrinate the Council." Dr. Andrew Wood took the opportunity of denying that he felt in any degree humiliated by having withdrawn on Friday from a position he had taken up on Thursday. "It was better to bend before the blast than to break; and if the question were put, 'Will you have the Government Bill or no Bill at all, and allow the matter to remain *in nubibus?*' he, for one, would prefer the Bill as it stood." It was in the experience of every man that individual opinions had to be given up. He (Dr. Andrew Wood) had departed from positions which he had held twenty years ago; nor could he see anything discreditable or humiliating in it. He was also pleased to defend Lord De Grey and Mr. Simon. Dr. Acland also said a good word for Mr. Simon, and, moreover, was kind enough to give an encouraging and

approving pat on the back to the corporations. "After the most anxious consideration for years past, he retained the opinion that upon the whole the existing Medical and Surgical Corporations of the country were an advantage to it," and then coming to consider especially the College which was now giving the Council hospitality he warmed into eloquence. "A College which had John Hunter, which had educated Richard Owen" (meaning, we suppose, "by the help of whose museum Owen had educated himself and the College")—"which had ever been the home of Medical science in the kingdom—an institution which was animated by the scientific spirit of Brodie and other great ones who had been its presidents, deserved to be maintained; and as long as he (Dr. Acland) had the slightest voice in Medical affairs, in or out of the Council—in the face of whatever might come, he would do his best to maintain that institution and others of a kindred nature." All this was very true no doubt, but we cannot help thinking that it did not accelerate business.

Dr. Parkes then moved a resolution for the appointment of a deputation to confer with the authorities of the Privy Council on the clauses of the Bill in which the action of the Privy Council is stated, with a view of removing ambiguity, and of defining the action of the Privy Council. This was seconded by Dr. Andrew Wood, was carried with but little discussion and no opposition, and the President, Mr. Hawkins, and Drs. Christison, Apjohn, and Parkes were nominated to form the deputation.

The rest of the Friday's sitting was chiefly spent in passing a resolution that it be an instruction to the deputation to lay before the Lord President, for his consideration, certain clauses proposed by Mr. Cæsar Hawkins as amendments of clauses 5, 6, and 7 of the Bill. These amendments, which will be found in our report of the meetings of the Council, were for the purpose of more accurately defining and limiting the powers of the Privy Council. A long discussion took place on a part of clause 7—viz., as to whether the number of dissentient members of the Medical Council who should have liberty to appeal to the Privy Council should be confined to three or more, or to six or more members, but it was finally resolved to recommend that the words "three or more" in the Bill should be altered to "six or more," and we may here add that the Lord President, in his interview with the deputation, agreed to accept the amendment. Clauses 8 and 9 were then read, and approved of.

On Saturday, April 30, Dr. Alexander Wood moved, in connexion with clause 10, and it was agreed to, that it be an additional instruction to the deputation appointed to wait on the Lord President to bring under his notice the importance of giving power to the General Medical Council under the Bill to frame regulations to provide that every person before entering on his Professional studies have sufficient general knowledge, and that power should be given to publish from time to time a register of Medical students, should such publication appear desirable to the General Medical Council. It will be seen on reference to our report that various amendments to clause 10 were proposed, but none of them were carried, and the clause was left as it stands in the Government Bill.

On clause 11 being read considerable discussion, prolonged into the Monday's sitting, took place on the powers conferred by the clause on the Privy Council, and it was finally determined to recommend that in the first part of the clause, which enacts that—"The Privy Council shall cause notice of any proposed examination rules to be sent," etc., the words "General Medical Council" should be substituted for the words "Privy Council," and that some other amendments should be made agreeing with the amendments recommended in clause 7. In clause 15 only a verbal alteration was recommended to make it clear that the examination prior to which the registration fee should be deposited shall be "the final examination before registration under the Act."

When clause 16, concerning the entry of higher titles in the register, was read, the Council resolved—"That in the opinion of this Council it is inexpedient to call upon the Council to decide which are higher and which are lower titles, and that in column 3 of the proposed new register all Medical or Surgical titles given by bodies under royal charter should be inserted on due proof being given of possession of the same."

On considering clause 18, the Council passed a resolution that the clause "should leave it to the option of a candidate for a licence to pass the examination required for it, either before or after graduation in Medicine or Surgery at a university."

The Council sat till 7 o'clock on this (the fourth) day of the session, but did not get further in the consideration of the Bill than to clause 19; and as the College of Surgeons could not any longer offer them house-room, they then resolved to meet next day (Tuesday) at 4 o'clock, at their own Registration Offices in Soho-square.

The change in the hour of meeting, from 2 to 4 o'clock, was rendered necessary by the Lord President having appointed the earlier hour as the time for receiving the deputation from the Council; and some time at the commencement of the day's sitting was taken up in hearing from the deputation what alterations in the Bill the Government had shown any inclination to accept. These, our readers will see on reference to our report of the proceedings of the Council, are much what we have suggested in a former number of the journal, and, as we have spoken of them in another part of our present number, we need not repeat them here.

After receiving from the President and other members of the deputation an account of their interview with the Lord President the Council resumed the consideration of the Government Bill at clause 19, which was read and approved. In reference to clause 20, concerning the conferring of minor titles by Medical authorities, it was resolved that "it is not expedient that university degrees should be conferred on Licentiates without additional and higher examinations than those required for Licentiates, and amendments were recommended limiting the application of paragraph 2 of the clause to any Medical authority to the time during which such authority should be in receipt of any part of the surplus fund, and subjecting any persons taking any of the minor Medical titles under the clause to the by-laws of the Medical authorities conferring such titles.

With reference to clause 22, two important resolutions were carried—viz., "That it is desirable that the consent of the General Medical Council shall not be deemed necessary towards the prosecution of any person contravening the clause;" and "that it is not expedient that the duty of proceeding" against offenders against the clause "should be assigned to the Medical Council or any branch Council."

On Wednesday, the 4th, the Council met at noon, and sat till the business of the session was completed; but we have not space this week to give here more than a mere outline of the last day's proceedings. The Council passed without any alteration clause 30, which certainly is open to very strong objections, and on which we have commented elsewhere in our present number. On considering the schedules of the Bill it was resolved "that it be suggested to the Lord President that in the third schedule the heading of the last column should be 'additional titles,' instead of 'higher titles,' and that column two, and its heading—viz., 'Part of the United Kingdom in which Examined'—should be omitted." It was also agreed to direct the Lord President's attention to the fourth schedule, "by which many important duties and privileges are affected, in regard to the Medical authorities in England, without any reference to the laws affecting the Medical authorities in Scotland and Ireland."

The Council then resumed, and the proceedings of the committee of the whole Council were brought up and agreed to. After that, much of the business was merely formal; but two or three very important resolutions were carried. Dr. Parkes

and Dr. Humphry proposed—"That this Council, having carefully considered the principles of the Amended Medical Bill introduced by Lord De Grey, and having learned the readiness of Lord De Grey to adopt suggestions from the Council on some of its provisions, desire now to express their general approval of the Bill, and their earnest hope that it may become law during the present Session." An amendment was proposed to this but lost, and the motion was carried by a large majority, several members, however, on this, as on other occasions, declining to vote. A well deserved vote of thanks was "respectfully offered to Lord De Grey for the great kindness and courtesy with which he has attended to all the representations of the Council, and for the great trouble he has taken in preparing the Amended Medical Bill."

The Council then recorded their willingness "to accept any extension of the powers conferred by section 29 of the Medical Act (1855) as the Government may see fit to grant."

The only other act of the day which we can now note was the rejection, by a very narrow majority, of the following resolution moved by Dr. Parkes and seconded by Dr. Andrew Wood, "That it is expedient that a clause should be introduced into the Amended Medical Act, giving the Medical authorities power to elect their representatives on the Medical Council on an enlarged basis; and that the clause shall be so worded as to allow the modes of election to be hereafter settled between each Medical authority, and those registered Medical Practitioners who have received from it any diploma or degree higher than the minimum diploma, granted after passing the examination of one of the conjoint boards." This and other matters we shall comment on next week.

THE SANITARY COMMISSION.

We wonder sometimes which is the more bored—the members of a parliamentary committee or special commission, or the unfortunate being who has to read and weigh for the edification of the outside public the conflicting and confusing evidence brought out before them, and printed *verbatim* in a report. Question and answer, question and answer in endless iteration. We used to think, in our young days, that the Assembly's Catechism was the most dreadful thing of this kind that it was possible to conceive; but, alas! we were then ignorant of the existence of Blue-books. They were surely invented as a penance for the sins of journalists. Now, for instance, in the first report of the Sanitary Commission, which extends only to the evidence taken up to the beginning of August last, there are no less than 8496 separate questions and replies upon the various matters which the Commission have to consider, in which these matters are continually shuffled in such a manner that it becomes an affair of the greatest labour to arrange the evidence into anything like a connected and coherent account. Yet some one will have to do this, and, after making allowance for evidence given from imperfect knowledge, for individual prejudices, for narrowness of view, and even sometimes for personal irritation, to present to Parliament a connected and practicable scheme for consolidating and amending the sanitary administration of this great country. Even the *viva voce* evidence reported, and to be reported hereafter, is not all that will have to be considered; for the Commission have issued long lists of printed queries for as full reply as possible to chairmen and clerks of local boards, to officers of local authorities, to Medical officers of health, and so on. The strangest thing of all, to our mind, is that, up to the present time, so far as we know, only one or two gentlemen who have been engaged as Medical officers of health in the metropolis have, in any way, been communicated with, or been called to give evidence before the Commission. And yet it strikes us very forcibly that most valuable information and most practical suggestions might be obtained from these men, who have been occupied for some fifteen years in endeavouring to make a practical use of our general sanitary statute. So far, however, as the published evidence goes, there are certain points which have come out very prominently. To some of these we will refer.

Whenever metropolitan health officers have complained of the inefficiency of the general sanitary statutes, they have been told that they were not framed for the metropolis so much as for rural districts. Yet the general tenor of the evidence is that in the rural districts they have been less used than anywhere else; that it is in the rural districts that their inefficiency has been most prominently manifest. How is this? Why, there are several reasons for it. One of them is that from the multiplicity of enactments no one is clear as to the authority whose duty it is to protect the public from the inevitable evils of an unwholesome condition of affairs. Different statutes constitute different authorities, and, according to the statute consulted, so will it appear the duty of one or of another to interfere. Hence, in a season of panic, two or more local authorities may be going over the same ground giving conflicting orders, or nothing may be done at all at any time because all alike are afraid to undertake an undefined responsibility. Thus it has happened at Epping. Prior to the passing of the Sanitary Acts, 1866 and 1868, there was a nuisance committee which sat at the union house with two inspectors of nuisances; but after the passing of the Act the clerk of the committee advised them that they had no further powers, and hence last year there was no local authority at all. One of the district Medical officers, Mr. Clegg, appealed to the Home Secretary, and at last, with great pains, got together a committee under the Sewage Utilisation Act, but they refused to do anything, and, as soon as the Home Secretary attempted to compel them to act, under the 49th section of the Sanitary Act, 1866, resigned in a body. Yet Epping is notorious for high mortality and for typhoid fever, the result of want of drainage and good water-supply. This is only a specimen of what is happening constantly in rural districts. Another reason is the difficulty there has been found in getting different parishes to unite in any one scheme for the sanitary amendment of all, as, for example, in a common scheme for drainage. Thus it was found in the Cray Valley that in order to bring into operation a system of drainage most necessary for all the district, no less than eight different parishes had to be combined, and if one held out against it, even the necessary outfall could not be obtained; and so as the ratepayers in the several parishes would not exercise their powers in unison, the scheme of application of the existent general statutes fell to the ground. But it may be replied, Surely the law has provided some sort of remedy against this state of things? Oh yes, of course, there is the 49th section of the Sanitary Act of 1866, which empowers the Home Secretary to act where local authorities refuse to exercise their powers. Exactly, and what does this sort of interference come to? Let us look at a case which occurred at East Bridgford in the Bingham Union. There was a good deal of fever and resultant distress in the place, and as the board of guardians would take no steps to prevent its spreading, or even to appoint a sanitary inspector, it continued to spread. A ratepayer complained to the Home Secretary, who referred the memorial to the guardians, who, apparently being determined not to give further ground for complaint on the score of inspection, advertised for an inspector to exercise his duties over forty-two parishes at the salary of £10 per annum! This gentleman, on remonstrating with the board for thus evading the law, was curtly told that they were capable of conducting their business without his assistance. This is Mr. Beaumont's account of the affair. The Secretary of State cannot control salaries, and here local boards have the whip hand of all central authorities, and can frustrate the best intentions of the Legislature. In Tunbridge we are told by the vestry clerk that the salary of the inspector is £20 per annum. And as to the Home Secretary's power to do works

when the local authority fails, we have in the report the strongest condemnation possible from Mr. Rawlinson, whose clear-headedness will be admitted on all hands. What he says is this, and it has great force in it:—

"When the Secretary of State has found a fit and proper person (to devise the necessary works) and such engineer has estimated the works, though he may be the ablest man that ever devised works, the weather, or the subsoil, or something or other connected with those works, may make them cost several times as much as the estimate; and then how the Secretary of State, through his appointed agent, is to levy an extravagant rate over a number of years upon an unwilling community without very great torment and trouble, I cannot imagine. But if such powers are delegated to a local representative body, answerable locally to the ratepayers, and the Secretary of State has merely the legislative power of putting the machinery in motion, you may give him the power of fining the district if it will not carry out proper works, fining the ratepayers continuously, week by week, until some local authority executes the works."

A good suggestion, which he is not the only one that has made to the Commission. "How not to do it" will then be the problem for local authorities to solve. But the first thing manifestly for Parliament to do is to consolidate the sanitary statutes, and a very powerful argument in favour of the need there is for speedy action in this direction is the fact of the frequent applications still made to Parliament for local Acts. Thus, there was an application for such an Act in the case of the Cray Valley referred to above, and also for the town of Oldham. The town clerk of Oldham being asked why they applied for a local Act, replied that the reason was the extreme difficulty and complication in working under so many different Acts of Parliament. When the Town Council was sitting, it was very difficult to say whether it was acting at one moment as the local Board of Health, and at another moment as the council acting under the provisions of the Municipal Corporations Act, and under the powers conferred upon it by its charter. But the great difficulty of all was in reconciling the language of a variety of Acts of Parliament with the proceedings that were required to be taken.

The further the labours of the Commission proceed, the more evident becomes the Herculean task which is committed to it for performance, and the more clear it becomes that if the sanitary condition of the country is to be made what it ought to be, it will be needful for Parliament to sweep away with remorseless hand the greater part of the tinkering legislation that it has been indulging in for the last quarter of a century, and to give us in its place a coherent and consistent statute that shall combine local management with due central supervision, and provide that no section of the community shall be endangered or annoyed by the lawless acts, the apathy, or the selfishness of individuals or corporations. For this purpose the law should not be merely remedial, but truly preventive. It must provide not only for an accurate registration of deaths, but also for a proper registration of sickness, for the verification of doubtful or suspicious certificates of the cause of death, and for the employment of Medical men properly qualified for their work to direct the means of arresting epidemics and of preventing their extension from one place to another, with power to act in emergency without bringing upon them the wrath of ignorant and selfish parochial magnates, and the pains and penalties resulting therefrom. It ought further to provide for the due prosecution of scientific inquiries, such as arise from time to time in connexion with the judicial proceedings of the coroner's court or of the superior courts, especially in criminal cases. Above all, no trace of a loophole should be permitted by which local administrators shall be enabled to escape from the necessity of performing the duties which the Legislature lays upon them in the efficient manner that the Legislature contemplates. We must see no more "mays" in sanitary statutes. Evasion must be made as nearly as practicable an impossibility, and local authorities must be made to understand that they will be held responsible in pocket for deaths from such diseases as typhoid fever, small-pox, and so on, if it can be shown that these deaths have arisen from a neglect on their part to enforce the sanitary requirements of the law.

THE WEEK.

TOPICS OF THE DAY.

Before receiving the deputation from the General Medical Council on Tuesday last, the Lord President of the Privy Council received deputations from the Royal College of Physicians and the Royal College of Surgeons. The gentlemen who represented the Royal College of Physicians were Sir James Alderson, Dr. Burrows, Dr. F. J. Farre, Dr. Birkett, Dr. Risdon Bennett, and Dr. Pitman. Those representing the Royal College of Surgeons were Mr. Cock, Mr. Solly, Sir William Fergusson, Mr. Hilton, and the Secretary, Mr. Trimmer. These gentlemen were received by Lord De Grey and Mr. Forster. Mr. Simon was also present. On the part of the College of Physicians Dr. Burrows, Dr. Risdon Bennett, and Dr. Pitman were the principal speakers. The points which were chiefly insisted on by these gentlemen were the desirability of affiliating the new licentiates to one of the existing bodies—a subject on which, however, the Government maintains its position unshaken—and the large powers given by the Bill to the Privy Council. The deputation from the Royal College of Surgeons called Lord De Grey's attention to the injustice which might be inflicted by clause 30—the majority clause of the Bill—and also to the necessity of limiting the expenditure of the surplus income from examination fees to the support of the museums, lectures, and libraries maintained by the Medical authorities, and to the danger, as the Bill stands, of the surplus being applied to other purposes. On these points we believe that the answers returned by the Lord President were satisfactory to the deputation, and gave proof of a desire of the Government, as far as the main principles of the Bill will permit, to give due consideration to the suggestions of the Medical authorities.

The controversy upon the female Doctor question has taken possession of the columns of the *Times* newspaper. No less a person than the Regius Professor of Medicine in the University of Oxford has written his opinion upon the question, and has made some suggestions by which he believes the controversy might be amicably closed. The small sect of ladies, however, who are anxious to invade a Profession, which custom, dictated by the good sense of mankind, has appropriated to the male sex, represented by Miss Garrett—a lady for whose talent all must entertain profound respect, however they may differ from her—entirely repudiate the learned professor's proposals—fling back the olive branch, and will have none of it. Dr. Acland suggests that special diplomas be superadded for those women who do not desire to have the same education as men, nor the same general right of practice as men, nor to compete with them in Operative Surgery, or for places in the general Hospitals; but who do desire to have a public recognition that they are fit to practise in the diseases of women and children, or that they have been trained to be nurses and to be superintendents of nurses, Hospitals, and public institutions of all kinds for the sex. Miss Garrett meets Dr. Acland's proposal with unqualified rejection. She will not admit that nurses and superintendents of Hospitals are at all in the same category with the female Physician. She argues quite rightly that to treat the diseases of women and children successfully requires the same knowledge of anatomy and physiology as does the Medical and Surgical treatment of men. And she stoutly objects to anything like a separate diploma, as it would be entirely without *prestige* either amongst members of the Profession or the public. With regard to the latter assertion, we might remind Miss Garrett that the *prestige* of a Medical Practitioner depends but little on the diploma he may possess, and about which his patients are probably as igno-

rant as the rest of the public. A professional person's position in society depends mainly upon himself, and but little upon the accident of his diploma or licence. But we prefer reminding our fair friends that if entrance to the Profession of Medicine entails attendance on Medical classes in company with men, studying anatomy and physiology with them, and sitting with them in the same class- and examination-rooms, if *prestige* of one kind be gained, *prestige* of another kind is likely to be lost. We mean that such a course cannot be pursued without endangering the highest *prestige* which a woman can possess—her self-respect and her modesty. This, at all events in the opinion of the greater part of mankind, is too high a price to pay for *prestige* of any other kind.

Dr. Langdon Down and Mr. Walter Rivington, M.S., have been appointed Physician and Surgeon, with the care of in-patients, at the London Hospital. Probably no vacancy will be announced on the Surgical side, as the staff is already large. Probably Dr. Bathurst Woodman will be a candidate for the vacant Physiciancy.

Dr. Hughlings-Jackson and Dr. Oppert are candidates for the Physiciancy to the Seamen's Hospital (late *Dreadnought*) at Greenwich.

At a recent meeting of the gentlemen who take an interest in the extension of the Contagious Diseases Acts, we notice that the chairman, Mr. Quain, stated that the committee had come to the conclusion not to recommend any further extension of the Acts until the public had become better informed on the subject. The present state of opinion is certainly not favourable to such extension. Longer experience must establish the value of existing legislation on the subject before Parliament will interfere to extend measures which seem to be very repugnant to the majority of the public. We see from the report of the meeting that Mr. Ernest Hart has returned to London.

A meeting of the Medical Profession is advertised to be held at the Freemasons' Tavern on Saturday, May 7, at 3 p.m. The meeting is convened by the Birmingham Medical Reform Union, and it is called together to discuss the new Bill of the Lord President, and to agitate for the representation of the Profession in the General Medical Council. The finances of this association, however, do not seem to be flourishing, as we notice that the circulation of their begging letters is becoming a matter of almost weekly occurrence.

SIR THOMAS WATSON.

We are glad to hear that Sir Thomas Watson continues to make satisfactory progress towards recovery.

DR. DRUITT.

The Professional and other friends of Dr. Druitt will be glad to hear that he is now fast recovering from an attack of fever which he unfortunately contracted in the south of Europe, whither he had gone for a few weeks' change of air. Absence for some little time longer from London and Professional life, however, will probably be necessary to perfect his recovery.

ST. ANDREW'S MEDICAL GRADUATES ASSOCIATION.

A meeting of the Council of this Association was held on Friday the 29th ult., to consider the provisions of the Government Medical Bill in so far as they affected the University of St. Andrew's. After a prolonged discussion the following resolution was unanimously adopted:—

"That this Council is in favour of the proposed establishment of an examining board in each division of the United Kingdom for the licence to practice Medicine and Surgery. But it protests against the power given in clause 20, by which degrees may be granted by a university without special examination."

ARMY MEDICAL DEPARTMENT.

We observe in our advertising columns that the annual dinner of the officers of the Army, Navy, and Indian Medical Services is announced as about to take place on Friday, June 3, in Willis's Rooms, St. James's-street. The proposal of combining the three branches of the public Medical service on such an occasion was first made at the annual dinner of the Army and Indian Medical Departments; the idea is a good one, and we hope the members of the Naval Medical Service may be numerously represented.

THE CONTAGIOUS DISEASES ACT.

Dr. Lyon Playfair, we are informed, purposes to move the rejection of Mr. Fowler's Bill for the repeal of the Contagious Diseases Act of 1866 as at present in force in some of our naval and military stations. Whatever doubts and difficulties—and they were many and serious—may have been in the way of the extension of the Act to the civil population, there can be no doubt whatever that, so far as it has been tried at military and naval stations it has had a beneficial effect on the health of the troops, as well as of the women to whom it has been applied, and we should certainly regret as a retrograde step and a decided error the discontinuance of the Act in the places in which it has now been in force for a period too limited as yet to deprive it of its merely experimental nature. For so far the experiment promises a satisfactory result, which may or may not be confirmed by the more extended trial to which we trust the Government will be enabled to submit it, by the decision on the approaching debate on Mr. Fowler's Bill.

BUTTERMILK FOR BABIES.

The very able paper on the value of buttermilk in the management of delicate children by Dr. Ballot, of Rotterdam, which we recently published has proved already of great practical use to some of our Professional friends. Unlikely as it would at first sight appear buttermilk does agree with some weakly children to whom fresh cow's milk acts as a not very slow poison. An English Physician now travelling on the Continent writes us that in the case of a sickly baby which he has had the opportunity of watching the buttermilk has worked wonders. We recommend our readers to study Dr. Ballot's paper, and thank him for what we believe to be a very valuable suggestion.

THE NIGHTINGALE FUND.

In the report of this Fund for last year it is stated that at the close of the year preceding, eighteen probationers were in the training school at St. Thomas's Hospital. Eighteen new probationers were admitted during last year, making altogether with those previously in residence thirty-six on the books. Of these one was dismissed, six were found unsuited for the work, and four were allowed to resign after various terms of probation varying from three weeks to eleven months. Sixteen have been recommended to appointments, and the remaining nine had still to complete their course of training at the close of the year, leaving sixteen vacancies. The greater part of the vacancies have since been filled up. Mrs. Deeble, who was admitted a probationer in Nov., 1868, has been appointed superintendent of nurses at Victoria Hospital; and Miss Torrance, admitted June, 1868, has been appointed Matron of the New Workhouse at Highgate. The receipts for the year in gross amounted to £2572 11s. 7d., and the expenditure less by a balance in hand of £1341 11s. 7d.

MALIGNANCY AND CANCER.

At the Pathological Society on Tuesday evening, the remarks made by Dr. Crisp and Mr. Arnott touched upon one of those inaccuracies of expression which tend to confuse men's minds.

Two terms are not infrequently employed as synonymous which are not really so; these are *malignant disease* and *cancer*. Now cancer, as well defined by Mr. Arnott, is a definite morbid growth possessed of certain qualities, among which rapid growth, tendency to invade surrounding textures, to recur on removal, and to attack distant organs, as well as lethal effects, are the most notable. But these qualities are not confined to cancer either hard or soft; they are common to it with other morbid growths and constitute *malignancy*. Cancer, then, is a distinct pathological lesion—the most malignant of all, no doubt, and, to a certain extent, the type of malignant disease; but malignancy is a *quality* characteristic of cancer, epithelioma, and other morbid growths, not an entity.

THE LONDON HOSPITAL DINNER.

The funds of the London Hospital being in a somewhat unsatisfactory position, it was resolved that a special appeal should be made on behalf of the charity; and, in accordance with this resolution, a dinner was held at the London Tavern on Wednesday, the 4th inst. The President of the Hospital, H.R.H. the Duke of Cambridge, took the chair, and was well supported by the influential friends of the charity. The dinner, which was served *à la Russe*, a much more convenient fashion than that ordinarily adopted, gave great satisfaction, and was a marked contrast to the last Hospital festival, which was not so memorable for excellence. Contributions to the amount of over £12,500 were announced, of which Mr. Hanbury and Mr. G. H. Currie working together had collected £3924. The Hebrew community contributed £1787, and Mr. T. Fowell Buxton, with his family, £1587. Mr. O. E. Coope himself gave £500. The aid is exceedingly well timed. The demands on the Hospital are so numerous and so urgent that the committee have been nearly at their wits' end to provide for them. It should not be forgotten that this is the only Hospital available for the enormous poor population of East London, both north and south of the river.

MEDICAL SOCIETY OF LONDON.

On Monday evening last there was a large gathering of the Fellows of the Society at the Hanover-square Rooms at a *conversazione*, Mr. Gay, President, in the chair. Mr. Francis Mason delivered the oration. The oration related chiefly to the Surgical history of the Society since its institution in 1773; but many other remarkable and even amusing extracts were incidentally mentioned. It appears from the records that the earlier years of the Society were devoted almost exclusively to Medical matters, and it has only been within the last thirty years that much progress has been made in the direction of Surgery. Mr. Mason spoke of excision of the joints as being amongst the most important steps of advance in recent years, as denoting the kind of progress the Society had made, and the character of the contributions that had been received. Several quaint illustrations of treatment were given, amongst them the taking lizards fresh in cancerous and other diseases, in 1787, and the case of a fasting "girl who, in 1790, lived without eating or drinking for two years;" with another girl who, in 1807, was called the "sleeping beauty," who frequently remained in a state of somnolence for nine days. Mr. Mason gave brief particulars of some remarkable instances of recovery after severe injuries to the head, and gave an amusing account of the heroic treatment adopted by the enlightened Physician of the last century. A number of examples in which foreign bodies had been swallowed were alluded to; some in which recovery took place whilst death occurred in others, the post-mortem in one case revealing "a large size blue earthenware egg cup, situate at the ileo-cæcal valve." An interesting account of the death wound of Nelson was also recorded. Social questions had also been discussed; amongst them papers had been contributed on "Stimulants," and on the use and abuse of tea and coffee, reference being made to a more recent discussion which will be in the recollection of many gentlemen present. The following is the list of objects exhibited:—Stereoscopic slides of morbid specimens, by Dr. Hun, of Albany, New York, by Dr. Morell Mackenzie; a new obstetric bag, made by Messrs. Arnold (Dr. Greenhalgh); spectroscope, by Dr. Thudichum; carbolic acid vaporiser, by Messrs. Savory and Moore; various specimens and objects, by Drs. Richardson, Dempsey, and Mr. Streeter; microscopes, by Mr. T. Ross, and Messrs. R. and J. Beck; Surgical instruments, by Matthews Brothers; scientific instruments, by Messrs. Horne and Thornthwaite; some admirable photographs of Medical gentlemen, by Messrs. Wilson and Beadell; improved marqueteric flooring, etc., by Messrs. Wright and Mansfield. Tea and coffee were served after the oration.

FROM ABROAD.—RESUMPTION OF PROFESSOR TARDIEU'S LECTURE.—THE EPIDEMIC OF SMALL-POX AT PARIS.

Professor Tardieu received some compensation for the brutal outrages to which he had been subjected in the theatre of the Faculty at the hands of a tribunal far better able to judge of his merits and of his conduct at the recent state trial. At the annual meeting of the General Medical Association of France, of which he is President, he was received by a crowded audience by applause which, in its vehemence, was almost tumultuous, preventing the proceedings for a while going on. The meeting seemed determined to make a hearty demonstration in his favour, and many of the members had come from the country for this express purpose. Again, when at the end of M. Amedée Latour's eloquent address upon the prospects of the Society, he appealed to the members present, as to a Professional grand jury, to vindicate the rights of liberty of conscience and the sanctity of an oath, "which none had the right to infringe, since their sacred character should be secured equally against the tyranny of numbers and the despotism of a single person," but which had been grievously violated in the person of their President by a minority of students maddened by political passion, the meeting was fairly carried away by the emotion which animated the speaker, and which prevented its object from uttering other than a few disjointed words.

Happily, the students have seen their error, or those who instigated them to violence have been excluded from the theatre. In fact, the proper auditors, the fourth year students, on the resumption of the lectures last Monday were alone admitted, these amounting to about 300 in number. On the Professor appearing, surrounded by a large party of friends, he was greeted with loud acclamations on every side, only some dozen protesting first by cries and then by quitting the theatre. The lectures were then resumed at the point where they had arrived at the time of their interruption, and it is fully believed that there is an end of this disgraceful riot.

In M. Besnier'a report on the diseases prevailing in Paris during the first quarter of the present year, he gives an interesting account of the course of the epidemic of small-pox still raging in that city. It commenced in November, 1869, when diseases from this cause exhibited a sudden increase. During the winter it underwent a considerable exacerbation, proceeding in this respect in conformity with the usual course of small-pox. On examining the mortality returns from variola during the last ten years, M. Besnier states he finds the minimum is always in the months of June, July, and August, when, increasing somewhat in September, it pursues a regularly ascending course during winter, to decline again in the spring, and fall to the minimum in summer. If this rule is to hold good the present epidemic must soon exhibit a decrease. Not only is the disease most frequent in the winter, but its proportionate fatality is greatest at that season. The entire number of deaths from variola during the first quarter of 1870 was 2266—viz., 681 in January, 747 in February, and 838 in March. In ordinary times small-pox follows pretty much the course of other diseases in its relative prevalence in the

different arrondissements, but during epidemics, the differences in this respect, although still observable, are much less marked. The greatest number of cases occur between the ages of twenty and thirty, males being more frequently its subjects than females. The mortality which ensues does not follow this rule in the present epidemic any more than in former epidemics Thus, for the months of January and February the mortality of adult males was 20·16 per cent., and of females 21·87 per cent.; and of males under sixteen it was 34·47 per cent.; and for females of the same age 36·66 per cent.—not counting the children at the Foundling Hospital, where it was 40 per cent. M. Vacher has established the great fatality of variola during the first year of life—viz., ten times greater than at the period between twenty and thirty; and, moreover, it is even very considerable during the first three months, contrary to an opinion generally entertained, and which has given rise to a false security in relation to early vaccinations. Observation during the present epidemic shows even more powerfully than on former occasions, the important mitigating power exerted by vaccination in the numerous cases in which small-pox has succeeded it. The report also details various examples of the slighter protection afforded by vaccination when only performed during the imminence of variola. With respect to the treatment of variola, the only new point of interest is the successful employment of phenic acid in large doses by M. Chauffard. M. Besnier has, since this means has been announced, given this substance to all his numerous cases of variola in quantities varying from 25 centigrammes to 1¼ gramme per diem; and the results have seemed to him decided enough to induce him to still continue the treatment by giving it at an early stage of the disease; and in several cases which appeared as bad as possible, a successful result was obtained. Consecutive abscesses were also observed to be much less common. M. Moissenet has found great advantage to accrue from adding a litre of Labarraque's Liquid to each of the baths he always employs. The patients derive great comfort from the baths, and the horrible odour which accompanies the suppuration disappears.

One of the most startling statements in reference to "animal vaccination" was made by its great promoter, M. Depaul, whose intemperate and hasty approbation of it has had much to do with its indiscriminate adoption which has led to such disastrous results. M. Vernois had been detailing to the Académie de Médecine the unsatisfactory results obtained by his procedure at the Lyceums and Prisons of the Department of the Seine, and in answer to an observation by M. Bouley that the want of success was probably due to the manner in which the vaccinations had been performed, he replied that in fact they had all been performed by M. Lanoix, the introducer of the practice. Hereupon M. Depaul arose and declared that every one knew that M. Lanoix (whose praises he at one time was never tired of repeating) was the Practitioner who of all others performed animal vaccination in the worst manner. It has been well observed that this heifer vaccination with all its difficulties and niceties of application ill contrasts with the simplicity of the Jennerian which it has temporarily and disastrously displaced in Paris.

The last returns shows small-pox still to be on the increase. There were were 166 deaths from it in a general mortality of 1263 for the week ending April 30.

PARLIAMENTARY—MEDICAL ACT (1858) AMENDMENT BILL—POOR RELIEF METROPOLIS BILL—MEDICAL EDUCATION OF WOMEN.

In the House of Lords on Friday, April 29, the Marquis of Clanricarde gave notice that, on the motion for the second reading of this Bill, which stood for Monday, he would move that it be postponed till May 19, and should also present a petition from the College of Physicians in Ireland against it.

The Duke of Richmond had intended to give a similar notice in the interests of the Scotch Universities, which viewed with great alarm the manner in which the Bill would affect their privileges.

In the House of Commons the Poor Relief (Metropolis) Bil l was considered in committee.

In the House of Lords on Monday, May 2, the Earl of Kimberley presented a petition from the Irish Apothecaries' Company, in favour of the Bill relating to the qualification of Practitioners in Medicine and Surgery.

Lord Houghton presented a petition in favour of the admission of women to Medical studies and practice.

On Tuesday the Duke of Argyll presented petitions from Kelsale and Edinburgh, praying for the extension of Medical education to women.

MEETING OF THE GENERAL MEDICAL COUNCIL.

SPECIAL SESSION FOR THE CONSIDERATION OF THE GOVERNMENT MEDICAL ACT (1858) AMENDMENT BILL

At the Royal College of Surgeons, Lincoln's-inn-fields.

First Day (*continued*).—Thursday, April 28.

The Council then proceeded to the consideration of clause 4 —"For the purpose of conducting the said examinations and granting the said licences there shall be established in each part of the United Kingdom—that is to say, England, Scotland, and Ireland respectively—a Medical examining board, by means of a scheme confirmed by the Privy Council in manner provided by this Act."

Mr. Hawkins proposed to substitute for the word "licences" the words "certificates of competency."

Mr. Cooper seconded the motion.

Sir D. Corrigan proposed, as an amendment, to omit the words "and granting the said licences" altogether. That would leave it an open question from what body those licences or certificates of competency should come. There ought to be only one central authority in the State to grant those licences, and the clause as it stood and as altered by Mr. Hawkins would bind the Profession to having three distinct sources from which licences could be obtained. This would perpetuate all the old evils of competition. He proposed to leave the question entirely open.

Dr. Thomson pressed Mr. Hawkins to adopt Sir D. Corrigan's suggestion.

Dr. Humphry reminded the Council that they had already affirmed the principle of having joint examining boards in each of the three kingdoms. (Applause.)

Sir D. Corrigan's amendment was then put to the vote, and lost.

The resolution was carried.

Clause 5.—"The Medical authorities of each part of the United Kingdom may, before the first day of October next, submit to the General Medical Council a scheme for the establishment of the Medical examining board of that part; and the General Medical Council, before the first day of January next, may approve such scheme with or without any alterations made with the consent of the said Medical authorities, and to propose the scheme so approved by them to the Privy Council."

Mr. Hawkins then moved some important amendments upon clauses 5, 6, and 7, which he grouped together; and on the motion of Dr. Andrew Wood, the discussion was reserved till the morrow; on the understanding that Mr. Hawkins should place his amendments upon the programme for the next day; not in the abbreviated form in use in the House of Commons, but printed in full.

Dr. Acland inquired if the President or Dr. Andrew Wood as chairman of the business committee could give members any idea as to the course of business likely to be followed at this session. It had been generally understood that the clauses of the Bill would be got through by Saturday; while, on the other hand, as the House of Lords would go into committee on the Bill on Thursday next, the question was whether it was intended that the Council should sit to watch the Bill. (No, no.)

Sir D. Corrigan said he had made a calculation which led him to the conclusion that at their present rate of progress,

they would get to the end of the Bill in sixty-one days. (Laughter.)

Clause 8.—"A scheme for amending any previous scheme in force under this Act, in any part of the United Kingdom, may from time to time be submitted by the Medical authorities of that part of the United Kingdom to the General Medical Council, and whether so submitted or not may be proposed by the General Medical Council to the Privy Council; and the provisions of this Act respecting, and the confirmation and effect of, an original scheme shall apply in the case of an amending scheme."

Mr. HAWKINS suggested, as a matter of courtesy to the authorities, that words should be inserted to provide for proper notice being given in such cases to them of the intention of the Medical Council to propose any such amendments to the Privy Council. He therefore moved, pursuant to notice, that, after the words "may be proposed," the words "to the Privy Council by the General Medical Council, notice having been given to the Medical authorities," should be inserted.

The motion was carried.

Dr. FLEMING then moved, and Dr. ANDREW WOOD seconded a motion suspending standing orders so as to enable the Council to sit at 1 o'clock instead of 2 to-morrow as well as Saturday.

Sir D. CORRIGAN opposed the motion. He had an engagement for 1 o'clock, and, for his part, if the motion were carried, he must claim exemption. No doubt this was the case with many other members. Besides which four hours' hard work at the Council was quite enough in one day.

The motion, however, on being put to the vote, was carried.

Dr. A. SMITH hoped that those members who were not able to attend until the usual hours would not be deprived of their fees. (Laughter.)

Adjourned to the morrow.

We have been favoured by a member of the Council with a copy of the following petition:—

To the Lords Spiritual and Temporal assembled in Parliament of the United Kingdom of Great Britain and Ireland,

The Humble Petition of the President and Fellows of the King and Queen's College of Physicians in Ireland,

Sheweth,—That a Bill has been brought into your honourable House intituled an Act to amend the law relating to the qualification of Practitioners in Medicine and Surgery, and otherwise to amend the Medical Act of 1858. Ordered to be printed April 8, 1870.

Petitioners humbly pray your honourable House not to proceed further with the said Bill, without full inquiry by a Royal commission, or in such other way as may seem fit, into the present state of the laws affecting the Medical Profession.

Petitioners do not object, but, on the contrary, deem it most desirable that, in addition to the possession of licence or degree from any of the Medical universities or corporations of the United Kingdom, all candidates for registry as Practitioners in Medicine and Surgery, should undergo a State examination before being declared eligible for any public appointments; but they think that this object can be attained in another and better way than proposed in this Bill.

Petitioners object to the proposed Bill on the following grounds:—

This College was founded by two Royal charters; the first granted by Charles II., in 1667; the second by William and Mary, in 1692; and under these Royal charters, has been empowered to grant Fellowships and to create Licentiates in Medicine and Midwifery.

By clauses 3 and 18 of proposed Bill, this ancient chartered right is destroyed, and the College can no longer exercise its power of conferring Fellowship or Licentiateship on any one who has not first passed an examination before one of the examination boards to be appointed under the proposed Bill.

Petitioners submit that this would be a great injustice, and there is this additional objection to the proposed clauses.

The Fellowship and licence in Medicine and Midwifery of this College have been and are sought by persons residing both in and out of the United Kingdom, for the sake of the distinction; and it is submitted, that to take away the power to confer those titles on those not desiring to be registered in the United Kingdom, or who had not previously passed the new examination proposed, is an aggravation of the injustice.

The said Bill proposes not only to take away, as above explained, from the King and Queen's College of Physicians the chartered right which it has exercised for 200 years, of granting the title of Licentiate in Medicine, but it proposes to appropriate the College title of Licentiate, which from this College means Licentiate in Medicine, to a new qualification to be created by the Bill. Suppose the title of Doctor or Bachelor in Medicine and Surgery was to be bestowed on the new qualification, the universities would most justly object to such appropriation of these titles.

Petitioners respectfully submit that if a new qualification is to be created, the time-honoured title of Licentiate in Medicine of this College should not be appropriated to it, but that for a new qualification a new title should be created, which should avoid similarity and the confounding of the two before the public.

Clause 20 enacts that, if this College receive any part of the income derived from fees, it may be made obligatory on it to admit every one who holds the new qualification, and desires to be so admitted to the lowest degree of Membership of the College, with the usual rights and privileges.

The King and Queen's College of Physicians in Ireland has, during its whole existence, not only applied itself to maintaining a good standard of education, but also a high social and moral position for its members; and this course, on the part of the College, has been ever recognised by the public and the Profession as the fulfilment of an important duty on its part; but the clause objected to would force on the College persons who might possess neither moral nor professional position to justify them in obtaining any title associating them with this College.

The clause referred to would, moreover, force this course on the College under pecuniary penalty; for it declares that if the College do not admit all persons who have passed before one of the new examining boards, the College shall not henceforth receive any portion of income derived from fees for examination.

This would be the infliction of a great pecuniary injustice. The College has never received any Government or State aid. Its income, since its foundation, 200 years since, has been derivable from fees paid on Fellowships and licences, and clause 20 would deprive it of any future share of fees, except on its submitting to the objectionable arrangement referred to. Other corporations have received, and continue to receive, State aid. They can afford to bear the injustice attempted to be inflicted on this College. On this College the injustice of this clause is harder still, considering that it has yearly paid for many years into the Treasury, in the form of stamp duties on its Fellowships and licences, continuing still on its Fellowships, large sums of money—an impost to which no other Medical authority in this part of the United Kingdom is subject.

Petitioners beg further to object to those parts of the Bill (*vide* cl. 10 and 21) which would give admission on special terms to examination to holders of foreign degrees, and to those who have even only studied in foreign countries, denying like privileges to holders of Fellowships or licences from this College.

To clause 16 your petitioners entertain very strong objections, for under it the General Medical Council might, at their option, refuse to admit on the register the qualifications or degrees of any one or more of the corporations or colleges, thus affixing the stigma of exclusion or inferiority on them, while the process of redress would be most unsatisfactory. Your petitioners submit that it is for the persons registered, not for the Medical Council, to determine what title or titles they may wish to have inserted, in addition to the single legal one, entitling them to have their names registered, as already in force under the principal Medical Act of 1858.

Your petitioners have many other objections to the principles and details of the Bill on general grounds; but they have purposely here confined their observations to the relation of the Bill to their own College; and they have again to pray that, in a matter of such vital importance to old chartered rights and the public good, your honourable House may be pleased, before proceeding with further progress of the Bill, to take such steps as may be necessary for the issuing of a Royal commission, or for inquiry in any other way into the various matters with which the present Bill purposes to deal. The General Medical Council has now been in action twelve years; from its members, as well as from others, a mass of information might be obtained, that would furnish a safe guide in legislation on so complicated a subject as Medical qualifications.

Your petitioners therefore pray that the present Bill do not pass.

April 25, 1870. J. T. BANKS, President.

SECOND DAY.—FRIDAY, APRIL 29.

Upon the roll being called, and the minutes of the last meeting confirmed, at 1 o'clock,

The PRESIDENT announced that for reasons which had satisfied his mind were sufficient reasons, he had, at the suggestion of certain members of the Council, agreed to move that the first portion of this day's sitting should be private. He would simply put a resolution to that effect, without further discussion, to the vote.

The motion was carried *nem. con.*

The press accordingly withdrew, and was not re-admitted until 3 o'clock, when

Dr. PARKES said: I yesterday moved for the appointment of a committee to confer with the Government in order to ascertain whether or not the principle of clause 3 was to be considered unalterable. I did so because I foresaw that unless that point were decided first, the time of the Council would be wasted in debating upon matters which might not be considered admissible by the Government. That was negatived. But, having had an opportunity yesterday of seeing Mr. Simon, I asked him to ascertain from Lord De Grey what his opinion was upon the matter, and in a letter just received he authorises me to state now that Lord De Grey considers the principle of clauses 3 and 13 as quite fundamental in his Bill, and he cannot consent to any alteration in those special clauses.

Dr. STORRAR: After the communication which has been made by Dr. Parkes, I think we cannot proceed too soon to arrive at a conclusion as to the course we are going to take with regard to the declaration that has been made on behalf of the Lord President of the Council. I therefore shall simply propose the following resolution—"That the Council accept the principle of clauses 3 and 13 of the proposed Bill." They are as follows:—"3. After the date fixed for the commencement of examinations by the first Medical examining board appointed under this Act, no person who is not at that date qualified to be registered under the principal Act shall be registered under that Act unless he has, after examination by a Medical examining board appointed under this Act, obtained a licence to practise in Medicine and Surgery under this Act." "13. Each Medical examining board shall license every person who passes the examination of that board in Medicine and Surgery, and not any other person to practise in Medicine and Surgery; and the person so licensed shall be called a licentiate in Medicine and Surgery, and shall be entitled to be registered under the principal Act." Any words addressed to you upon this reso-

lution would be utterly uncalled for, because every member of the Council has with some care studied the principle of this Bill; and you will observe how I have framed my resolution: it is simply that we accept the principle of the clauses, or, in other words, that we accept the principle of a common licence, but that it is open to us to propose modifications such as have been suggested in the course of the conversation which has occurred during the absence of the reporters.

Dr. Parkes seconded the resolution.

Dr. Alexander Wood: May I be allowed at this stage to ask a question? The difference between the expression in clauses 3 and 13 and the resolution at which we arrived yesterday is this—that in clauses 3 and 13 the result of successfully passing the examination of the conjoint board is communicated in the form of a licence to be given to the candidate. Now, I do not know in what way this was explained to Lord De Grey, and it is quite possible that Lord De Grey is not aware of our peculiar objection to the form of the approval of the board being conveyed in the shape of a licence, and it is quite possible that Lord De Grey might be perfectly satisfied if he understood that we agree that the passing of this board was to be preliminary to getting upon the Register. For I cannot conceive how it can be material to the Government, if they secure that no man shall get a licence unless he passes this board, what collateral arrangements we may desire, whereas it is everything to the corporations; and when we are asked to confirm a resolution which is, in fact, a cutting at the root of all we did yesterday—upon a mere note from Mr. Simon to Dr. Parkes—I should like to know what Lord De Grey's understanding of the matter is. Either we must have some direct communication with Lord De Grey, so as to put things before him in the light in which we see them, or we must go on doing what we consider necessary with this Bill irrespective of Lord De Grey and the Government. It is impossible we can be asked to reverse what we did yesterday simply because Dr. Parkes has received a note from Mr. Simon.

Mr. Hawkins said that yesterday he had felt it of very great importance to the universities and corporations that the alterations which he suggested should be made in the Bill, and he still thought it so, and desired that attention should be drawn to it; but, on the other hand, he was so desirous of diminishing the multitude of examining boards at present existing to the number of three, and so exercising a supervision over them and making the examination of the Practitioners of the country equal and uniform—thus doing away with many evils which at present existed—that if it were made a *sine qua non* by the Government that licences shall be given to those that pass those examinations, he would be quite willing to let his resolution of yesterday drop and allow the Bill to pass with that in it which, although he did not think it desirable, sooner than lose the Bill altogether, he would consent to have included in it.

Sir Dominic Corrigan: I should have felt great delicacy in alluding to Mr. Simon's name in the course of this debate were it not that a letter has been presented from him to-day, in which he represents himself as authorised to speak for Lord De Grey, and that letter not addressed to you, Sir, but to Dr. Parkes. That letter connects him with what occurred in private to-day, because he himself with his own hand connects himself with the subject under debate here. There is then no use in abstaining from mentioning his name in the course of any observations I have to make. Sir, the course of proceedure that we are called upon to adopt is, I think, the most extraordinary that ever occurred in the history of councils or debating societies. We resolve ourselves into a private committee, and then, in consequence of communications with Mr. Simon, Dr. Storrar brings forward a resolution that, in consequence of some conversations that occurred when reporters were excluded, we are to take——

Dr. Storrar: No, not in consequence.

Sir D. Corrigan: I have taken down your words. I say you did use them.

Dr. Storrar: No.

Sir D. Corrigan: I positively assert that you did. I wrote them down the moment that they escaped your lips.

A Member: It is not in the motion.

Sir D. Corrigan: No, not in the motion, but in his speech. He said that in consequence of conversations that occurred in this room when the reporters were excluded he brought forward this resolution. In other words, we put ourselves in this discreditable position, that we are ashamed to give to the public the reasons which induce us now to reverse all our proceedings of yesterday. (Cries of "No, no.") Then why were the reporters turned out? Why should we be guided by private conversations that four members of the Council happened to have with Mr. Simon? for that is the ground upon which it is put. There is a clause in the Bill which contains one of the most monstrously tyrannical provisions I ever saw—that the Lord President shall take the reports of any three members of the Council without any consultation whatever with the President of the Council—there were four members in this particular case. So that it won't do to call it a triumvirate—I suppose we must call it a quatrumvirate—that is to say we shall be handing over to them our rights to consider the Bill. That is the position in which it is proposed we should be placed—that without stating our reasons we hold here a private committee and then in consequence of private communications we pass over all matters connected with the proceedings in private committee to-day, so that we are ashamed to state to our constituents or the bodies which we represent what has induced us to depart from the principle on which we met here—namely, to consider this Bill clause by clause. What were we brought here for at great inconvenience from different parts of the United Kingdom? After a well considered resolution of February last we were brought here to consider this Bill clause by clause, and now on the second day of our meeting all that arrangement is to be swept away, and it is proposed to us gravely that in consequence of conversations that occurred yesterday (I suppose after dinner) among four gentlemen [a laugh] to reverse the whole of our proceedings, and further than that to conceal from the public and the Profession our reasons for this strange course. The learned Baronet then stated that upon a point of order he would be entitled to object to such a course being pursued as not being within the terms of the resolution upon which the Council were assembled. It had been held out as a threat that if the Council did not accept this Bill it would not be brought forward during the present session or perhaps next session. Now in place of that being an evil he looked upon it as about the best thing that could possibly happen. (Laughter.) It was said that a worse Bill would be thrust upon them; he defied any one to get a worse Bill than that which destroyed the rights of all the Corporations, and made a minimum qualification entitle a man to hold the highest offices under the Crown. They had heard from gentlemen on the opposite side of the table that Lord De Grey had said so and so, and that Mr. Simon had been authorised to say so and so. One gentleman said that Lord De Grey would not receive a deputation, another that he would. What the Council had to deal with was a written bill diametrically opposed to what was expected from the Government, and yet when that Bill lay before them for criticism and debate they were called upon to sacrifice their functions to conversations that had occurred amongst three or four gentlemen; and the only reason for acceding to such a course was to be kept secret from the public, from the Profession, and from the bodies represented on the Council. A more humiliating position could not be imagined. Dr. Parkes had stated, upon what authority did not appear, that Mr. Simon is authorised by the Government to insist upon this being done; he (Sir Dominic Corrigan) could tell them upon just as good authority that such was not the fact, and that the Government had not taken up Mr. Simon's views. He put his assertion against the other, and until there was documentary evidence produced he would stand by that assertion that the Government has not adopted Mr. Simon's views. The Council had heard that Mr. Simon is more authorised than anybody else to state the views of the Government. He put forward a statement in opposition to that, and further, he would assert that Mr. Simon was not as much authorised as other persons were. The communications made to the Medical Council in private committee amounted to this, that they should not criticise the Bill upon any minute points. But now they were called upon by Dr. Storrar's motion to absolutely bind themselves to two of the most important details of the Bill. It was neither more nor less than asking them to tie their hands and consent to two resolutions which utterly destroyed their independence, and which must eventually end in the destruction of the various chartered rights of the universities and bodies which they represented, and the degradation of the whole Profession to the lowest depth. Dr. Christison had well stated that the thin end of the wedge had been put in.

Dr. Christison: I never said a word about a wedge. (Laughter.)

A Member: It was Dr. Wood.

Dr. Alexander Wood: Dr. Christison drove the wedge home. I put it in.

Sir D. Corrigan: It had been said that Mr. Simon knew what the Houses of Lords and Commons would do in the

matter. He (Sir D. Corrigan), with all respect, replied that no man could say what they would do. The Council was called upon to give up their liberty with regard to opposing the obnoxious clauses of the Bill, because, forsooth, the Government had expressed a wish—or, to speak more correctly, because Mr. Simon says the Government has expressed a wish—to carry this particular point. Supposing such a principle had been adopted with regard to the Reform Bill or with regard to the Church Bill of last session, would the country ever have get two such noble measures through Parliament? Were they going to be so cowardly as to say, "We will take what you offer us; we will run away from the very shadow of the Government;" and was a man who says he speaks for the Government to frighten them and make them bend their necks in abject humiliation? That was not the course for British subjects to follow, and he hoped the members of the Council would not be such a set of cowards as to yield to the pressure. He took it to be their duty to the Profession and to the public to say at once to the Government, "We will oppose the Bill; we will use all the engines in our power to oppose it." That would be a much more manly course than to place the Council in the pitiable and humiliating position of one day voting in one direction, and then, having a statement made that such and such are the views of the Government, turning round and voting in the other, and keeping the whole thing secret, afraid to state the reasons upon which that change had taken place.

Dr. Alexander Wood pointed out the inconsistency of the course which the Council was now asked to adopt.

Mr. Hargrave spoke in favour of Dr. Storrar's motion. He had been a member of the Council for many years, and remembered the time when session after session the whole cry was to get a minister of the Crown to bring in a Medical Bill. He had been laughed at afterwards because when a minister could not be got to do so he proposed that some respectable member of the House of Commons or of the House of Lords should be asked to bring it forward. He would tell them now what was the cause of the stringent measure which had been introduced by the Government. It did not rest with the Council, for they were a set of men imbued with energy, skill, and thoroughness and truthfulness of work, which were most admirable. He (Mr. Hargrave) had been astonished at the mode in which most of the gentlemen engaged had thrown their whole heart and soul into the work. It did not, then, rest with the Council; but it was the universities and the corporations that had done the whole mischief. If they had from the beginning with good faith and truth consented to adopt the recommendations of this Council, as they should have done, instead of sneering at and turning into ridicule those recommendations, the present state of things would never have been brought about. There was one of the universities especially which had continually set at defiance these recommendations as regards preliminary education. (Cries of "Name.") He alluded to the Queen's University of Ireland. He had been called upon for a name; he would tell them now the reason why that University had acted in such a manner; it was this, that although Lord Clarendon was nominally President of that University, there was a power behind the Senate which was more powerful than the Senate itself. (Cries of "Name, name.") I will not give the name. I am not called upon to do so, and it is not fair to ask me. It was that which had kept the Council in hot water throughout. Dr. Alexander Wood had stated that the Government would put its heel upon the neck of the Profession and of the Council. He (Mr. Hargrave) denied that *in toto*; and in place of that he believed that the Government would elevate the Profession by bringing it into direct communication with the State. If that had been done before, there would have been none of the nonsense which had been going on for the last four or five years. As regards the Corporations, there was no fear that they would be extinguished, unless, indeed, for the same extraordinary reasons that a most remarkable institution in Ireland had been swept away about a year ago. (Loud laughter.) He had given his opinion freely upon this question, and he knew he was right, for he had watched the action of the Council for years.

Dr. Christison complained that Sir D. Corrigan's strictures on the course that was being pursued by the Council were not correct or fair. He apprehended that it was in the power of every deliberative body to retire within itself for private consultation with reference either to its course of procedure, or for the purpose of deliberation upon the resolutions which it had passed, in order that members might freely express their opinions in the first instance, and put matters into a proper shape. That was what the Council had done, and it was a course pursued by every deliberative body from the judges of the land downwards. Again, a charge of inconsistency had been made. That was an unfair charge, because members were able to understand now what they did not understand formerly—namely, that there was a way by means of which the difficulties which had been anticipated in reference to clauses 3 and 13 could be got rid of. He alluded to the fear that he amongst other members had entertained that great damage would be done to the corporations and universities. That fear was removed, and for that reason alone he supported the resolution which he formerly dissented from. He could now see how, with the consent of the Government, this Council could fill up what is called a scheme, and perfectly well adapt that scheme so as to secure the interests of the corporations and universities.

Dr. Arjohn opposed the resolution. It referred to that part of the Bill which was most important with reference to the interests of the different bodies. At the first meeting there was a strong desire to maintain those bodies in the position in which they are at present, or, at least, not to let them sustain any great damage. He regretted to find that, amongst others, Mr. Hawkins had changed his mind, and that he was now satisfied to work with the Government and accept whatever they chose to give the Profession in the Bill. It was clear to him the Bill had not been drawn up by Lord De Grey, but by Mr. Simon. The letter alluded to by Dr. Parkes appeared to be quite contrary to what Dr. Christison had stated—namely, that the Government is prepared to make such modifications as to protect the institutions; because the letter to Dr. Parkes distinctly states that the Lord President insists upon a particular clause. If that clause were carried in the particular form in which it is expressed in the Bill, these institutions which the Council was anxious to support must be injured. It was quite impossible for the Council to agree to a Bill which includes a clause of that description. The most mischievous effect of it would be the great discouragement which it would give to education in arts. He would give them an example from Dublin:—In the academical year 1868-9 there were seventy-one gentlemen who took Medical degrees, every one of whom was a Bachelor in Arts, and it was the opinion of college people, who understood the means of the students and their wants thoroughly, that this number of seventy-one would be reduced to one-fourth if such a clause were carried. The Council would recollect what high authority they had for making education in arts an important element in the education of Medical men. Every one would remember what great importance Sir Benjamin Brodie always attached to it. (Applause.) Under these circumstances, and feeling that in point of fact it would be perfectly ridiculous to rely upon vague conversations between members of the Council and Mr. Simon, he felt bound to oppose to the utmost the motion of Dr. Storrar.

Dr. Parkes: As seconder of this motion, I have only to say, first, that this Council is not proceeding upon any vague conversations at all, but upon a definite statement of Lord De Grey to Mr. Simon, conveyed to the Council through me. It came through me in consequence of my having addressed a letter yesterday to Mr. Simon. The whole question is really in a nutshell. It has been stated over and over again by Dr. Christison that this principle must be accepted or the Bill will be abortive. That is all the Council have to decide—whether or not they consider the acceptance of the Bill with these clauses is better than throwing the whole subject into chaos, as it most certainly will be thrown if it is not accepted. And I can only say that I trust that power which appears to be behind the Queen's University, and which I suppose is exactly facing Mr. Hargrave—(laughter)—will not be powerful enough in this Council to bring about so disastrous a result. I trust, therefore, that the Council, under these circumstances, will vote for Dr. Storrar's resolution, in the full conviction, not only that it is the best course, but that it is in point of fact the only practicable course now open to it.

Sir D. Corrigan: I have been alluded to as a power behind the senate of the Queen's University. I really never could have supposed I could have been the person to whom such influence is attributed were it not that Dr. Parkes said that the person alluded to sat exactly opposite Mr. Hargrave. At the same time, I do not very well see how I can be behind the senate, inasmuch as I happen to be one of the senate. Mr. Hargrave has alluded to the Queen's University not complying with the recommendations of this Council. In answer to that, I will simply say that it has given as a reason "that the general knowledge required by the Queen's University is far beyond what is required by the Council," and the Council has never replied to that. I will remind you of what the difference between us is—your recommendation is that Greek shall not form

a part of the course of preliminary study of students in Medicine, and our recommendation upon which we would not give way is that we do require Greek, and we will require it.

Dr. Storrar's motion, "That the Council accept the principles of clauses 3 and 13 of the proposed Bill," was then put to the vote, and carried by a large majority.

Dr. Bennett: The resolution we have just passed should, I think, be followed by something of this sort:—"That it is desirable, when considering the formation and scope of the schemes contemplated by the Bill, that due care should be taken, whilst maintaining the principle of clauses 3 and 13, that in granting the licence to those who shall have passed the new conjoint board, provision should be made for securing, as far as possible, the co-operation of the Medical authorities." I think we ought to be very well satisfied that there are such provisions for taking care of the interests of the corporations; and my sole object in proposing this resolution now is to show that, whilst we accept the principle of those two clauses, we contemplate the making of such arrangements as may be possible consistently with the rest of the Bill, in order to afford the existing Medical authorities not only an opportunity of taking part in these examinations, as they unquestionably should do, but an opportunity of granting their licences at the same time that this licence is granted by the new board. The licence granted by the new board will be absolutely necessary in order to obtain a place upon the Register; but ours will not be absolutely necessary unless we make some such provision as that contemplated here. Now, if you look a little into the liberty given to you by the scheme, you will at once see that there is a possibility of making this licence a necessary preliminary to passing the ultimate joint board examination; at all events, there is an opportunity afforded of our arranging matters so that those who pass this ultimate board and receive the requisite licence to appear on the Register, shall be affiliated with one or other of the existing Medical authorities, and their relation to the Profession will in that way be maintained, and the position of those authorities secured *pro tanto* by such an arrangement. I think it will diminish in some considerable degree the feeling of, I was going to say, humiliation in which the Medical authorities may consider themselves placed by having to give their licences as a mere preliminary to something which shall come after, and which will be taken to be superior to that which students obtain from them. I wish that we may take into our careful consideration the best mode for bringing the Medical authorities into co-operation with the conjoint board, and to facilitate as far as possible the affiliation which I have suggested.

Dr. Alexander Wood suggested that the motion should be postponed until the Council had arrived at that portion of the Bill.

Dr. Bennett: Well, the reason I wish this resolution to come here is that I think it will rather take off the edge of the other. (Laughter.)

Dr. Christison, in seconding the resolution, said: I think it is most important that it should immediately follow the other resolution.

Dr. Alexander Wood objected to Dr. Bennett's resolution, inasmuch as it mixed up the duties of the Council before the passing of the Bill with those which would come into force after the passing of the Bill. It was not unnatural that the mover of the resolution should endeavour to soften the blow, because he and others had gone through the very humiliating process of exactly contradicting what they had said and done yesterday. (Cries of "Order" and "No, no.") The only reason given is—"We have received certain intimations from the Government as to what they want us to do." It was only natural under such circumstances that he should be anxious to soften the fall as much as possible; but he (Dr. Alexander Wood), as one of those who had endeavoured to save the Council from eating their own words, had no such motives to influence him. It appeared that there was a Government normal school already in existence; that it met in the evening after the Council rose; that certain members were not privileged to partake of the instruction which it afforded—(laughter)—but that there were certain good and obedient boys who went there and were educated up to the proper point—(laughter)—and who then came back and attempted to indoctrinate the Council. (Loud laughter and applause.) This was all very well, but it did not tend to maintain the consistency of a body like the Medical Council; and if they wished to maintain their authority and power it would not be by passing a resolution after seriously considering its merits one day, and then reversing it under Government pressure, and without stating any reasons, on the very next. (Applause.)

Dr. Andrew Wood entirely disagreed with the last speaker as to there being anything humiliating in yielding to the force of circumstances which could not be withstood. It was better to bend before the blast than to break; and if the question were put, Will you have the Government Bill or will you have no Bill at all, and allow the matter to remain *in nubibus?* he for one would prefer the Bill as it stood. There was no humiliation in retreating before an enemy that one could not withstand, and for his part he wanted no resolution to soften the fall or to dull the sharp edge, as it was called, of the course which the Council had been compelled to pursue. A great deal had been said about Mr. Simon. No doubt he possessed that influence on the Government which his ability entitled him to; but it was disparaging to Lord De Grey, and contrary to the fact, to suppose that his lordship had not thoroughly mastered this matter, and brought forward this Bill as his own Bill, or rather as the Bill of the Government of the country. He was the responsible minister in the matter, and he had told them (for they were bound to believe Mr. Simon's word as the word of a gentleman), "If you refuse the Bill with these clauses in regard to licences, there will be no legislation at all." [Sir D. Corrigan: So much the better.] He did not agree with Sir D. Corrigan when he said so much the better. He did not admit it was a good thing to go on year after year with a series of agitations upon this subject, either for the parties concerned or for the public. It was not good for the Profession: it was still worse for the corporations and universities, whose existence might perhaps be seriously threatened in consequence of obstinately standing out at a time when it is clear the consequence may be, if this opportunity is not taken, that they will never get such good terms again. It was in the experience of every man that individual opinions had to be given up. He (Dr. Andrew Wood) had departed from positions which he had held twenty years ago; nor could he see anything discreditable or humiliating in it. If, therefore, Dr. Bennett was actuated with a desire to take away the sharp edge, his motion was not wanted. It was an incompetent motion, because they were not entitled at present to deal with the schemes, the preparation of which was first of all thrown upon the different authorities in the kingdom. It would be time enough for the Medical Council to deal with them when it became their province to do so, and he would therefore vote against the motion of Dr. Bennett.

Dr. Acland had voted yesterday against Mr. Hawkins's proposed amendment in a minority of the Council. The charge of inconsistency, therefore, could not be brought against him. In point of fact the Council had pursued the only course that, as practical men, they could pursue. He was, however, prepared to support Dr. Bennett's motion; and he thought it came now in its proper place and time. It was quite true as a body the Council had negatived what they did yesterday; and they had agreed that they would take a friendly Bill from a friendly and powerful Government. After the most anxious consideration of this for years past, he (Dr. Acland) retained the opinion that upon the whole the existing Medical and Surgical corporations of the country were an advantage to it. He was perfectly well aware that in public this matter was represented in an exactly contrary light; he had heard it stated by members and fellows of the very College which was now giving the Council hospitality that it is a useless and worthless institution. He held exactly the contrary opinion, and believed that it was one of the best institutions in the country. A college which had housed John Hunter, which had educated Richard Owen, and which had ever been one of the homes of Medical science in the kingdom—an institution which was animated by the scientific spirit of Brodie and other great ones who had been its presidents, deserved to be maintained; and as long as he (Dr. Acland) had the slightest voice in Medical affairs, in or out of the Council—in the face of whatever might come—he would do his best to maintain that institution and others of a kindred nature. He, therefore, thought that they would act wisely to express an opinion that some way should be found by which these corporations should not be crippled in respect of the funds by which they are maintained. That would come under discussion at a further stage of the debate. If by the Bill their income was sacrificed, it would be the duty of the Council to protest against it, and to show how the defect might be rectified. Mr. Simon was on the Council of the College of Surgeons, and it was absurd to suppose that he was ignorant or unmindful of its interests, or that he was not desirous to maintain its advantageous, useful, and national character. The duty of the Council was to find out a way in which they could in the House of Commons show those who advocated the Bill how to answer the statements made so strongly over and over again that the bodies which were injurious to the main-

tenance of science and of the high character of the Profession were the corporations. (Applause.) He was glad the Council would be forced to face the question, and say deliberately whether they are or are not valuable national institutions. The university which he had the honour to represent—Oxford—had its faults and shortcomings, but it was not therefore to be swept away. The Medical corporations and universities had their faults, but that was no reason why they should be destroyed or crushed. He maintained the principle of the Government Bill to be a right one; the Council was now nearly unanimous upon that; and, although they might say strong things in the course of debate on the one side or on the other, they were all agreed that national examinations must now be instituted. It was no use blinking the question, and the only thing as he understood which had been said by Mr. Simon was that the Government would not depart from that principle; so that in reality they were at one with the Government. The only question was whether hereafter they would be able to find out a way of at once carrying out the principle of three sets of examinations, and yet not sacrifice the very existence of the corporations. They would have to consider that question by-and-by. He concluded by supporting the resolution of Dr. Bennett.

Dr. Humphry confessed himself utterly unable to understand the resolution. Indeed, so far as it went, it seemed to be incompatible with the previous resolution, because those who had passed the new conjoint board would be already entitled to a licence, and no "co-operation of the Medical authorities" could be at all necessary. He was one of the four gentlemen who had been twitted with reversing what had been done yesterday; but he had voted against what was done yesterday, and therefore had not been guilty of any inconsistency. Nor could it with justice be said that Mr. Hawkins and those who voted with him yesterday were guilty of inconsistency when, upon different information and a more perfect understanding of the intentions of the Government, they accepted the principle of clauses 3 and 13 to-day. As Mr. Hawkins had stated, rather than risk the Bill falling through, he would accept it in the form insisted upon by Government. There was no inconsistency and no humiliation in that. He must vote against the present resolution, because he could not understand it.

Mr. Hawkins also explained the grounds upon which he had withdrawn from opposition to clauses 3 and 13 of the Bill. He was inclined to vote for Dr. Bennett's resolution.

Dr. Humphry suggested, as an amendment to Dr. Bennett's resolution, "That, whilst maintaining the principle of clauses 3 and 13, it is desirable so to secure the co-operation of the Medical authorities in conducting the examinations, that the present relation of the members of the Profession to those authorities shall, as far as possible, be maintained as at present."

Dr. Thomson seconded the amendment.

After some criticisms by the President, Dr. Andrew Wood, Dr. Bennett, Dr. Sharpey, and Sir D. Corrigan,

Dr. Parkes asked how they proposed to give effect to it, whether by a clause or what?

Dr. Bennett: As an expression of opinion.

Dr. Parkes: That would have no effect upon the Government.

Dr. Bennett: It may have an effect upon the corporations by assuring them that their rights would be respected.

Dr. Parkes said he did not see how the Government could do more than they had done in that direction. For this reason he must oppose the amendment as futile.

Dr. Humphry: The principle affirmed by the amendment is possible under the Bill, but there is no distinct provision for it.

The amendment was put from the chair, and the numbers being equal,

The President said he should vote against it in order that the resolution might be put.

The resolution was then put to the vote, and carried by a majority of 13 to 6.

Sir D. Corrigan moved that the names and numbers be recorded. They were as follows:—*Majority*, 13: Dr. Bennett, Mr. Hawkins, Dr. Acland, Dr. Humphry, Dr. Storrar, Dr. Fleming, Dr. Macrobin, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Sir D. Corrigan, Dr. Christison. *Minority*, 6: Mr. Cooper, Dr. Embleton, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Sharpey, Dr. Parkes. *Declined to vote:* The President, Dr. Apjohn, Dr. Stokes.

Dr. Parkes said that with reference to the action of the Privy Council the Government was only anxious to exercise the proper degree of control which was necessary for the proper working of the scheme, and there was no fear of any undue interference. It might be well to word some of the clauses of the Bill so as to make that a little more clear and certain, and for this purpose the best course to pursue would be that some conference should be held with the Privy Council in order to see how those clauses might be best worded. The time of the Council was so extremely valuable that he would simply move—"That in reference to the clauses in which the action of the Privy Council is stated, it is desirable that this Council should confer with the authorities of the Privy Council, with a view of removing ambiguity, and of defining the action of the Privy Council; and that steps should be taken by the President to secure an interview between the authorities of the Privy Council and a deputation from the Medical Council as soon as possible." If that motion were adopted he would move that the Council should at once proceed to consider these particular clauses.

Dr. Andrew Wood, in seconding the motion, said it was desirable to be able to state authoritatively what is the power to be exercised by the Privy Council in regard to the affairs of the Medical Council, because it was said by the Journals that this was a Bill which would bind the Profession neck and heels to the Government, and not only that, but to one individual who may be considered as adviser to the Government now. He (Dr. Andrew Wood), as a member of the Executive Committee, had had the privilege of being present when this matter was brought before the Government, and Lord De Grey then stated most distinctly that there was no wish to exercise anything like the power that had been suggested; but, as there must be an arbitrating power somewhere, the Privy Council seemed the most suitable body for that purpose. He looked upon these powers not as any attempt to dictate to the Council, but as a protective power for the various authorities against each other. It would be seen from the Bill that there was a very large liberty left as to the arrangement of the scheme, and there was little doubt that when the authorities came to form the scheme together there would be many points of division amongst them, for the settling of which the Privy Council would be a much more impartial tribunal than even the Medical Council could be. He did not, therefore, look with any jealousy upon the powers taken by the Privy Council in the Bill, and he seconded Dr. Parkes's motion because he thought it desirable that there should be an official declaration of what is meant by those provisions of the Bill which give the Privy Council the controlling authority. If there was anything expressed in the Bill which was not clearly understood, he had not the least doubt that the Privy Council were ready and willing to make the necessary emendation.

Dr. A. Smith was entirely in favour of the Privy Council exercising a certain amount of supervision over the Medical Council. Probably the powers given by the Bill were too numerous and great, but he would have been sorry if a certain amount of control had not been reserved to the Government. Numerous objections had been made to the control of the Privy Council, but he did not hesitate to say that if the Bill were to pass in its present form without those powers of supervision it would become a source of very great embarrassment to the Council itself in future stages of business—they might often find themselves in a position of hesitating to do what they probably thought was right; whereas if they were subject to supervision they would act to the best of their judgment, knowing that if they gave offence to any of the authorities in the kingdom there were powers of appeal to the Privy Council. He agreed with other speakers that there was probably too much power claimed in the present Bill, but he would remined them that on an occasion when the Bill was first drafted and an objectionable clause about admitting foreign diplomas was pointed out to Lord De Grey, he struck it out at once. There was little doubt that the Privy Council in like manner would, upon proper remonstrance, correct anything that was really objectionable.

Dr. Sharpey had no fears of the Privy Council, although he knew there were fears out of doors entertained by very influential persons upon the subject; and he agreed that it would be well to do anything they possibly could to quiet those apprehensions. Therefore he would vote for the motion.

It was put to the vote and carried *nem. con.*

It was resolved that the deputation to the Lord President should consist of the President, Mr. Hawkins, Dr. Christison, Dr. Apjohn, and Dr. Parkes.

Mr. Hawkins then moved "That it be an instruction to the deputation to lay the following clauses, proposed by Mr. Cæsar Hawkins, before the Lord President for his consideration."

5. "The Medical authorities of each part of the United Kingdom may, before the 1st day of October next, submit to the General Medical Council a scheme for the establishment of

the Medical examining board of that part, and the General Medical Council, before the 1st day of January next, may approve such scheme, and propose the scheme so approved by them to the Privy Council, who may then make an order confirming the same, if they think fit.

6. "If any alterations in the scheme proposed by the Medical authorities of any part of the United Kingdom shall be deemed necessary by the Medical Council, such alterations shall be communicated to the Medical authorities of that part, to be considered by them, and their opinions reported to the Medical Council for further consideration, and, if approved, the scheme, as amended, shall be proposed by them to the Privy Council, who may then make an order confirming the scheme, if they think fit.

7. "If, in the case of any part of the United Kingdom, a Medical examining board has not been established in that part by agreement between the Medical Council and the Medical authorities of that part, on the 31st day of January, 1871, or if at any time there is no examining board for any part of the United Kingdom, the General Medical Council shall themselves forthwith frame and propose to the Privy Council a scheme for the establishment of an examining board for that part of the United Kingdom. The Privy Council may confirm such scheme, or may suggest to the Medical Council such modifications therein, or in any scheme proposed under the preceding clauses as they may think fit, and the Medical Council shall consider such proposed modifications, and submit the grounds for their difference of opinion, if there be such difference, to the consideration and decision of the Privy Council. The Medical Council shall cause notice of any scheme proposed by them according to the foregoing clause, together with the modifications proposed by the Privy Council, to be sent as soon as may be to all the Medical authorities of that part of the United Kingdom to which that scheme relates, and during one month after such notices are sent the Privy Council shall receive and consider any objections and representations made to them respecting the scheme by any Medical authority to whom such notice is required by this section to be sent, or by any six or more members of the General Medical Council. After the expiration of the said month, the Privy Council may make an order confirming the scheme, with or without any modification therein, as they may see fit. Any scheme confirmed by such order of the Privy Council shall come into operation on the day in that behalf in the order mentioned, or, if no day is mentioned, on the day of the date of the order, and shall have effect as if it were enacted in this Act."

The motion was seconded by Dr. Andrew Wood.

Dr. Parkes said that the alterations in these clauses would provide for quite sufficient superintendence of the Privy Council without any chance of undue interference. That being so, it was quite possible that the Government draftsman might be able to introduce them into the Bill without any further alteration.

A long discussion then took place as to whether the number of dissentient members of the Medical Council who should have liberty to appeal to the Privy Council should be confined to three or more or to six or more members of the General Medical Council.

Mr. Hawkins, Mr. Hargrave, Dr. Andrew Wood, and Dr. Alexander Wood having spoken upon the question,

Sir D. Corrigan proposed as an amendment that the number should be left out altogether, the words "the General Medical Council" being substituted.

Dr. Storrar opposed the amendment suggested by Sir D. Corrigan. He thought the clause should remain as it originally stood, "three or more." It was quite wise to have such a provision; for it was quite possible by an act of haste a real grievance might be created which might be remedied by the action of three members.

The President said that it might seem a small point upon which to trouble the Council with any remarks from the chair, but it struck his mind that the effect of this power of appeal by three, possibly eccentric, members—(a laugh)—of the Medical Council to the Privy Council would be that it would give them the power of putting the whole settlement of this important matter into the hands of the Privy Council. What was the Privy Council? The chief authorities of it were persons who neither knew anything of Medicine in general nor were likely ever to do so. They could not be, because they obtained their position by virtue of their knowledge and reputation in general politics, and no man could rise to a reputation in that department of knowledge if he had devoted his time to the study of Medicine. In the case of Lord De Grey, it was true he was an exception. Just at the present time, no doubt, he was capable of judging upon this matter, because he had made a careful study of it, but his immediate successor would not know anything about it. The Vice-President, whoever he might be, could not know anything about it; and, at all events, his opinion ought not to weigh against the opinion of twenty-one out of twenty-four members of the Medical Council who had made the thing their study for years. Again, although at the present time no doubt they had an exceedingly able Medical adviser, he was only one man, and there was no sort of security that he would live for ever, or that his successor would be equally able. Another objection occurred to his mind—the Privy Council one of these days might be left without any Medical adviser at all, because there was a tendency now to the establishment of a sanitary department in the State, about which Dr. Acland could tell them something if he chose, and possibly a Sanitary Minister might become an institution. The result would be that the present Medical department of the Privy Council would be incorporated into that sanitary department, and the Privy Council would then be left to its main functions—namely, that of education. Thus the Lord President of the Council would be left probably to his own Medical attendant to advise him upon those matters who might be—[A Voice: "Miss Garrett," and much laughter]—or a much less able and much less trustworthy person than Miss Garrett.

Sir D. Corrigan withdrew his amendment, and the motion having been put to the vote, was carried unanimously.

Clause 8 was adopted with merely verbal alterations.

Clause 10.—"The General Medical Council shall from time to time propose to the Privy Council rules (in this Act referred to as examination rules) for regulating the examinations under this Act, and in particular for all or any of the following purposes; that is to say:—1. Determining the conditions of admission of persons to the said examinations, and in particular their age, general knowledge, and course of Professional study. 2. Providing for the admission to such examinations on special terms of persons who hold Medical diplomas, degrees, or titles granted by any university, college, or body in any British possession or any foreign country, or who have studied in any British possession or foreign country. 3. Determining the subjects of, and method of, conducting the examinations, whether practical or theoretical. 4. Providing for the superintendence by the General Medical Council of the examinations either by themselves or by persons appointed by them. 5. Securing the equally strict application of the rules, so that a licence under this Act may be granted on the like terms throughout the whole of the United Kingdom. 6. Altering any rules for the time being in force. The General Medical Council shall prepare the first examination rules at some date not later than one month after the confirmation of the original schemes for establishing Medical examining boards in each part of the United Kingdom, or at such later date as may be allowed by the Privy Council."

Dr. Alexander Wood moved upon this clause—"That it be an instruction to the deputation to the Lord President, to endeavour to secure that power is given to the Council to provide sufficient security that every entrant into the Profession have sufficient general knowledge; and that, if necessary, a register of Medical students be established under their direction."

The motion was seconded by Mr. Hargrave.

After some remarks from Dr. Sharpey,

Dr. Christison observed that the Council had already gone beyond its powers in requiring the registration of students. It was a mistake to say that the recommendations of the Council had been of no service; they had proved most valuable in Scotland with reference to the preliminary examinations, they had been faithfully and loyally adopted, and he could speak from visitations that he had made in Scotland to the fact that the various licensing bodies there had been carrying them out in the most thorough and painstaking way.

There was an attempt on the part of Dr. Acland, seconded by Dr. Stokes, to suspend the standing orders to enable the Council to conclude this debate, but upon this being put to the vote the motion was negatived.

The discussion on Dr. Alexander Wood's motion therefore stood adjourned to the morrow at 1 o'clock.

Third Day.—Saturday, April 30.

At the sitting of the Council at 1 o'clock, the adjourned debate on the motion moved on the previous day by Dr. Alexander Wood and seconded by Mr. Hargrave, was resumed.

After some considerable discussion, Dr. Andrew Wood and

Mr. Hawkins withdrew certain amendments which they had prepared, the mover of the resolution consenting at the same time to modify it as follows:—"That it be an additional instruction to the deputation appointed at the last meeting to wait on the Lord President in regard to the Medical Bill, to bring under his Lordship's notice the importance of giving power to the General Medical Council under the Bill to frame such regulations as may provide that every person before entering on his Professional studies have sufficient general knowledge; further, that power be given to the General Medical Council to publish from time to time a register of Medical Students, should such publication appear to the General Council to be desirable." In this form it was ultimately agreed to.

Clause 9 was passed with a merely verbal alteration.

Upon clause 10 Dr. Humphry moved the following resolution:—"That in reference to clause 10 it is desirable that the Medical authorities should be empowered to submit to the General Medical Council a scheme for examinations in the same manner as a scheme for the establishment of an examining board."

Dr. Macrobin seconded the motion.

Dr. Andrew Wood objected to the motion on the ground that in the Bill there had been advisedly drawn a line of demarcation between the two matters dealt with in the resolution, and the power was left in the hands of the Medical Council to draw up the scheme for examination for a very good reason—namely, in order to make the examinations as uniform as possible in the three divisions of the kingdom. He treated the proposal as a radical alteration in the Bill, and he would be very sorry to see the Medical authorities employed in devising schemes for examinations—that being the duty of the Medical Council.

Dr. A. Smith said that there were sufficient powers in the Bill to provide for what was contemplated by the resolution.

Dr. Sharpey presumed there would be nothing to prevent the Medical authorities from making representations to the Medical Council on the subject of examinations: and, on the other hand, there was nothing to prevent the Medical Council from consulting the authorities if they thought fit. It must be remembered that these bodies were represented at the Council, and he thought on that ground alone Dr. Humphry's anxiety was causeless.

Dr. Humphry thought it was a question whether under the Bill they could propose any scheme to the Medical Council, and he would like it to be made clear that they had power to do so.

Dr. Sharpey said the Medical Council would certainly consult them upon such matters, and, moreover, if they were not satisfied with what the Medical Council did they could go to the Privy Council.

Dr. Stokes maintained that the principle laid down in the Bill was a sound one that the authorities should only have permission to interfere or recommend alterations in the machinery, and that for the sake of uniformity the subjects for examination must proceed from some central authority. In clause 10 of the Bill due provision was made for both these purposes. On those grounds, therefore, he felt bound to oppose the motion.

Dr. Acland said that if it was proposed only that the Medical authorities should have power to submit a scheme to the Medical Council he could not see the harm of it, because it would simply facilitate the proceedings of the Medical Council; but, in view of future work, he looked with no little anxiety as to the length of time which would be occupied in discussing details. If Dr. Humphry proposed to take away from the Medical Council the power of deciding upon the subjects of examination, he was quite confident what Lord De Grey's answer would be, because it was a point which was quite vital to the Bill that, while the different corporations of the country were to make the machinery most convenient to them, the Council was the body to say what that machinery should work upon.

After some remarks from Dr. Bennett,

Mr. Hawkins said he was afraid there would be considerable difficulty in the adoption of Dr. Humphry's proposal, and that instead of facilitating the proceedings of the Council it would lead to the occupation of more time than ever. There were nineteen bodies who might send in their claims to be considered by the Council, and he thought if such a duty were cast upon the Council it would rather increase than diminish their labours. (Hear, hear.) Besides which, the Act advisedly provided that the supreme authority should be lodged in the Medical Council. With reference to subdivision 5 of the clause, "Securing the equally strict application of the rules, so that a licence under this Act may be granted on the like terms throughout the whole of the United Kingdom," it would be seen by a comparison with clause 11 that the authorities had full power of laying their views before the Privy Council. Taking, therefore, the two clauses together, there seemed to be no necessity for Dr. Humphry's motion.

Dr. Humphry, Dr. Sharpey, Dr. Apjohn, Sir D. Corrigan, and Dr. Embleton also took part in the discussion.

The President: It does not appear to me that the Bill as it stands would deprive the Medical authorities of any power such as Dr. Humphry desires. There is nothing in the Bill, as I read it, to prevent Medical authorities putting forward a scheme and submitting it to this Council; because almost every individual Medical authority has a representative on this Council, and this Council has always received, and received with respect, a communication from any individual, still more from a corporation. The resolution, it appears to me, would make the clause read so as rather to require that this examination scheme should originate with the Medical authorities. I think that not at all desirable. It appears to me that it would enormously increase the difficulty of making the examinations equal in the three divisions of the kingdom, and also enormously add to the labours of this Council. Probably it would also make it necessary that this Council should meet twice a year, whereas once now sufficed. According to the proposal of the Bill this Council would meet and draw up examination rules. Those rules would be sent with a notice to the authorities to object if they thought proper, and there the action of the Council would end. But if this resolution of Dr. Humphry be carried the examination rules would be drawn up and sent to this Council, and then if this Council did not approve of them they would be sent back to the Medical authorities; and if exception were taken to any portion of those rules, a second meeting of this Council would be required to consider them; but I think the great objection is that which was pointed out by Dr. Andrew Wood and Dr. Stokes—namely, that it would so greatly increase the difficulty of making the examinations equal in the three divisions of the kingdom.

The motion was put to the vote and negatived.

Sir Dominic Corrigan: In clause 10, sub-clause No. 1, I propose that it should terminate with the word "examinations" in the second line. My reason for proposing that amendment is this—that I think there is quite too large a power given to the General Medical Council or any authority, I do not care what; and I think the requirement that a person entering the Profession should have a sufficient amount of knowledge is sufficiently provided for in the resolution of Dr. Alexander Wood passed unanimously a few minutes ago—namely, that this Council shall have power, if it think fit, to ascertain the amount of general knowledge possessed. I think they ought not to have any further powers under this clause, and that these details in particular with reference to age and so on ought to be dispensed with. The authority over the general knowledge and course of Professional study I consider a very objectionable power to be placed in this Council, and one that will be sure to create very great dissension. It is a matter which we have discussed for many years, and many days in several successive years have been spent in determining what was a Medical school. (Laughter.) I think we shall all recollect that some of us were of opinion that a Medical school meant a place where there was a large teaching establishment, and that no instruction should be recognised unless there was. Other bodies—as, for instance, the representatives of the London University—permitted education to go on in many of the provincial Hospitals, and also allowed persons to be bound to Surgeons or general Practitioners. I incline to the view of the London University—namely, that we do not confine the recognition of certificates to what are called Medical Schools. Then, again, in Ireland it is an ordinary practice for a young man to spend one or sometimes two years as the apprentice to the Surgeon of a county Infirmary; and I know no way in which a man pursues Professional study better than having the care of fifty or a hundred cases under the eye of one master. I foresee unceasing contentions arising from giving this Council the power to go into such details as these. Supposing we take the subject of lectures; there is always a discussion in Ireland with regard to the limits of a course of Professional study. In one place for the course of Professional study in *Materia Medica* the authorities require six months' attendance; in another case, only three months. In one place, attendance at a lying-in Hospital is required; in another, the attendance on the lectures of a person who is a Physician to a maternity institution. The learned Baronet alluded to some further diversities of practice amongst the different corporations in the three kingdoms, and

contended that, where the means of education were so diverse, it would be a departure from one of the main principles of the Bill if the proposal contained in sub-clause 1 were not limited in the way he suggested. He would state fairly and openly that the power of the Medical Council or of the examination board should simply apply to an examination, and that they should not have power to dictate to the various licensing bodies what are the particular little details of lectures and other matters. There were many paths up the mountain side, but they all led to the summit; and when a horse was entered for the Derby nobody asked where he got his pasture from, or his oats, or who trained him; but he was brought to the racecourse, and there the best horse won. So in competitive examinations for the Indian Civil Service; the men were not asked if they had attended lectures so long in botany, or had studied the German language in a particular manner, but they were examined upon one platform to see what they knew. Examination was the great test. He quite agreed with Dr. Wood that the Council was bound by every means in its power to secure that a man should not be allowed to enter the Profession unless he exhibited to the satisfaction of the Council the requisite amount of general Professional knowledge.

Dr. Stokes seconded the motion.

Mr. Harorave: Is it Sir Dominic Corrigan's intention that there should be a perfect licence to the students to educate themselves where and when and how they choose?

Sir D. Corrigan: When that contingency arises I will answer your question.

The motion was put to the vote, and lost by a large majority, the numbers being 13 to 2.

Sir D. Corrigan: I have another amendment to propose upon sub-clause 2. That gives us the extraordinary power of providing for the admission on special terms of persons who hold Medical diplomas granted by foreign universities, thus giving them privileges above our own fellow subjects who have been students in the universities of this country. Under the clause as it stands at present all the graduates of all the universities of the United Kingdom would be obliged to conform to our rules; but we have this extraordinary provision, that there are to be exempted from those rules and examinations—

A Member: No, not from the examinations.

Sir D. Corrigan: It provides for the admission to our examinations, on special terms, of persons who hold foreign diplomas. Now, we all know how these diplomas are sold, and that certificates of study can be got in America, Germany, France, and other places merely for the payment of money; so that we absolutely by that clause hold out a bonus to a man not to study here, but to cross the Channel, and go into France and stay six months there, and then we are to let him in on special terms. I therefore object to that clause, and I will move that it is desirable that it be expunged.

The motion was seconded by Dr. A. Smith.

On being put to the vote, it was negatived, only two hands being held up in its favour.

"Clause 11.—The Privy Council shall cause notice of any proposed examination rules to be sent as soon as may be to all the Medical examining boards and to all the Medical authorities of each part of the United Kingdom. During one month after the rules are so sent, the Privy Council shall receive and consider any objections and representations made to them respecting such rules by any Medical examining board or any of the Medical authorities or any three or more members of the General Medical Council. After the expiration of the said month the Privy Council may confirm such rules with or without any modifications, as they think fit. The Privy Council shall give to the General Medical Council due notice of any modifications they may propose to make in the rules, and an opportunity to be heard with respect to such modifications."

Dr. Alexander Wood: Referring to what took place yesterday, this Council was induced to alter the opinion which it expressed pretty strongly on Thursday with regard to the question of the new conjoint board, if we may call it so, giving licences, by certain statements which were made to us very clearly and ably by Dr. Christison and others. I was opposed to that course, but I was in a minority, and I believe the majority of the Council were led to rescind the resolution of Thursday, on Friday, by a statement and an understanding that if this was done careful provision should be made in the Bill that the rights of the universities and corporations should be preserved in that conjoint examination. Now, on looking at the Bill, I do not see any clause introduced to that effect, and it occurs to me, or it has been suggested to me in a conversation which I have held just now with Dr. Christison, who thoroughly understands this matter, that it would be extremely important before we leave this clause that we should give further instructions to the deputation to state to Lord De Grey that this Council was only led to abandon its resolution on that distinct understanding—(cries of "No, no," and applause)—and that effect should be given to that in the Bill. Otherwise, I see no security for the preservation of the rights of the universities or corporations. We were certainly led to rescind our resolution of Thursday by a statement of that kind, and nothing appears in our minutes, or in any tangible shape or form, to intimate to Lord De Grey the grounds upon which we agreed to that rescission. I think we should take some steps now to put the matter upon record so as to bring under Lord De Grey's notice the understanding upon which we did so.

Dr. Parkes: All that was said yesterday on this matter at the Council was this, that the Government considered the principle of clauses 3 and 13 absolutely essential, and that if there were a question whether the Council would adopt that view and take the Bill as it stands, or refuse that view, the Government must then throw up the Bill altogether. Upon that simple question the Council voted, and it seems to me that this is a mere reopening of the question which was decided yesterday by a large majority.

Dr. Christison: I wish to put the Council right as to what is our present predicament. There is no doubt many of us only agreed to adopt this clause in the Bill—namely, the examination by the conjoint board, which will carry with it the licence of General Practitioner—in the expectation that we should be able so to arrange with regard to the examinations of that board that they should not be taken entirely out of the hands of the corporations and universities, but that through means of a certain share in these examinations, as corporations and universities, we should contribute something towards the licence. This is what we expected. It was pointed out to me when this suggestion was made that all that was perfectly within the limits of the scheme as it stood. (Hear, hear.) At the same time, I think we should be seriously misleading the Government—and by Government I mean Lord De Grey—if he were not made acquainted with this expectation of the Council that the usefulness of the corporations and the universities is to be secured by a certain part of the examination still remaining with them, the boards very possibly being differently constituted, and being, so to speak, amalgamated with boards and certain corporations affiliated to the boards. All this can be perfectly easily managed in detail. The difficulty is to put it in a form which is to be an expression of the opinion of this Council; but I really do feel, and I think many are of my opinion, that we ought to apprise Lord De Grey of our expectation that some such security will be given us in the Bill that the interests of the corporations and universities and schools for Medical education shall be maintained. I have drawn up a statement, but I am not satisfied with it, because it is a matter which requires to be couched very courteously, and I do not think I have succeeded in doing that.

Dr. Bennett: I would just ask the attention of the Council to a resolution which I moved, and which was seconded by Professor Christison, which, coming in connexion with the previous resolution, can scarcely fail to attract the attention of Lord De Grey. It will be seen now why I insisted upon the word "licence" being introduced into that resolution, and it is probable that sufficient will be done for the purpose we have in view if the special attention of the Government be drawn to it. I do not quite accord with what was said as to the inconsistent character of our proceedings. We came to our conclusion because we thought we saw our way to meet the necessities of the Medical authorities; and it was with a view of stating that we could see a way of meeting their necessities that I drew up this clause. It states distinctly that, when we proceed to make these schemes, we intend to take care of the Medical authorities by securing their co-operation in granting licences to those who pass the conjoint board. I agree with Dr. Christison that it is very desirable we should give Lord De Grey to understand that that is our intention—that so far as we can, we mean to secure the co-operation of the existing bodies. But I do not quite like the terms of what Dr. Christison has drawn up. I think we should be rather cautious in giving Lord De Grey to understand that we accept the principle of clauses 3 and 13 on condition—perhaps that is too strong a word.

Sir D. Corrigan: "On the understanding"—perhaps that would do.

Dr. Bennett: No, I think we accepted it unconditionally, and I think my resolution expressed that.

Dr. PARKES: The words "consistently with the principle of the Bill" would meet that difficulty.

Dr. BENNETT: Yes, my clause includes that, "consistently with the principles of clauses 3 and 13."

Dr. CHRISTISON: This is one of the matters that must be put before Lord De Grey in one shape or other. In fact, there is not a single change proposed which it will not be necessary to call his attention to.

The PRESIDENT: Would it not be sufficient for you to draw Lord De Grey's attention to that? (Applause.)

Dr. CHRISTISON: Yes: I think that would be sufficient.

Dr. ALEXANDER WOOD thought it was necessary to instruct the deputation formally upon this important matter, and he therefore moved "that it be a further instruction to the deputation to call Lord De Grey's special attention to the resolution adopted by the Council on the motion of Dr. Bennett."

Dr. APJOHN seconded the motion, but it was lost by a majority of one.

Dr. ALEXANDER WOOD: I have another matter to draw your attention to in clause 10. We have the power of proposing rules, but they may be rejected *in toto* if the Privy Council pleases. Now, I do not think the power of the Privy Council should extend to the rejection of rules framed by the Medical Council. I think it should be limited to deciding points of difficulty as provided for in other parts of the Bill—that in the event of a minority of six complaining that such and such rules are oppressive and injudicious, the Privy Council should decide upon the matter, but that the Privy Council should override the decision of this Council in Medical matters where there is no complaint of that decision, appears to me to be giving up the independence of the Profession altogether. (Applause.) These are my views. The question lies in a nutshell, and it shall be brought before you in this form to-day. Do you think that the Medical Council is capable of regulating the affairs of the Profession, or do you think that henceforth the Privy Council should regulate those affairs? That is the real question. If the 10th clause is agreed to as it stands we shall surrender all our powers to the Privy Council.

Dr. BENNETT: I think Dr. Alexander Wood is quite right in drawing our attention to this most important point. A great deal turns upon those five words, "propose to the Privy Council." There is no doubt that they are most important, and there is no question that the deputation ought to call Lord De Grey's especial attention to them, and to say that we are unanimous in objecting to such a provision. I think it ought to run thus:—"The General Medical Council shall from time to time prepare rules," etc., making no reference to the Privy Council at all there. It may save time if I state now that I have precisely the same objection to make to clause 11, where the matter is not quite so important as it is here; but where it is still very important, and as there may be probably more alteration in that clause, I should suggest some such resolution as this:—"That it is desirable that in clause 11 the power given in paragraphs one and two to the Privy Council, should vest in the General Medical Council, and that only in the event of the Medical authorities, the General Medical Council, and the examining boards, not being agreed as to the examination rules, shall the matters be referred to the determination of the Privy Council." I think great stress should be laid upon the importance of that by our deputation calling Lord De Grey's attention to it, and speaking very firmly and decidedly as to our objections.

Dr. ALEXANDER WOOD seconded the resolution.

After some remarks from Dr. PARKES, who called attention to the terms of the original motion which he moved yesterday, and which, he stated, provided for the objection now raised,

The PRESIDENT said: The resolution passed yesterday was that the deputation should confer with the authorities of the Privy Council with a view of removing ambiguity and defining the action of the Privy Council; but if I am to judge of Dr. Bennett's views by what he says, I think he objects to a great deal of the substance of this. (Applause.)

Dr. ALEXANDER WOOD: I think it is extremely important that a definite resolution such as Dr. Bennett's should be put into the hands of the deputation that there may be no ambiguity as to the duty which they have to discharge, and that the Lord President may see what the views of the Council are. I think besides that we owe it to the public and to the Profession to take this our only opportunity to vindicate our independence as a Profession. Therefore, notwithstanding what Dr. Parkes said, I think we should pass this resolution, and give them all the strength we can.

Dr. ACLAND: I think the Privy Council is entirely right in claiming these powers in clause 10, and wrong in claiming those in clause 11. We have to look to the Government on the one hand as a national power which is bound to enforce a certain course of action upon us. That is one thing; but we have also to remember that in the present action of the constitution of England nothing has a chance in this country which has not a representative in Parliament, who answers for them and protects them, as well as sees that they do their duty. Now we have to stand in that relation to the Privy Council, that the Privy Council, having given us general powers, sees, on the one hand, that we do actually use them, and, on the other hand, sees that frivolous objections and attacks are at once answered. The Privy Council must have power to reject and refuse, as in clause 10; but when it goes into such details as to say that it is going to send notices round, then I think it is travelling into our functions and interfering with us in a manner to which we cannot submit. I am quite willing to be under the Privy Council on all principles to the utmost, because by that means the Privy Council protects us from the legislature; but if the Privy Council comes in and says, "By my subordinates or my authorities I am going to send annual notices," and so on, I think we had better shut up at once. Therefore, I quite support Dr. Bennett's motion. I quite believe it was an oversight, and that Lord De Grey will say "This is a matter of detail; it was an oversight—we will leave the details with you." On the general principle, it appears to me that the Government must have, for their sake and for our own sakes, power to refuse; but, in reference to these little matters, we must be independent. Now I think, if the deputation are so good as to think over that kind of definition of our respective functions, there will be no ambiguity whatever; and then, that being so, the fewer details mentioned to Lord De Grey the better. I exceedingly deplore the length of these paragraphs, especially the one concerning general knowledge. The Privy Council has given us the fullest power, and why should we torment the Lord President upon that? If anything could tend to make the work disagreeable to him who has done everything he can to clear this up, it would be pressing him to give answers upon the points which he wishes us to carry out clearly and well ourselves.

Sir D. CORRIGAN: I rise to say I support cordially Dr. Bennett's resolution. I think it is a matter of absolute necessity, because if that resolution be omitted, the deputation cannot say one word as to the powers of the Privy Council. If we take the resolution of Dr. Parkes, seconded by Dr. Andrew Wood, under which this deputation stands appointed, it is to confer with the authorities of the Privy Council—for what? Not with regard to the powers of the Privy Council, not with regard to limiting them, not with regard to enlarging them, but it is simply with regard to removing ambiguity and defining the action of the Privy Council. Under that instruction the deputation could not say one word of the necessity that exists so strongly in the minds of so many of us here, that the General Medical Council should have a power greater than that which has been accorded to them in the Bill by the Privy Council. Therefore, I think it absolutely necessary that Dr. Bennett's resolution should be passed, not only to remove ambiguity and to define the action of the Privy Council, but with a view of expressing our opinion that these modifications should take place.

Dr. ALEXANDER WOOD moved that the word "prepare" should be substituted for the word "propose," and that the words "Privy Council" in the second line should be omitted.

Dr. PARKES said the Privy Council would insist upon the right of confirming the rules. He was further of opinion that the powers already conferred upon the deputation were sufficient to enable them to remove ambiguity and to define the action of the Privy Council. Those words covered everything.

Dr. ALEXANDER WOOD thought it was very important that a clear statement of the views of the Council should go forth. He challenged Dr. Andrew Wood or Dr. Parkes to show any security by that Bill that every rule submitted to the Privy Council might not be thrown into the waste-paper basket as soon as it was sent in.

Dr. ANDREW WOOD explained the purpose of the clause, which was that the Medical Council should prepare first the examination rules. To understand the reason for that, it was necessary to go to clause 11, where it was provided that the Privy Council should cause notice of such rules to be sent to all the licensing bodies in the kingdom. That was for the purpose of protecting the examining boards and Medical authorities from any tyranny which might be exercised by the Medical Council.

After some further observations from Dr. Bennett and Sir Dominic Corrigan, the Council adjourned to 1 o'clock on Monday.

Fourth Day.—Monday, May 2.

We give the following brief summary of this day's proceedings, which were, comparatively speaking, unimportant.

At the sitting of the Council, the President informed the Council that the Lord President of the Privy Council had been pleased to appoint the following day, May 3, at 2 o'clock, for his reception of the deputation upon the subject of the Medical Acts Amendment Bill; also that the second reading of the Bill was fixed for May 5.

The adjourned consideration was resumed of the following motion, respecting clause 11 of the Bill, moved by Dr. Bennett and seconded by Dr. Alexander Wood:—"That it is desirable that in clause 11 of the Bill, the power given in paragraphs one and two to the Privy Council, should vest in the General Medical Council; and that only in the event of the Medical authorities, the General Medical Council, and the examining boards, not being agreed as to the examination rules, shall the matters be referred to the determination of the Privy Council."

The following amendment, moved by Dr. Andrew Wood and seconded by Mr. Cæsar Hawkins, "That it is desirable, that in clause 11 of the Bill, line 28, for the words 'Privy Council,' be substituted the words 'General Medical Council;' and in clause 11, line 35, for the word 'three,' be substituted the word 'six;' and that after the word 'modifications,' in line 42, there be inserted the words, 'in the manner directed in Clause 7,'' was then debated by the Council and carried.

Upon being put as a substantive motion, it was agreed to.

Clause 12 of the Bill was read, and approved of.

Clause 13.—"Each Medical examining board shall license every person who passes the examination of that board in Medicine and Surgery, and not any other person, to practise in Medicine and Surgery, and the person so licensed shall be called a Licentiate in Medicine and Surgery, and shall be entitled to be registered under the principal Act."

Sir D. Corrigan moved—"That it is desirable that in clause 13 the words 'the General Medical Council' shall be substituted for the words 'each Medical examining board.'"

The motion was seconded by Dr. Arjohn, and on being put to the vote was negatived.

Sir D. Corrigan required that the names and number of those who voted for and against the motion, and of those who declined to vote, be taken down.

Majority, 12.—Dr. Bennett, Mr. Hawkins, Mr. Cooper, Dr. Humphry, Dr. Andrew Wood, Dr. Fleming, Dr. Macrobin, Dr. Thomson, Mr. Hargrave, Dr. Leet, Dr. Parkes, Dr. Quain.

Minority, 6.—Dr. Acland, Dr. Embleton, Dr. A. Smith, Dr. Apjohn, Sir D. Corrigan, Bart., Dr. Stokes.

Declined to vote.—The President, Dr. Storrar, Dr. Alexander Wood, Dr. Sharpey, Dr. Christison.

Clause 14 of the Bill was read, and approved.

Clause 15.—"Every person who is registered under the principal Act shall pay such fee, not exceeding £5, as the General Medical Council may from time to time fix. No person shall be admitted to the examination of any Medical examining board under this Act, unless he has deposited with the treasurer of the Branch Medical Council of that part of the United Kingdom for which such board act, the amount for the time being of the fee for registration. Such fee shall be repaid to an unsuccessful candidate, and in other cases shall be applied as a registration fee is applied under the principal Act."

Upon this clause the following resolution, moved by Dr. Humphry, and seconded by Dr. Storrar, was agreed to:—"That it is desirable that the examination referred to in line 4 of clause 15, as that before admission to which the registration fee shall be paid, should be the final examination before registration under this Act."

Clause 16: "If any person registered as a Licentiate under this Act obtains any Medical diploma, degree, or title, granted by any university, college, or body in any part of her Majesty's dominions, or in any foreign country, which diploma, degree, or title appears to the General Medical Council to be granted in respect of a higher degree of knowledge in Medicine or Surgery than is required for obtaining a licence under this Act, such person shall be entitled, subject to such rules and upon payment of such fee, not exceeding five shillings, as the General Medical Council may from time to time make and fix, to have such diploma, degree, or title registered in the Register under the principal Act, in addition to his licence; and section 28 of the principal Act shall apply to erasing any such diploma, degree, or title, in like manner as if it were the qualification therein mentioned. The General Medical Council may draw up from time to time a list of diplomas, degrees, and titles, which may be registered in pursuance of this section, and may from time to time add to or diminish such list; but no person who has obtained a diploma, degree, or title before the same is added to such list, or the earlier date (if any) fixed by the General Medical Council, shall be entitled to have the same registered under this section, and the removal of any diploma, degree, or title from such list shall not deprive any person entitled before such removal to have the same registered of his right to have the same registered."

Dr. Humphry moved, in reference to this clause—"That it is desirable that powers should be given to the General Medical Council to ascertain whether the Medical diplomas, degrees, and titles referred to in clause 16 are granted in respect of a higher degree of knowledge in Medicine and Surgery than is required for obtaining a licence under this Act."

The motion was seconded by Mr. C. Hawkins.

Dr. Andrew Wood moved, and Mr. Hargrave seconded, the following amendment:—"That, in the opinion of this Council, it is inexpedient to call upon the Council to decide which are higher and which are lower titles, and that in column 3 of the proposed new register all Medical or Surgical titles given by bodies under Royal Charter should be inserted on due proof being given of possession of the same."

This amendment, upon being put to the vote, was carried, and was then proposed as a substantive motion; upon which Dr. Leet moved, and Mr. Hargrave seconded, the following amendment:—"That, after the words 'by Royal Charter,' the words 'or by Act of Parliament' be inserted.

The amendment was negatived.

The motion was then again put to the vote, and agreed to.

Clause 18.—"After the date fixed for the commencement of the examinations by any Medical examining board under this Act, none of the Medical authorities shall grant any of the qualifications mentioned in schedule (A) to the principal Act as amended by this Act, or by any of the Acts mentioned in the first schedule to this Act, except to persons registered or qualified to be registered under the principal Act."

Dr. Storrar moved—"That clause 18 should leave it to the option of a candidate for a licence to pass the examination required for it, either before or after graduation in Medicine or Surgery at a university."

The motion was seconded by Dr. Humphry.

In the course of an animated debate Sir D. Corrigan moved the following amendment:—"That clause 18 should leave it to the option of a candidate for the licence proposed by the Bill, to pass the examination required for it, after graduation or licence in Medicine or Surgery, granted by any university or College of Physicians or Surgeons in the United Kingdom."

The amendment having been seconded by Mr. Hargrave, was put to the vote and lost. The motion was carried by a large majority. The names and numbers were:—

Majority (13).—Dr. Acland, Dr. Humphry, Dr. Embleton, Dr. Storrar, Dr. Macrobin, Dr. Thomson, Dr. A. Smith, Dr. Leet, Dr. Apjohn, Dr. Sharpey, Dr. Quain, Dr. Christison, Dr. Stokes.

Minority (7).—Mr. Cooper, Dr. Alexander Wood, Dr. Andrew Wood, Dr. Fleming, Mr. Hargrave, Sir D. Corrigan, Bart., Dr. Parkes.

Declined to vote.—The President, Dr. Bennett, Mr. Hawkins.

The hour of six having arrived, by suspension of standing orders it was agreed that the Council should meet at four o'clock in the afternoon, in order to give the deputation the opportunity of meeting the Lord President of the Privy Council before the sitting of the Council.

Fifth Day.—Tuesday, May 3.

The deputation having been appointed to wait on the Lord President of the Privy Council on the morning of Tuesday, the meeting of the Medical Council did not take place until four o'clock in the afternoon at Soho-square.

The roll having been called,

The Chairman made the following announcement as to the result of the deputation:—Gentlemen,—The deputation appointed to wait upon and have an interview this morning with Lord De Grey at the Privy Council Office have performed the duty which you imposed upon them. There are several members of the deputation present now, and I hope they will supplement what I have to say, because there were so many topics of conversation that I may very likely forget a portion of them. The Lord President, of course, was present to receive the deputation, and the Vice-President of the Council, Mr. Forster. There were

also present the Medical Officer and the Law Officer of the Privy Council, and Mr. Jenkins, who was the draftsman of the Bill. We were received, as the Executive Committee has always been received, by Lord De Grey with great courtesy and frankness, and the conversation was conducted in every respect satisfactorily. We spoke with the Lord President upon several different topics. The first was as to the power of the Privy Council, and on that as on all other topics of conversation we drew the attention of his lordship to the resolution which had been passed by the Medical Council during its present sittings upon that point. We also drew his attention to the resolution which was moved by Dr. Parkes, which is in page 66 of the minutes, and to the resolution in the form of clauses that was moved by Mr. Cæsar Hawkins. The Lord President assured us, as he had previously assured the Executive Committee, that it was not intended by the Bill that the powers of the Privy Council should extend to more than really and truly modifications of what was brought before them—that is to say, a power of modifying matters of detail, but not of introducing new matter at all either in the schemes for examining boards or in the examination rules. With regard to one of the most important parts of the clauses proposed by Mr. Cæsar Hawkins, substituting the figure 6 for 3 as a minimum number of members of this Council who should have the right of appeal to the Privy Council against the opinion of the majority of their colleagues, I am happy to say Lord De Grey assented to that alteration. I understood him distinctly to be willing to allow such a modication. I think that was the substance of what passed except that there was one other thing that was mentioned, and upon that Lord De Grey was willing to hear the opinion of the Council if it desired to express an opinion—namely, whether in case the Privy Council differed from this Council in regard to the scheme laid before them, either for the establishment of examining boards or for examination rules, his Lordship would be willing to and desirous perhaps of hearing the opinion of the Council as to whether they would like, in case of such difference arising, that words should be inserted in the Act to allow the General Medical Council to withdraw the scheme proposed by them—and of course the withdrawal of one would lead to its becoming the duty of the Medical Council to propose another in lieu of that which the Privy Council had refused to give its consent to. That I think was the substance of what was a much longer conversation with Lord De Grey upon the matter. But if any of my colleagues upon this rather important question remembers anything which I have omitted, I shall be very glad if he will mention it. There was a distinct disclaimer by Lord De Grey of any wish on the part of the Privy Council for more powers than are expressed in the ordinary meaning of the word modification.

Dr. Parkes: I think he said he would consider whether he could not withdraw the word modification and substitute something else that would more nearly convey the meaning we have expressed.

Dr. Storrar: The meaning I suppose he wishes to express is that the Privy Council has a veto.

The President: That is understood.

Dr. Storrar: And then that the Medical Council would withdraw the scheme and propose another for his consideration.

The President: Yes: The Privy Council necessarily have a veto.

Dr. Apjohn: I collect that in the case of the withdrawal of the scheme the whole scheme would fall to the ground.

The President: Yes; and it will be remembered that when I put it to his lordship in that way whether it would not possibly bring matters to a lock, Mr. Forster, the Vice-President, said, "No—then the Medical Council would have to propose another scheme." (Applause.) Then the next matter of conversation with the Lord President was the question of the higher titles—clause 16 of the Bill. Of course, we drew his attention to the resolution of the Council a day or two ago. The Lord President seemed to be somewhat surprised at that resolution. It was at variance with opinions that had been expressed to him, as I understood him to say, by some other deputation this very day.

Dr. Parkes: The two Royal Colleges.

The President: Of course, I mentioned to Lord De Grey what was plain from the remarks that were made by many members of the Council in discussing this matter—namely, that it would be a matter of both difficulty and delicacy on the part of the Council to determine those higher titles; and another member of the deputation (Dr. Christison) mentioned that it was possible that it might be a subject of discord in the Council.

Mr. Hawkins: There was a proposal also to consider whether the words "other title," instead of "higher title," should be adopted.

Dr. Parkes: He seemed disposed to put in the word "other," I thought.

Dr. Andrew Wood: There is no objection to that.

The President: He mentioned the difficulties or inconveniences that would arise from putting "other titles" without limitation—namely, that in that case titles of all sorts and kinds from every possible quarter would come under our discussion.

Dr. Andrew Wood: Unless there was a schedule as in the Act of 1858.

Sir D. Corrigan: Which simply authorised titles conferred by Medical authorities in the United Kingdom.

Dr. Aquilla Smith: The chartered bodies.

The President: Then the next question was the granting of university degrees to persons who had not passed the conjoint examination. That, Lord De Grey had under his consideration previous to our interview. He said it did not involve the principle of the Bill, and he was willing to yield it, but he did not appear himself to be of the same opinion as was expressed by the Council; and I am bound to say he mentioned a reason against it which was not mentioned in the course of the debate, and which I think, therefore, it is proper I should now mention to the Council. It is this: he thinks that the exemption of university graduates from the operation of the strict law of passing the Licence Examination may endanger the passing of clause 22, and put it into peril; and that is a clause to which both this Council and the Profession at large attach very great importance—a clause which proposes to impose a penalty upon the assumption of a title by unregistered persons. He thought it would imperil that clause in this way, that if it were stated in the House of Commons that Doctors of Medicine of the University of London, however great their qualification in science might be, not having passed the examination of the conjoint board, would be subject to a penalty of £20 for practising, although it would be notorious that they had passed a sufficient examination to test their capacity. But Lord De Grey himself thought the clause was not essential to the principle of the Bill, and was willing to yield if the desire were very strongly expressed by the universities and other bodies.

Dr. Christison: Upon that point I think he ended by saying that it was a matter in which he would be guided by the universities.

Dr. Andrew Wood: By the universities?

Dr. Christison: Yes.

Dr. Andrew Wood: Does he mean to say he would not receive a deputation from the other bodies?

The President: He did not say so, certainly; but, on the contrary, with a fairness which has always characterised all that I have seen of Lord De Grey in this matter, he said, "Let me look at the minutes and see the amendment; that sometimes enlightens one with regard to a resolution;" and he saw the amendment proposing to give the same power to the corporations.

Dr. Andrew Wood: And he saw the division?

The President: And he also saw the division.

Dr. Parkes: What he said about the universities was, that if they would consent to put their graduates under the disadvantage of passing the subsequent examination for a licence, he was not disposed to oppose their wishes; but he considered they would be put under a disadvantage which they must fairly consider, and that if they did not mind it he would not object.

Dr. Christison: I hope Dr. Andrew Wood will understand my statement distinctly. It was, that the Lord President did not see any difficulty, except that which would arise among the universities themselves. He did not desire to have any of their graduates subject to a prosecution for not passing the examination of the conjoint board, but he said he did not see any reason for not granting the licence.

The President: Then the deputation called his lordship's attention to the resolution upon clause 10 with reference to general knowledge. That resolution was passed on the motion of Dr. Alexander Wood. His lordship requested the draftsman of the Bill to tell us whether the words "general knowledge" as they occur in the Bill would cover what was required by the Medical Council as expressed in the resolution; and we had an assurance from him and the draftsman of the Bill that care should be taken that they should be made to do so. There were some smaller details as to the mode of procedure recommended and indicated in the clauses proposed by Mr. Cæsar Hawkins, and the attention of the Lord President was

drawn to them; no difficulty was raised by his lordship npon that; and he in particular desired that all the minutes, as far as they had gone, and as far as they should go to the end of the session, should be sent to him for his consideration. (Applause.) He was informed that the discussion upon the Bill was not ended. He asked whether we, as a deputation of the Council, could give him a general approval of the Bill. I told him we could not, because that had not been discussed, but that there was, in fact, a notice of motion to discuss it before we separated. There is one other point of interest to Mr. Cooper which I may mention. Lord De Grey had not forgotten the communication which had been made to him from the Council as to granting to those bodies which do not already possess it, the power of striking off names from the rolls. Lord De Grey seemed to think that there would be a considerable difficulty in a general measure of that kind applicable to all the universities and corporations in giving such a power in this Bill; but he said that if the Medical Council had found by experience, or were very strongly of opinion, that the powers given under the section of the Act of 1858 which enables this Council to strike names off the Register were not sufficient, he should be most willing to consider the propriety of extending those powers. The Lord President was informed as to what the proceedings of the Council have been upon clauses 3 and 13. He was told that the opinion of the considerable majority of the Council was decidedly adverse to the principles of those clauses; but that when the Council found they were regarded by him as a *sine quâ non* of the Bill, they renounced that decision. Then his attention was drawn to the resolution passed upon the motion of Dr. Bennett, and upon that he had a more full explanation from my colleagues. I think that is all that passed. If I have forgotten anything, I hope my colleagues will supply the defects.

Dr. Bennett: I do not know whether it may not assist the Council, if there is any discussion upon the point you have mentioned as to the power of the Privy Council, if I were to state what passed at the deputation previous to the one at which you were present, in which this question came up very prominently, in a somewhat new light. His lordship gave what seemed to be an unanswerable reason for introducing in some shape or other the supervising power of the Privy Council, although he told us, as he did you, that there was not only no intention to make use of this power unduly, but that he had a good legal authority for believing that the words of the Bill would not give the Privy Council such power even as they now stood; but if there was any doubt about it he had no objection to give the draftsman instructions to modify it so as to render it as free from doubt as possible. With reference to the other portions where general power of acceptance or veto is given to the Privy Council, he gave this very satisfactory reason for it. He said there were but two courses open in introducing this Bill into Parliament—one was that there would be a general power given to us of preparing a scheme, and letting a Bill go through Parliament sanctioning that cut and dried scheme. In that case there would have been no occasion to have made reference to the Privy Council or any other department of Government whatever; you would have had an Act of Parliament under which you were acting, and there would have been no control beyond the Act of Parliament at all. If you had needed any modifications in that scheme it would have been absolutely necessary to have gone to Parliament each time. The other plan was the one he adopted, thinking it was more courteous to the Council, and that it would give the Medical authorities more power, and give them full scope to propose the thing according to their view, and to modify it from time to time according to the requirements of the Profession. But if such a Bill were brought into Parliament it would have been impossible to pass it without having superadded to it a proviso that what you did would be brought under the notice of parties responsible to Parliament. Therefore it was necessary that some such general power should be given to the Privy Council or some other department. That struck me as a very important mode of looking at, and considering the thing, there was so much reason in it that I really felt there was no more to be said against the general principle of supervision, especially as the Lord President had in the most emphatic way denied that there ever had been any intention or possibility of interfering on the part of the Privy Council by these modifications beyond such matters as came legitimately within its province. There was another most important point which was discussed at that deputation—namely, the necessity of securing that no one should get on the register without having obtained the licence of the one body. He had put it to the Lord President in this way: Suppose the scheme admits of the examinations being divided into several parts—say, three parts—and that one of those is undertaken by one board, and another by another, and then the final part of the examination is conducted by the conjoint board, who would have a general supervision over the whole. Until that final examination had been passed no licence would be receivable, but those who had gone up to the previous examinations—for example, the one conducted by the College of Surgeons or College of Physicians of London—would have a claim to attach themselves to one or the other of those bodies if they had passed satisfactorily the examinations instituted by them, and submitted to the conditions of those bodies for the reception of their title. The thing evidently struck his lordship very forcibly. He said: "That is a very good suggestion; I do not at present see there is anything in the scheme which would prevent it, but I should not like to pass any direct opinion upon it. It shall have my best consideration." It was quite evident that it presented itself favourably to his mind, and that he did not at that moment see any objection to such an arrangement. If that were so, many of the difficulties would be overcome—certainly those with regard to the universities.

Dr. Andrew Wood: How?

Dr. Bennett: Because they would be able to conduct a considerable part of the examination by themselves, before their graduates go up to the conjoint board.

Dr. Andrew Wood: Would they be entitled to conduct the whole of it?

Dr. Bennett: Certainly not; only the preliminary part.

Mr. Hawkins said the deputation did not forget the question raised by Dr. Humphry's motion upon the word "final."

The Chairman mentioned several other minor matters which had taken place during the interview, and the Council proceeded to the consideration of clause 18.

(To be continued.)

MEDICAL NEWS.

University of St. Andrews.—The following gentlemen having passed their examinations, obtained the degree of Doctor of Medicine on April 27 last:—

Browne, William, M.R.C.S. Lond., L.A.C., Lichfield.
Hunt, William J., F.R.C.P. Ed., L.R.C.P. Lond., London.
King, Thomas, M.R.C.S., and L.S.A., Rochford, Essex.
Kriekenbeck, Charles A., L.R.C.P.L., R.C.S. Ed., Colombo, Ceylon.
McKeller, Edward, M.R.C.S.I., Surgeon Bengal Army, London.
March, John, M.R.C.S., L.S.A. and L.M., New Wandsworth.
Reeves, William, M.R.C.S.L., L.A.C., Carlisle, England.
Robinson, John, F.R.C.S., L.S.A., Midhurst, Sussex.
Walker, Hugh E., M.R.C.S., L.S.A., L.K. and Q.C., L.M. Dub., Chesterfield.
Walker, William H., L.R.C.P. Edin., M.R.C.S. Lond., Aldbro', Darlington.

Royal College of Physicians of London.—At the quarterly meeting, April 28, the following gentlemen, having passed the required examinations, were admitted as Members:

French, James, Cheltenham.
Jelly, William, 21, Great Western-terrace, Paddington, W.
Snow, William Vicary, M.D. Lond., 1866, Richmond-gardens, Bournemouth.
Thomson, John Roberts, M.D. Edin., 1866, L.R.C.P. Lond., 1866, Bournemouth.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 3rd inst.:—

Bowles, William Wallace, Folkestone, of St. George's Hospital.
Brash, Edward Alexander, Exeter, of St. Bartholomew's Hospital.
Butler, William John, Albion-street, W., of St. Mary's Hospital.
Collins, Edward Lorton, L.S.A., Canterbury, of Guy's Hospital.
Dutt, Russick Laul, L.S.A. Lond., Calcutta, of University College and Calcutta.
Gamble, Charles Edward, L.S.A., Fulneck, near Leeds, of the Leeds School.
Gibson, John Charles, L.S.A., Somerset-place, Brixton, of King's College.
James, James Bowen, L.S.A., Llandovery, Carmarthen, of the Middlesex Hospital.
Noakes, Samuel Silverthorne, Newhaven, Sussex, of the Charing-cross Hospital.
Peacock, Henry George, Gloucester, of Guy's Hospital.
Pinder, John William, L.R.C.P. Edin., and L.S.A. Lond., Horsforth, near Leeds, of the Leeds School.
Smith, Edwin, Birmingham, of the Birmingham School.
Wallis, Ferdinand, Bessborough-gardens, of the Westminster Hospital.
Webb, Thomas Law, Salop, of the Birmingham School.

The following gentlemen were admitted Members on the 4th inst.:—

Bayliffe, Alworth Merewether, L.S.A., Chippingham, Wilts, of the London Hospital.
Healey, Thomas St. Clair, Hull, of the Hull School.

Hunt, Thomas Henry, Manchester, of the Manchester School.
Male, Henry Davis, L.R.C.P. Lond., Yeovil, Somerset, of St. Thomas's Hospital.
Maybury, William Augustus, Frimley, Surrey, of St. Thomas's Hospital.
Morris, William Jones, Portmadoc, Carnarvonshire, of the Glasgow School
Roberts, William, St. John-street-road, of St. Bartholomew's Hospital.
Roy, Gopaul Chunder, Lic. Med. and Surg., Calcutta, of the Calcutta School.

APOTHECARIES' HALL. — The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, April 28, 1870 :—

Field, George Purdey, Sussex-gardens, W.
Lattey, Arthur, Cambridge-place, W.
Lidbetter, Thomas George, Cliftonville, Brighton.
Morton, Samuel, Sheffield.
Walsham, William Johnson, Tyndall-place, Islington.

As Assistants in Compounding and Dispensing Medicines :—

Bell, James, The Orchard, Ambleside.
Boden, Samuel, Royal Asylum, Chelsea.
Thompson, John Thomas, Richmond, Yorkshire.

The following gentlemen also on the same day passed their First Professional Examination :—

Beech, Lionel, London Hospital.
Lycett, John Allan, Middlesex Hospital.
Russell, Ebenezer George, Guy's Hospital.

At the Preliminary Examination in Arts, held at the Hall of the Society on April 29 and 30, 1870, 46 candidates presented themselves, of whom 17 were rejected, and the following 29 passed and received certificates of proficiency in general education, viz. :—

In the First Class, in Order of Merit.

(First.) Joseph Tyson.
(Second) John Henry Badcock and Arthur Littlewood Tate.
(Third) H. W. Phillips.

In the Second Class, in Alphabetical Order.

Allen, Morgan Henry.
Balshaw, Edward Pass.
Bickford, William.
Black, Robert Francis.
Brenchley, Algernon D.
Coles, Robert Stratton.
Dearden, John Alfred.
Dickinson, William Gilbert.
Forty, David Herbert.
Greenwood, T. P.
Hodding, Samuel White.
Hes, Alfred Robert.
Jones, Timothy Siddall.
Lightoller, Harry Martin.
Maberly, William Henry.
Makins, George Henry.
Marsh, Herbert Elliott.
Prowse, William Byass.
Robinson, George Winsor.
Ross, William Abraham.
Rossell, John Christopher.
Rudduck, John Burton.
Sargent, Arthur.
Thorpe, Henry Stanley.
Wellington, George.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

FISHER, S. WINTER, M.D.—Physician to the Bristol Hospital for Sick Children.

ROBERTS, DAVID WILLIAM, M.B. and C.M.—House-Surgeon to the Carnarvonshire and Anglesey Infirmary, *vice* T. O. Williams, Esq., resigned.

NAVAL APPOINTMENTS.

Dr. John Nihill, Staff-Surgeon to the *Pallas;* Henry Slade, Surgeon to the *Tamar*, additional, for temporary service; and James Johnstone, Surgeon to the *Pembroke*, additional, for service in the *Reserve*.

BIRTHS.

ARNOTT.—On March 27, at 6, Nottingham-place, the wife of Henry Arnott, Esq., of a son.

BARLOW.—On April 24, at Norfolk House, Albion-road, Dalston, the wife of Robert Barlow, M.R.C.S. Eng., of a daughter.

FEGEN.—On April 25, at 6, St. Jean D'Acre-terrace, Stoke Devonport, the wife of William Banks Fegen, Staff Surgeon Royal Navy, of a son.

INKSON.—March 25, at Lucknow, the wife of I. Inkson, M.D., of a daughter.

SOUTHEY.—On April 27, at 32, Montague-place, Russell-square, the wife of Reginald Southey, M.D., of a son.

MARRIAGES.

BOURSOT—CRITCHETT.—On April 28, at St. Andrew's, Wells-street, Edward Claude Henry, second son of Adolphe Boursot, Esq., of St. Pierre les Calais, to Amy Eliza, only daughter of George Critchett, Esq., of 21, Harley-street, Cavendish-square. No cards.

FOGO—HILL.—On April 28, at St. George's Church, York-place, Edinburgh, Alexander Scott Fogo, M.D., Royal Artillery, to Janet Dixon, only daughter of the late James Hopkirk Hill, Esq., Brandon-place, Glasgow, and granddaughter of Lawrence Hill, Esq., of Barlanark, Lanarkshire, and Burley Lawn, Hampshire.

HARRIS—BATCHELOR.—On April 30, at the parish church, Streatham, John B. Harris, L.R.C.P., M.R.C.S., of Lower Norwood, to Alicia Kate, youngest daughter of George Batchelor, Esq., of West Dulwich, Surrey.

KEDDLE—MOOR.—On April 26, at Stoke St. Gregory, near Taunton, the Rev. Samuel S. Keddle, M.A., assistant-curate of Wimborne Minster, Dorset, and younger son of S. S. Keddle, J.P., M.D., The Elms, Beaminster, Dorset, to Margaret A. M. H. Moore, elder daughter of the Rev. Richard Watson Moor, vicar of Stoke St. Gregory.

LOCH—BEECHAM.—On April 25, at the British Consulate, and at the British Church, Nice, William James Loch, Surgeon retired Bengal Army, to Charlotte Beecham, daughter of the late W. P. Beecham, of Hawkhurst, Kent.

MATTHEWS—MOULE.—On April 28, at the parish church, Royston, J. Forrester Matthews, Surgeon, of St. Austell, Cornwall, to Laura Elizabeth, youngest daughter of the late Mr. Stephen Hughes Moule, of Kneesworth, Cambs.

TAYLOR—ALLANBY.—On April 26, at the parish church of Dearham, Cumberland, the Rev. James Taylor, of Brigham, near Cockermouth, to Anne Williamson, only daughter of the late J. S. Allanby, M.D., of Hampstead, Middlesex. No cards.

WATSON—ARNOLD.—On April 30, at Rickmansworth, Herts, Samuel Watson, Lymington, Hants, eldest son of Samuel Watson, F.R.C.S. Edin., of Cottingham, Hull, to Ellen Georgina, daughter of the Rev. Charles Arnold, Rector of Tinniel, Rutland, and Hon. Canon of Peterborough Cathedral.

DEATHS.

BATTEN, MARION, the beloved wife of Rayner Winterbotham Batten, M.D., and daughter of the late S. Leonard, Esq., of Clifton, at Brunswick-square, Gloucester, on April 29, aged 32.

EVANS, CATHERINE, eldest surviving daughter of the late Richard Evans, M.D., of Ross, Herefordshire, at Wilton Castle, on April 26.

GAUSSEN, JAMES ROBERT, Assistant-Surgeon, Royal Artillery, youngest son of Charles Gaussen, Esq., of Gardiner's-place, Dublin, at the residence of his father-in-law, W. H. Bayley, Esq., 25, Cambridge-square, Hyde-park, on April 28.

HAWARD, Staff Assistant-Surgeon, H.M.S., only son of Edwin Haward, M.D., 40, Nottingham-place, W., on April 28, a few days after his arrival from India, at the Oriental Hotel, Southampton, aged 31.

LEIGH, ALEXANDER, Physician and Surgeon, formerly Assistant-Surgeon 60th Rifles, at 47, La Motte-street, St. Helier's, Jersey, on April 30, aged 59 years and 3 months.

WEATHERS, ELIZA, the beloved wife of O. Weathers, Surgeon, of 144, Hampstead-road, N.W., suddenly, on April 29, aged 52.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

CITY OF LONDON LYING-IN HOSPITAL, CITY-ROAD.—Surgeon-Accoucheur. Candidates must reside in the neighbourhood of the Hospital. Applications and testimonials to the Secretary on or before May 17. Election on the 18th.

CORK SOUTH CHARITABLE INFIRMARY AND COUNTY HOSPITAL.—Medical Officer for the Intern Department, and Surgeon for the Extern Department. Candidates must hold the licences of the King's and Queen's College of Physicians in Ireland, and the Royal College of Surgeons in Ireland. Applications and testimonials to the Board of Trustees on or before May 12. Election on the 13th.

CRANBROOK UNION.—Medical Officer for Hawkhurst Parish. Candidates must possess the qualifications prescribed by the general orders of the Poor-law Board, and be registered. Applications and testimonials to Henry J. Farrar, Clerk, Cranbrook, Kent, on or before May 10. Election on the 11th.

HALIFAX INFIRMARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to Dr. Alexander, Halifax, on or before May 10.

INFIRMARY FOR CONSUMPTION AND DISEASES OF THE CHEST, 26, MARGARET-STREET, CAVENDISH-SQUARE.—Visiting Physician; must be M.R.C.P. Lond. Testimonials to the Secretary on or before May 11.

LIVERPOOL NORTHERN HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Chairman of the Committee, on or before May 7. Election on the 11th.

LIVERPOOL ROYAL INFIRMARY.—Junior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee, on or before May 28.

LONDON FEVER HOSPITAL. — Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, Islington, on or before May 9. Election on the 13th.

ST. GEORGE, HANOVER-SQUARE, DISPENSARY. — Physician; must be M.R.C.P.L., not practising pharmacy. Applications and testimonials to the Honorary Secretary, 59, Mount-street, Grosvenor-square, W., on or before May 7. Personal attendance will be required at the meeting on the 10th at 4·30 p.m.

SUNDERLAND INFIRMARY.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, W.—Physician; must be M. or F.R.C.P. Eng. Applications and testimonials to the Secretary, on or before May 9. Election on May 11.

WESTERN GENERAL DISPENSARY, 264, MARYLEBONE-ROAD, W.—Surgeon in Ordinary; must be M. or F.R.C.S. Eng., and be registered. Applications and testimonials to the Secretary, on or before May 9. Election on the 11th.

WINCHCOMB UNION, GLOUCESTERSHIRE.—Medical Officer for the Hill District. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Henry Plumbe, Clerk to the Guardians on or before May 19. Election on the 21st. A Medical Officer is also required for the Union Workhouse.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Cheadle Union.—Mr. Charles H. Greene has resigned the Caverswall District; area, 3136; population, 3047; salary, £18 per annum.

Honiton Union.—The Fourth District is vacant; area, 14,040; population, 5121; salary, £112 per annum.

APPOINTMENTS.

Abergavenny Union.—R. Smythe, L.R.C.P. Edin., L.F.P. and S. Glas., to the Abergavenny District; Samuel H. Steel, M.B. Lond., M.R.C.S. Eng., to the Llanarth District and the Workhouse.

Barnsley Union.—Edward Crockett, M.R.C.S.E., L.R.C.P., to the Wombwell District.

Frome Union.—James F. Smith, M.R.C.S. Eng., L.S.A. Lond., to the Kilmersdon District.

Hackney Union.—Alfred Butler, M.D. St. And., M.R.C.S.E., L.S.A., to the South Hackney West District.

Holyhead Union.—Edward P. Edwards, L.R.C.P. Edin., L.S.A. Lond., L.F.P. and S. Glas., to the Bodedern District.

Mansfield Union.—William A. Stamford, M.R.C.S.E., to the Sixth District.

Prescot Union.—Charles M. Deane, M.D. Edin., M.R.C.S.E., to the Rainford District.

Taunton Union.—Wavell A. Dene, M.R.C.S. Eng., L.S.A., to the Bishops-Lydeard District.

York Union.—Alfred E. Wilmot, M.R.C.S. Eng., M.R.C.P. Lond., to the Eighth District.

We hear that there have been two deaths from chloroform at University College within a month.

Professor W. H. Corfield's lectures on hygiene will commence at University College on Tuesday, May 10.

University of London.—The following have been appointed Examiners for 1870-71:—Chemistry: Dr. Matthiessen, F.R.S., and Professor Odling, M.B., F.R.S. Botany and Vegetable Physiology: Joseph Dalton Hooker, M.D., LL.D., F.R.S., and Thomas Thomson, M.D., F.R.S. Geology and Palæontology: Professor Duncan, M.D., F.R.S., and Professor Morris, F.G.S. Practice of Medicine: John Syer Bristowe, M.D., and Professor J. Russell Reynolds, M.B., F.R.S. Surgery: Professor John Birkett, F.R.C.S., and F. Le Gros Clark, F.R.C.S. Anatomy: Professor William Turner, M.B., and Professor John Wood, F.R.C.S. Physiology, Comparative Anatomy, and Zoology: Michael Foster, M.D., and Henry Power, M.B. Obstetric Medicine: Robert Barnes, M.D., and Professor W. M. Grailey Hewitt, M.D. Materia Medica and Pharmaceutical Chemistry: Thomas R. Fraser, M.D., and Professor Alfred Baring Garrod, M.D., F.R.S. Forensic Medicine: E. Headlam Greenhow, M.D., and Thomas Stevenson, M.D.

Glasgow University.—The winter session of this University closed on Friday last, and the old college buildings in High-street have ceased to exist for academic purposes. The next session will be opened in the splendid new edifice at Gilmore-hill, which has cost to erect some £250,000, of which sum only about £3000 remains to be subscribed.

Faculty of Medicine of Paris.—M. Daremberg has been elected to fill the new chair of Medical History, and M. Chauffard to that of General Pathology.

Dr. Maurice H. Collis.—A marble bust of this gentleman is to be placed in the hall of the Meath Hospital, Dublin, "in commemoration of his long-continued and unwearied services in behalf of the Hospital, as an active and prominent member of the standing committee and Medical board, and in token of his eminence as a Surgeon and his ability as a contributor to Medical literature."

Boarding-out of Pauper Children.—The committee of the Bath Board of Guardians have reported that from their first year's experience of this system it has been successful, and has not failed in any single respect. Since it has been adopted by the Bath Union, twenty-two other unions have followed the example, and in others it is under consideration.

The University of Philadelphia has conferred the honorary degree of LL.D. on Mr. Baxter Langley.

The Royal Medical College.—The sixteenth annual festival of this institution was held on Wednesday evening, at the Freemasons' Tavern, Mr. W. H. Smith, M.P., in the chair. There are at present fifty foundation scholars, who receive board and education free. There are also twenty-four pensioners on the funds of the institution, provided with all the comforts of a home, of whom twenty-one are widows of Medical men, and three are aged Medical Practitioners. Besides providing for the more destitute of those of the Medical Profession, their widows and children, a school for the education of the sons of Medical men is provided at a reasonable rate. There are now about two hundred sons of the Medical men of this country being educated at this college. It is now intended to make provision for ten additional pensioners, the election of candidates to which positions will take place on the 17th of this month. Those, however, will be out-pensioners receiving annuities without residence. Since the last meeting of the friends of the College three boys have matriculated at the University of London—one with honours, and two in the first class. Six distinguished themselves in the preliminary examination at the College of Surgeons. At Cambridge one of the pupils gained the Tancred Studentship in Physics at Caius College; Mr. Newton gained an open Scholarship at St. Catherine's; Mr. Eleum the classical prize at Sidney College. At Oxford Mr. H. J. Woodhouse won the Cashberd Scholarship at St. John's; whilst others have equally distinguished themselves at Guy's and St. Bartholomew's Hospitals. Donations and subscriptions to a large amount were announced.

Collegiate Examinations.—At the pass examinations for the diploma of membership of the Royal College of Surgeons, which have just been brought to a close, forty candidates presented themselves. Of this number eight were altogether referred, four of whom had already licenses to practice. Twenty-four were examined in Medicine, and eleven rejected. Nine having passed in Surgery will be admitted members when qualified in Medicine. Fourteen candidates had the following qualifications—L.S.A., 10; L.R.C.P. Edin., and L.S.A., 1; L.R.C.P. Lond., 1; Lic. Med. and Surg., Calcutta, 1; and B.A. Cantab, 1. The following questions on Surgical Anatomy, and the principles and practice of Surgery, were submitted to the candidates at the written examination, and at the examination on bandaging, etc., each candidate had twenty minutes at two tables instead of ten at one as heretofore, a great improvement, and one well calculated to test the practical knowledge of the candidate:—1. Describe the usual form of cancer affecting the testicle. Mention other structures which become affected during the progress of the disease. State the treatment which may be employed, and the probable result. 2. Mention the circumstances attending a compound dislocation at the ankle-joint which would induce you to amputate. 3. Describe the relative position of the subclavian artery in the third part of its course; and the different steps of the operation by which the vessel may be exposed. 4. Mention the kind of accident which might produce fracture of the base of the skull; and describe the symptoms which indicate such an injury. State the treatment to be adopted, and the probable or possible result. 5. Describe all the symptoms which indicate a fracture of the clavicle in the middle of the bone. State the position of the broken ends of the bone, and the cause of the deformity produced. Describe the treatment. 6. Myeloid disease: Describe the local appearance and the symptoms of myeloid disease. Mention its microscopic character. State the treatment, and the probable result.

Supper and Presentation to Dr. James Lawrie.—On the eve of his departure for London, as the sphere of his future practice, Dr. Lawrie was entertained by a number of his friends in the Waverley Hotel, Sauchiehall-street, Glasgow, on the evening of the 27th ult. About twenty gentlemen sat down to supper. The chair was taken by Dr. Eben. Watson. In the course of the evening, Dr. Watson, in the name of the subscribers, presented Dr. Lawrie with a very handsome time-piece, silver inkstand, and some standard volumes in Medicine and Surgery. The time-piece bore the following inscription:—"Presented, along with a silver inkstand, to Dr. James Lawrie, on the occasion of his leaving Glasgow, by his Professional brethren and private friends, as a token of the esteem in which he is held as a Medical practitioner and gentleman."

NOTES, QUERIES, AND REPLIES.

Ye that questioneth much shall learn much.—*Bacon.*

T. C. A.—Sorry your note came too late.

A Village Surgeon.—The work of Mr. Braid on Mesmerism, etc.

Dr. Burney Yeo has removed from Clarges-street. His address is now 60, St. James's-street, S.W.

Dr. Paterson.—Dr. Williams has fairly established his reputation in a court of law and before the Profession generally. It would, therefore, be hardly competent to us to reopen the question by entering into any discussion as to the nature, etc., of the case referred to.

The Manchester Medico-Ethical Association.

*** We have been requested to publish the following petition:—

To the Right Honourable the Lords Spiritual and Temporal in Parliament Assembled,

The Petition of the Undersigned on behalf of the Manchester Medico-Ethical Association.

Humbly Sheweth,—That the various existing Acts legislating for the Medical Profession are very imperfect and unsatisfactory, inadequate to the requirements of the Medical Profession, and especially to the welfare of the public.

That your petitioners in common with the bulk of the Medical Profession,

are highly gratified with the manner in which the present Government has undertaken the charge of a Bill for the reform of Medical legislation, and respectfully submit the following suggestions :—

That in order that the General Medical Council should have the full confidence of the Profession, the general body of Practitioners should be directly represented therein.

That it is desirable that for the future entrance into the Profession shall be by one sole portal of examination uniform in the three divisions of the United Kingdom, and that this examination shall entitle to registration and right to practise.

That it is desirable that the examiners be appointed by the State and General Medical Council conjointly.

That, as Parliament has decided on the expediency of persons requiring Medical aid being enabled to distinguish qualified from unqualified Practitioners, it is desirable that all unregistered persons who, for objects of gain, assume any designation used to distinguish qualified Practitioners in Medicine and Surgery shall be amenable to penalties, and that the General Medical Council, or some other legal authority, shall have power, and be required to prosecute such persons.

And your petitioners will ever pray.

(Signed) Richard Allen, President.
Jonathan Wilson, Vice-President.
Charles Hitchman Braddon, Honorary Secretary.

COMMUNICATIONS have been received from—

T. C. A.; Dr. E. Van Millingen; Dr. H. Bonham Carter; Dr. Black; Mr. Lloyd Owen; Dr. Burney Yeo; Mr. John L. Paterson; Dr. Holman; Dr. T. Britton; Mr. T. Stokes; Dr. E. Long Fox; Dr. H. C. Andrews; Mr. D. W. Roberts; Mr. C. H. Braddon; Dr. J. G. Davey; Mr. G. Yates; Mr. N. Alcock; Mr. Haynes Walton; Dr. Buzzard; Dr. Angus Smith; Mr. J. Chatto; Mr. A. Beigel; Dr. F. Oppert; Dr. S. W. Fisher; Dr. Lethery; Dr. George Johnson.

BOOKS RECEIVED—

Des Eaux Minérales de Contrexeville, par le Dr. A. E. Debout—Food Journal, No. 4—Baltimore Medical Journal, Nos. 3 and 4—Pharmaceutical Journal, May—Transactions of the Odontological Society of Great Britain, vol. ii. No. 6—Indian Medical Gazette, April—Monthly Homœopathic Review, May—Hardwicke's Science Gossip, May—Edinburgh Medical Journal, May—West on Excision of the Wrist Joint—Williams's Case of the late Earl St. Maur, second edition—Crisp on Medical Reform—Lee's Practical Pathology, 2 vols.—Practitioner, No. 23—Plain Words, No. 94—The Church Record, No. 6.

NEWSPAPERS RECEIVED—

Nature—Tamworth Herald—New York Medical Gazette—Scotsman—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

May 7. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

9. Monday.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Royal Institution, 2 p.m. General Monthly Meeting.

10. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Royal Institution, 3 p.m. Prof. Blackie, "Moral Philosophy."

Royal Medical and Chirurgical Society, 8½ p.m. Sir Henry Thompson, "Analysis of 134 Cases of Stone in the Bladder of the Adult treated by Lithotrity."

11. Wednesday.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.

Epidemiological Society, 8 p.m. Special Meeting, to consider further Resolutions of the Medico-Chirurgical Society respecting the Amalgamation of Societies.

Society of Arts, 8 p.m. Meeting.

12. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

Royal Institution, 3 p.m. Prof. Tyndall, "Electricity."

13. Friday.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Dr. John Harley, "Injury to the Liver." Dr. Morell Mackenzie, "Stricture of Œsophagus." And other Papers. The Meeting will afterwards be made Special, to consider the Amalgamation Scheme Resolutions.

Royal Institution, 8 p.m. Rev. Canon Moseley, "Descent of Glaciers."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 30, 1870.

BIRTHS.

Births of Boys, 1173; Girls, 1095; Total, 2268.
Average of 10 corresponding weeks, 1860-69, 2077·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	712	682	1394
Average of the ten years 1860-69	685·0	649·1	1334·1
Average corrected to increased population	...	...	1467
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	3	14	1	11	2	1	2	2
North ...	618210	...	9	32	1	13	5	4	4	7
Central ...	383321	2	7	7	...	7	1	1	...	...
East	571158	...	7	4	...	11	3	5	1	2
South	773175	...	6	11	4	19	2	4	4	2
Total	2803989	3	32	68	6	61	13	15	11	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·926 in.
Mean temperature	47·7
Highest point of thermometer	67·0
Lowest point of thermometer	36·2
Mean dew-point temperature	40·3
General direction of wind	Variable.
Whole amount of rain in the week	0·13

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 30, 1870, in the following large Towns :—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending April 30.	Deaths Registered during the week ending April 30.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2268	1394	67·0	36·2	47·7	8·72	0·13	0·33
Portsmouth ...	122084	12·8	82	51	65·5	30 1	47·0	8·33	0·11	0·28
Norwich	81087	1·09	66	45	61·0	34·0	45·8	7·67	0·35	0·89
Bristol	171382	36·6	117	88	58·9	34·2	46·3	7·95	0·26	0·66
Wolverhampton ...	72990	21·5	50	39	64·4	35·0	46·8	8·23	0·40	1·02
Birmingham ...	369604	47·2	259	134	63·8	36·3	47·2	8·44	0·41	1·05
Leicester	97427	30·4	77	32	64·5	36·5	46·7	8·17	0·18	0·45
Nottingham ...	88888	44·5	73	39	65·6	36·2	47·1	8·39	0·11	0·28
Liverpool	517567	101·3	356	236	60·2	38·8	46·6	8·12	0·61	1·55
Manchester ...	374993	83·6	288	184	61·4	35·0	46·7	8·17	1·13	2·87
Salford	121580	23·5	94	50	59·5	32·8	45·0	7·22	0·98	2·49
Bradford	143197	21·7	113	85	57·4	37·0	46·2	7·89	0·22	0·56
Leeds	259527	12·0	215	126	58·0	38·0	47·0	8·33	0·25	0·64
Sheffield	247378	10·8	247	113	60·7	35·0	46·2	7·89	0·28	0·71
Hull	130869	36·7	70	47	...	...	...	...	...	...
Sunderland ...	94257	30·5	81	33	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	114	69	60·0	36·0	44·1	6·73	0·30	0·76
Edinburgh	178970	40·4	147	83	59·7	38·0	48·7	9·28	0·10	0·25
Glasgow	468189	92·5	454	257	55·8	37·2	46·9	8·28	0·22	0·56
Dublin (City, etc.*)	321540	33·0	159	176	62·9	36·0	49·3	9·61	0·01	0·03
Total of 20 Towns in United Kingd'm	7209603	33·8	5330	3281	67·0	30·1	46·7	8·17	0·34	0·86
Paris—Week ending April 30	1889842	242	...	1263	...	...	...	...	...	...
Vienna—Week ending April 23 ...	605200	167	...	478	...	...	49·8	9·88	...	...
Berlin—Week ending April 28 ...	702437	112	641	449	...	...	50·0	10·00	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·926 in. The highest barometrical reading was 30·24 in. on Sunday, and the lowest was 29·43 in. at the end of the week.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

THE NATURAL MINERAL WATERS OF CARLSBAD
IN BOHEMIA.

CARLSBAD is the first of the Saline Alkaline Mineral Springs. Carlsbad Springs maintain indisputably, through the extraordinary effects they have produced in a multitude of cases, the first rank among all the mineral waters exported. The use of these waters is preferred and recommended by persons affected with weak stomachs, disordered bowels, affection of the liver, spleen, kidneys, prostate gland, urinary organs, diabetes, leucorrhœa, and gout.

The exported Carlsbad Waters may be used in the same manner at home as at the Spring itself. The usual dose is a bottle of the mineral water taken every morning at intervals of twenty minutes, either cold or warm, and either in the open air, if convenient, or at home, or if necessary in bed. In order to increase the aperient effect it is only necessary to add a teaspoonful of spring salt. The Carlsbad waters taken cold have more effect than when warmed.

The use of cold Carlsbad Water is preferable for invalids who are full-blooded, or who suffer from obstinate chronic constipation. The bottling and exportation of the mineral waters, of the spring salt, spring soap, and spring pastilles, are under the sole superintendence of

HEINRICH MATTONI,

BRUNNEN-VERSENDUNGS-DIRECTION.

The Natural Waters and products of Carlsbad can be had, freshly bottled, from the London Agents,

W. BEST AND SONS, 22, HENRIETTA-STREET, CAVENDISH-SQUARE.

Natural Mineral Waters of Vals, Vichy, Carlsbad, Seltzer, Kissengen, Homburg, PULLNA, FRIEDRICHSHALL, &c., direct from the Springs; also the Artificial Mineral Waters prepared by Dr. Struve and Co. at the Royal German Spa, Brighton, and the Natural Bromo-Iodine Water of Woodhall Spa, Lincolnshire.—Agents, W. BEST and SONS, 22, Henrietta-street, Cavendish-square, London, W.

THE NATURAL FRIEDRICHSHALL BITTER WATER.

ONE OF THE MOST POPULAR AMONG THE NUMEROUS MINERAL WATERS OF GERMANY.

Not only does this water possess a high reputation among the people as a curative, but—and it is on this we lay greatest stress—it is highly recommended by the Faculty, and is in almost daily use in most clinical Hospitals.

"This water, which may be employed advantageously at home, especially in winter, by those who cannot conveniently go to a mineral spring, is a well-proved mild aperient and powerful dissolvent. It improves the appetite, strengthens the digestive organs, and, by banishing lassitude and melancholy, renders occupation a pleasure instead of a labour. It is an excellent remedy for cold in the chest and bowels, and has been used more particularly, with the best results, in cases of long-continued disorder of the abdomen. Its effect is excellent in constipation, piles, obstructions in the bowels, tendency of blood to the head and breast, and inflammation of the womb. Its efficacy has been proved against scrofula, obesity, pleurisy, and may be used simultaneously with such popular remedies as the whey-cure, &c. The effect of the Water is gentle and gradual, and neither requires a particular diet nor the slightest interruption to one's usual business. The Friedrichshall Bitter Water, accompanied by printed directions for use, may be had of all Apothecaries and Dealers in Mineral Waters."

Mineral Water Establishment, Friedrichshall, Germany.—C. OPPEL & CO

LIQUOR CARBONIS DETERGENS

AND

SAPO CARBONIS DETERGENS.

SOLE PROPRIETORS,

W. V. WRIGHT AND COMPANY,

SOUTHWARK-STREET, LONDON.

ONLY SILVER MEDAL AWARDED 1867.—JUROR 1862.

MORSON'S PREPARATIONS OF PEPSINE.

MEDICINAL PEPSINE

(Poudre Nutritive, or "Pepsine Acide Amylacée" of the French Codex).

Contains the active digestive principle of the gastric juice, purified and rendered permanent and palatable. Dose—15 to 20 grains.

PEPSINA PORCI,

A concentrated and NEUTRAL preparation of Pepsine, free from any disagreeable taste or smell. Dose—5 to 10 grains.

☞ These preparations of Pepsine are carefully examined and tested by a professional Chemist, and certified to answer to the tests indicated. Every bottle containing the preparations named, and bearing the Trade Mark of T. MORSON AND SON, is sold with a guarantee to that effect.

PEPSINE WINE, PEPSINE LOZENGES, PEPSINE GLOBULES,

Are convenient forms for the administration of Pepsine.

SACCHARATED WHEAT PHOSPHATES,

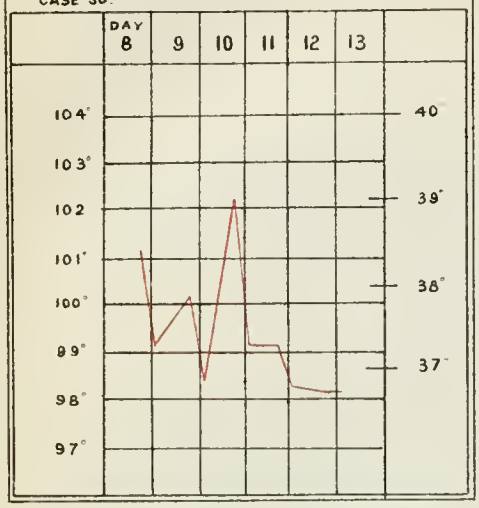
A Dietetic Preparation, supplying an important deficiency in the ordinary Food of Invalids and Children.

Manufactured by T. MORSON and SON, Pharmaceutical Chemists,

31, 33, and 124, SOUTHAMPTON-ROW, LONDON, W.C.

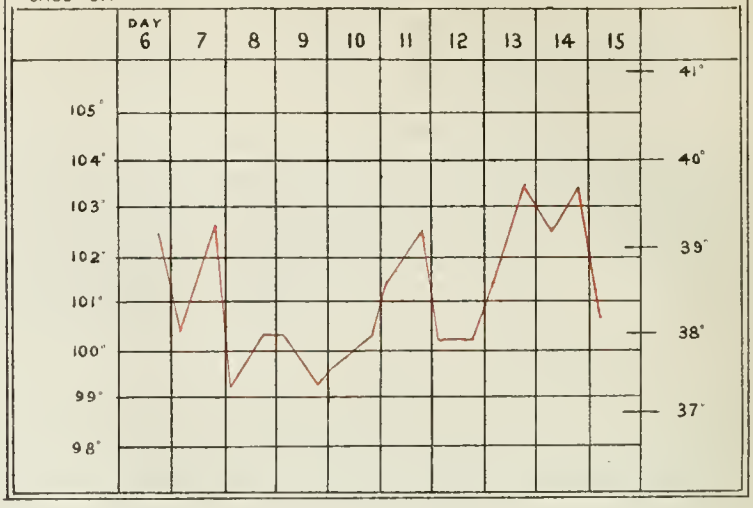
TUBERCULAR MENINGITIS

CASE 30.



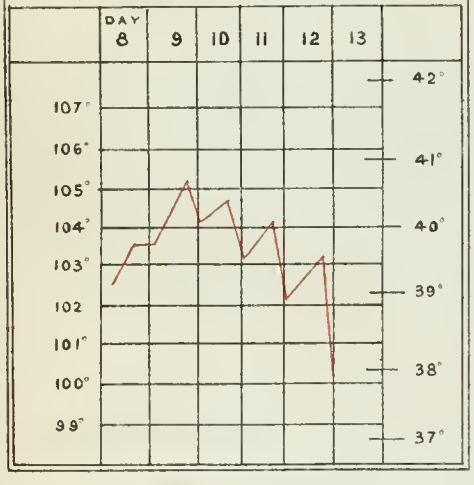
TUBERCULAR MENINGITIS

CASE 31.



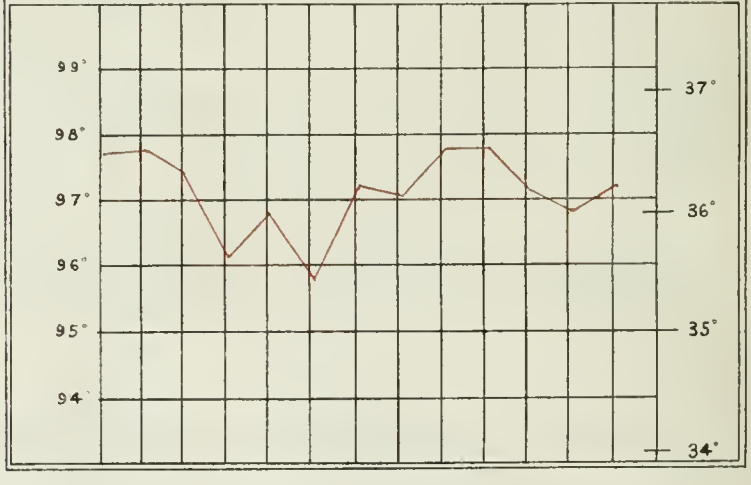
ABSCESS OF BRAIN

CASE 32



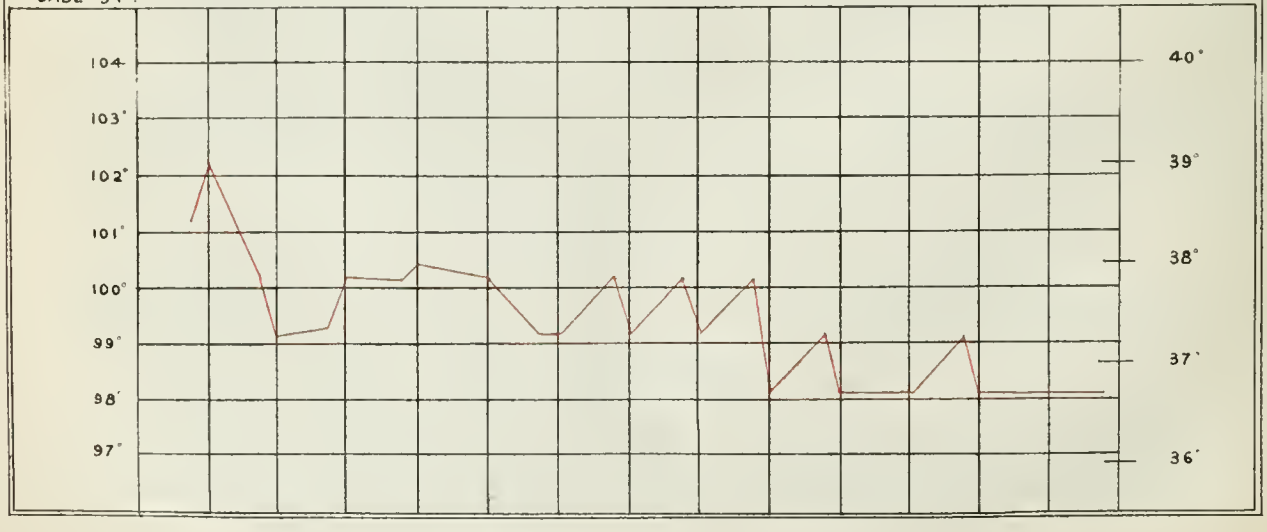
MELANCHOLIA WITH MASTURBATION

CASE 33.



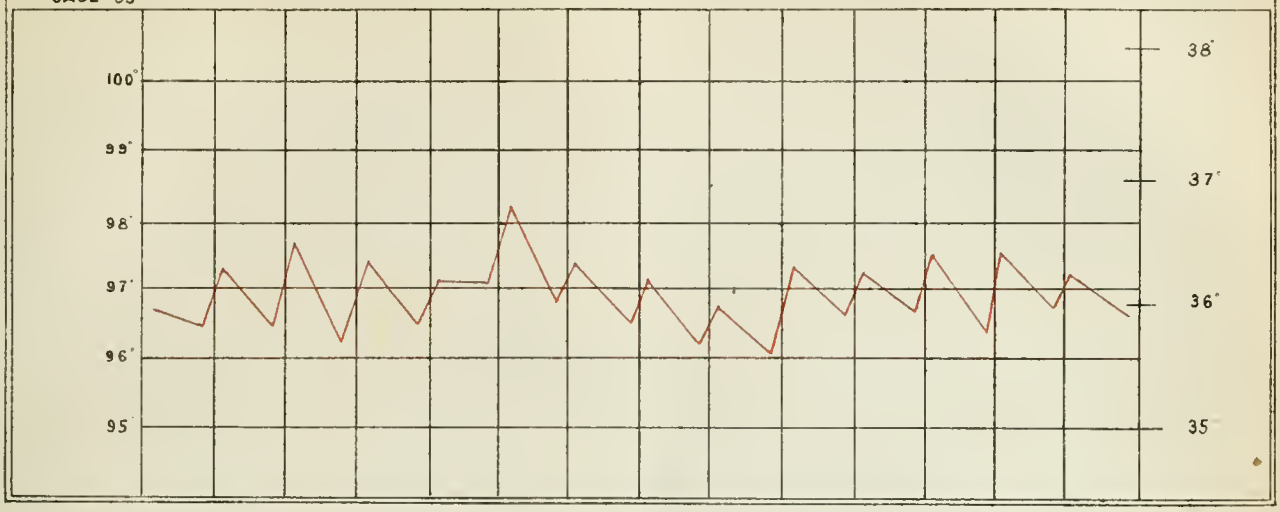
MANIA AND PARALYSIS

CASE 34.



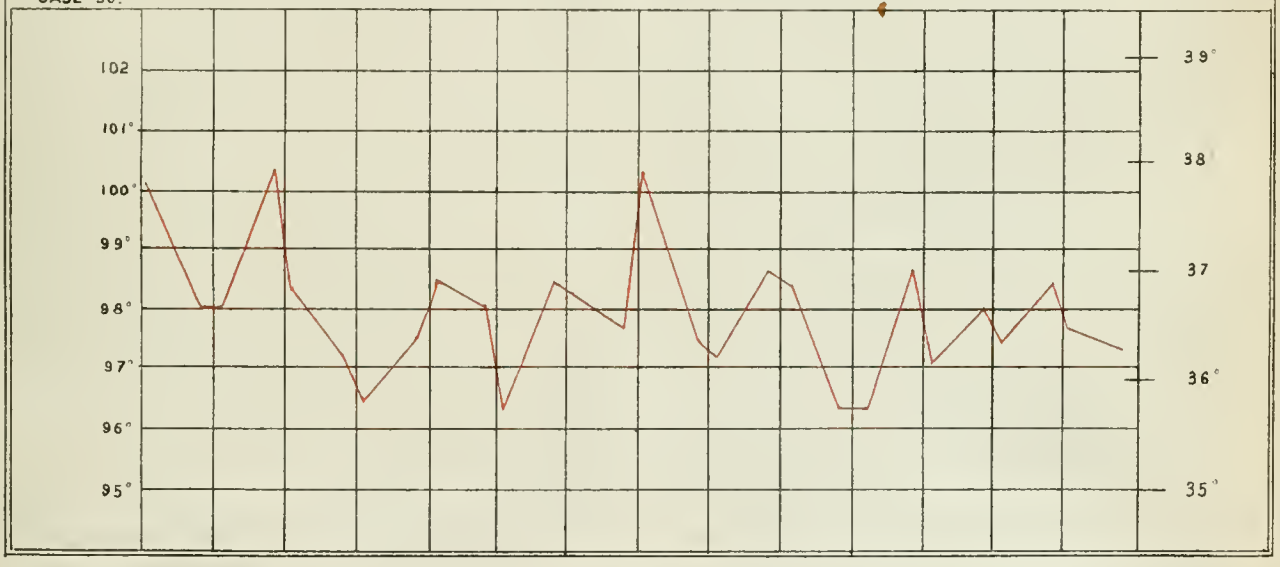
MELANCHOLIA

CASE 35



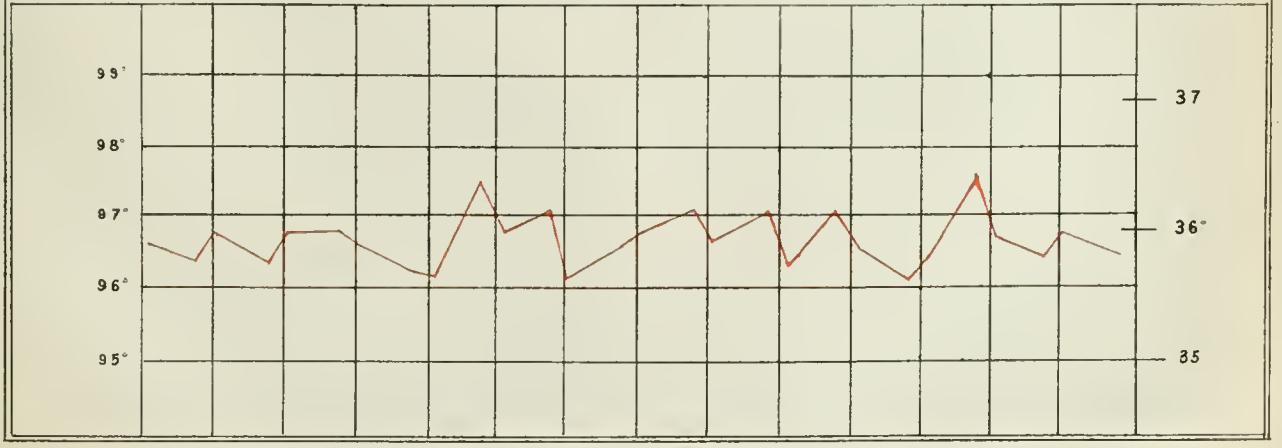
GENERAL PARALYSIS OF THE INSANE

CASE 36.



DEMENTIA

CASE 37.



ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON DEATH FROM CHLOROFORM.(a)

Gentlemen,—I am following, I believe, your own wishes, in taking up death from chloroform as a subject for the present course of lectures. The time is fitting for a careful study of the important question before us, for the deaths from chloroform seem to be—I do not say they are—seriously on the increase, and the hearts of the boldest men are in some fear whenever they summon the agent to their aid. Certain ascertained facts respecting the cause of death from the agent are insufficiently known, certain new facts admit of being added to what are known already. Finally, certain conclusions require to be arrived at as to the possibility or impossibility of making chloroform so safe an agent that it shall maintain its place as the chief instrument for the production of general anæsthesia.

We have work enough on our hands if we include in our labour some of these various subjects. Happily for us in this place, secluded from the multitude, we can study the difficulties we would have solved, with patience, quietude, exactitude. We can read, in short, from nature, who, as Walter Landor tells us, never reveals herself to the crowd nor by sound of trumpet, but of whom we must inquire with the simplicity of children, looking earnestly in her face for the reply.

In the outset of our work I think it best we should honestly admit this truth, that whatever our admiration may be of the scientific advancements which have in our day been made for the relief of pain during Surgical operations, we are bound to season the admiration with the disagreeable knowledge that the blessing we confer on humanity, when we resort to the application of general anæsthesia, is not unmixed with danger and sorrow. At present we are forced to know, for example, that the administration of this, the most common agent employed for anæsthesia—chloroform—is attended with a certain fixed mortality. We are bound, therefore, to consider whether that mortality is necessarily to remain; we are bound to inquire if the mortality be an essential part of the administration, and, if so, we are bound further to ask whether the general value of the agent is commensurate with the special evil. It has been urged that if any other medicinal agent than chloroform had caused as many deaths, it would long ere this have been ruthlessly expunged from practice. The assertion is true and untrue; true on the argument that an agent of doubtful usefulness or of limited usefulness produces a certain evil; untrue on the argument that an agent of certain and most extended usefulness produces an occasional evil. But chloroform is an agent which is of certain and most extended usefulness; therefore the argument against chloroform, when carried to the expulsion of it because of its evil, is untrue.

Behind all these remains the inquiry whether we ought to accept the necessity of danger from general anæsthesia at all. Can we avoid every danger and supply every good? Perhaps we cannot; we ought nevertheless to try so to do, and perchance we may succeed. In endeavouring to avoid danger we have two lines of research before us. We may inquire whether we can so reform the anæsthetic process altogether as to insure success; we may inquire whether we can so master the effects of anæsthetic agents that we can use *any* with perfect safety, and specially *that* agent *chloroform*, with which the world and the Profession is most familiar. I, for one, have trodden both these lines of research. I have introduced new methods, which, I have hoped, would conduce to safety in anæsthesia. I have studied much to make *local* anæsthesia a ready and perfected process, and on the whole I have reason to be satisfied with the results which have fallen to me. In science, however, it is quite hopeless in any man to harbour a prejudice or ignore natural truth; and so I am open to confess that, however we may yet perfect the only perfectly safe—I mean the *local*—method of abolishing pain, we shall still often require a general anæsthetic. The demand for a general method is, truly, psychical rather than physical, but it is a strong demand. General anæsthesia differs from local, in fact, in this one particular, and in none other, that it removes mind and body together out of the reach of pain: in this lies its strength. The majority of persons having to submit to a Surgical operation prefer to have no knowledge of the operation whatever; they pray us to make the brain insensible as well as the body, and to let them lie unconscious even of their immunity from suffering. Nay, I have seen men who have had no such sentiment faint during an operation when pain was locally removed, and have heard them afterwards affirm candidly that they felt no touch of pain, and yet could not help but be faint. Now this is a disagreeable truth, and I warrant that if I or any one else should so clearly learn how to remove pain that we could make large sections of the body insensible, and utterly dead for a time, we should still often not get over the phenomenon of mental pain until we extended the insensibility to the organ of the mind itself and for a moment effaced the tablet on which the mental impressions of mankind are written.

I keep then on the present occasion to general anæsthesia, and for the sake of avoiding any confusion I keep to one part of the research above mentioned—viz., research to find whether we can make every anæsthetic safe, and thus be able to retain chloroform as the agent on which we may at all times, and for all times, confidently rely. I would myself far rather succeed in this research, if it were possible, than discover an agent which should put out chloroform; inasmuch as the discovery of means of safety of the kind named would unfold the richest treasures of Medical science and art. If we, by our knowledge, can take a living animal, put it into such deep repose, inertia, that it shall represent in its negative condition blank death, so that the general vulgar would bury the animal as something dead; and if from this state we could proceed leisurely to set the animal in motion again, as we set a silent and motionless clock in motion when we give it so much force from our hand, then should we accomplish far more than if we had discovered a thousand new individual remedies. We should reach then great principles in relation to living action. This restoration of motion in inert organic matter that has lived will be the ultimate and grand result of physiological learning. It is wonderful what is done already towards the result; and it is obvious that every advance we make in studying the extreme action of chloroform, and modes of recovery from the extreme effects of the agent, serves the double purpose of making the administration of one particular medicine safer, and of opening the way further towards the discovery of suspending and restarting, at will, animal organic motion. We will therefore proceed with the study of death from chloroform solely, and, that we may do so more surely, we will proceed leisurely, taking up first some minor and yet important points of detail.

Rate of Death from Chloroform.

In the commencement of our inquiries it is well to consider what is the actual proportion or rate of death from the administration of chloroform. To arrive at correct results on this subject is a difficult task, for many deaths have not been recorded, and there is a natural diffidence on the part of individuals and of the managements of public Hospitals to speak of fatal cases. When a Practitioner has administered chloroform a very large number of times without having met with a fatal case, he is often led to under-estimate the danger, and to ascribe his success to some particular mode of administration. I am satisfied this is not reliable experience. I can myself say that I was never present when a human being died from the administration of any anæsthetic, and I have been engaged in the study and practice of general anæsthesia ever since the introduction of the practice. But the favourable evidence I should give on my experience would be worse than worthless, for at least three times in my life some accident has prevented me from being present at cases which have ended fatally, and which would have ended in the same way had I been the administrator. But recently I was conversing with a Surgical friend on this subject, who was not himself an administrator of chloroform, and who told me that he had been present at not less than six fatal administrations. Now his experience had not been so large as mine, yet had it been six times as large it would have been six times more unfavourable. I have here reports, very brief in each case, but most important, of over four thousand administrations of chloroform by the

(a) Delivered on Tuesday, February 1, 1870.

late Dr. Snow, all drawn up by his own hand; the whole record is free of a fatal case; there are some close escapes of death, but no obvious direct death from the narcotic agent. This again is a remarkable experience, but if I were to compare it with the experience of two other equally careful administrators who have followed faithfully the method and practice of Snow, theirs would differ full half as much as that of mine and of my Surgical friend of whom I have spoken.

Here before us are a still more valuable series of facts. When I was engaged in writing the Medical History of England for the *Medical Times and Gazette* in the years 1864 and 1865 I visited in turn eight Hospitals—viz., Norwich, Lynn, Stafford, Wolverhampton, Newcastle-under-Lyne, Brighton, Birmingham General Hospital, and Birmingham Queen's Hospital. From the books of these institutions I collected, personally, the number of administrations of chloroform in each institution from the first, in 1848, and before I arrived at a death I recorded no less than seventeen thousand administrations. Now, one death in 17,000 cases reduces the mortality to a nominal value, and if this experience were supported by all experiences we need trouble ourselves little for any better agent than chloroform. But mark the result of the five years' subsequent experience in the very same institutions. Since 1864 there have been in these Hospitals 7500 administrations with 6 deaths, or 1 death in every 1250 cases. After I had visited the Hospitals above named in 1864 I visited in the same and the following year six other Hospitals—viz., at Lincoln, Bath, Oxford, Cambridge, Reading and Nottingham. In these I collected the facts of 7900 administrations from the year 1848 with a result of 3 deaths or 1 in 2633 cases. In these same Hospitals in the subsequent five years there have been 2762 administrations with a result of 1 death.

If, finally, in relation to these large Hospital statistics we put all the facts together, we find that in the twenty-one years from 1848 to 1869 inclusive, in the thirteen Hospitals named, there were 35,162 administrations of chloroform, with a proportion of 11 deaths. I believe this to be the largest reliable series of cases of administration as yet collected, and I know it to be just. Doubtful cases of death from the agent there are none, and in every case a qualified and competent Practitioner was the administrator.

If from individual and general Hospital experiences we pass to the experiences of particular Hospitals, we find, again, the widest differences of results from chloroform administration. Some Hospitals, like some individuals, are fortunate, some unfortunate. There are before me the statistics of two Hospitals so alike we might call them twins: they have the same average of patients, the same average number of administrations a year, the same precise length of experience. In one of these in twenty-one years there have been 1575 administrations without a death; in the other the mortality has been 1 death in 525 cases. I could multiply these illustrations were the labour necessary. It is not necessary. My preliminary purpose is fulfilled if I have proved that, in face of the facts of frequent runs of so-called good luck by particular men, or in groups of Hospitals, or in particular Hospitals, there is, under the most favourable aspect of chloroform, a given mortality which up to this moment seems to be a necessary mortality, just as there is a mortality from accidents and acute diseases like fevers. The mortality is, moreover, considerably greater than is known, for cases occur constantly which are not recorded. I compute favourably from the facts given above that the rate of mortality is as 1 in 3500 administrations of chloroform (I think it really is greater, and that one death in 2000 to 2500 administrations would be nearer the truth): but even at this rate we have no other remedial agent which approaches chloroform in point of danger.

Prevention of Danger from Chloroform.

A certain mortality from chloroform admitted, we ask, in considering how to reduce this mortality—Are there any means by which we can lessen the danger of death? The question in general brings before us several questions in particular, which we will take up *seriatim*.

Condition of Patient.—Can unusual danger be predicated from the condition of the patient? This is a point I am constantly consulted upon. But last week I had two cases before me for advice on this one subject. Well, while I dispute altogether the dogma that whenever an operation is justifiable chloroform is justifiable, because there are numbers of useful operations for which it is unjustifiable, I am not prepared to bring any dogmatical rule against chloroform founded on the condition of the patient. Sometimes persons die under chloroform who have no appreciable disease whatever before death—no disease, that is to say, which the most perfect diagnostician could put his finger on and say there was cause of anxiety from the presence of disease. In the only real case of danger I ever had—in the only case where I thought life really was extinct (happily I was wrong)—the patient was one of the most perfect specimens of a healthy body I ever remember to have seen. It was the case of a young lady who had from her birth been in health; she was free from the least affectation. She came under the influence of the narcotic with the utmost ease, the operation—the extraction of a tooth—was quickly and skilfully performed, and a full minute after the chloroform had been withdrawn, the breathing was tranquil, the pulse steady, the countenance natural. Never was a moment when there was less cause for anxiety under the same circumstances; when suddenly there were lighted up all the phenomena of death—the respiration became imperceptible, the heart inaudible, the limbs flaccid. Fortunately, the heart, feeble as it was, continued, and, after three hours of anxious waiting, the recovery was completed. But an hour before I had administered chloroform to an aged lady for a much longer time, and had seen no symptom whatever of danger. The same specimen of chloroform (I mean, of course, a specimen out of the same bottle) was used, the same mode of administration was followed, the same hand administered; and yet how different the results. They were results which, I think, could not be predicated; they were results which I, at all events, had not the sagacity or knowledge to predict at the time they occurred, in 1860, and which now would be as far from me as ever.

There is a fact I have learned, moreover, in experiment, bearing on this same subject, and which deserves notice. I have occasionally had two animals of the same age, breed, and condition in this glass chamber breathing at the same time and for the same time the same atmosphere of chloroform and common air. They have become narcotised by the vapour, and when I have proceeded to remove them I have found one dead and the other alive and apparently free of danger. This is a result which I think could not possibly be foreseen.

We turn from natural to diseased conditions of body, and the difficulties continue. I believe I know of one condition of body which may be diagnosed as specially dangerous for chloroform, and there my knowledge is brought to an end. This unfavourable condition is present when careful diagnosis shows the existence of a weakened and dilated right side of the heart, with enlarged hæmorrhoidal veins, varicose veins of the lower extremities, and large, full, yet not tense, veins in the other parts of the body. In the body thus circumstanced we may be certain that the right side of the heart, which is the most important organ to be sustained in action under chloroform, is already half dead, and will readily succumb if subjected to further injury.

Beyond this point of diagnosis I repeat I know nothing definite. When I was engaged in the practice of the administration of chloroform I was careful to make diagnosis of disease before administration of the narcotic, and on referring to the facts I find I administered in the presence of the most extreme forms of organic disease. In phthisis pulmonalis in various stages; in cancer in various stages and types of the malady; in chronic bronchitis, asthma, hydrothorax; in mitral disease, hypertrophy, dilated aorta; in epilepsy, in idiotcy with epileptic disease; in various forms of dropsical effusion; in paralysis and acute mania; in some acute diseases, such as croup and pertussis; and in disease of the kidney with albuminous urine. In not one of these administrations has it appeared that the danger of administration was in any sense increased. But my own experiences are small when compared with those which Dr. Snow has written in his book of recorded cases, and he came to the same general conclusion as has been expressed above—a conclusion affirmed, I believe, by all who have become practically conversant with the subject.

Some observations have been made relative to the influence exerted by chloroform on persons of the different sexes and on persons of different ages of life. The evidence in respect to sex is affirmative of no special fact indicating that either sex is subject to peculiar danger, but in the matter of age it has been affirmed that the young are exposed to less danger than the old. It is true that in the lower animals it is easier to resuscitate from apparent death a young than a middle-aged or old animal, and it has been assumed, on the statistics of fatal cases in the human subject, that fewer deaths have been recorded in the young than in those more advanced in life. But, for my own part, I am unable to come to any satisfactory conclusion; for I find that young inferior animals are quite as easily killed as older animals, and, respecting the statistics, the evidences are faulty in the main point, inasmuch as no comparison has been made of mortalities in a given number of

administrations. When we consider how many more adults and middle-aged and aged persons, massed together, are made to take chloroform than young children, we cannot reason on the subject—in short, a sufficient number of deaths from chloroform have not yet been accurately tabulated to allow of any safe inference being drawn from them. We may, therefore, leave this question of age and its influence an open question, and wait for further information. Lastly, the effects of mental influence and habit have been considered in relation to the action of chloroform on the body. Snow made a very sound observation on this point which I have often seen proved as true; it is that persons of strong muscle and athletic power are brought under the influence of chloroform with much more difficulty than are persons of weak, sensitive natures and of refined and highly cultivated minds. It does not, at the same time, follow that the danger in one of these classes of cases is greater than in the other, for those who come readily under the influence of chloroform are subjected to a smaller dose than the stronger class, and this compensates for what might otherwise be a greater danger.

On the whole the only diagnostic I could give as warning the Practitioner from exceptional danger from chloroform, is the diagnostic of dilated and weakened right heart, with the other attendant symptoms already explained. If I have one further misgiving in respect to dangerous cases, it relates to cases of kidney disease with albumen in the urine, and disposition to uræmic sleep. Here, however, the misgiving is based on theoretical reasoning alone, and is greatly negatived by the knowledge we have acquired from practical observation.

Preparation of the Patient.—The state of the patient preparatory to administration admits of being discussed in respect to danger of administration. It may seem childish to insist that a person under chloroform should enjoy the most perfect muscular freedom so that the breathing may be naturally performed and the circulation left unimpeded. In plain truth it is not childish to enforce these rules, for they are constantly broken. In some operations, as in removal of the jaw, some Surgeons still carry out the plan, necessary before the days of anæsthesia, but more than unnecessary now, of binding the upper limbs of the patient to the trunk. In other cases tight clothing is allowed to envelope the trunk of the patient, and frequently many bedclothes are allowed to rest on the abdominal muscles. Further, it is no uncommon practice when, in the second degree of narcotism, the patient struggles, to use force to restrain movement, instead of pushing on the chloroform to the third, quiescent, and much safer degree of narcotism. Now all these proceedings, negligences or practices, are essentially dangerous; they are not trifles. It should be ever remembered that the living body under chloroform is a body more than three parts dead, and that such power as still remains in the organs, all essential to life, is itself so reduced that the smallest untoward circumstance may turn the scale towards death. Perfect freedom for respiratory movement is consequently a vital preparation for the administration of chloroform.

The *position* of the patient has been often dwelt on, and it, too, is important. The sitting position is certainly unfavourable for the heart, and the perfectly recumbent position is unfavourable in many ways. It interferes with free respiratory power, it allows fluids accumulated in the mouth to fall back to the throat, it allows the tongue to fall back, and when vomiting happens to come on it enforces the necessity for raising the body. For all these reasons the semi-recumbent position is the best, as it is the most convenient. To this recommendation as to the position it is essential to add another—viz., to keep the body from the beginning to the end of the administration in the same position without any upward or downward movement. We find in deeply narcotised animals nothing so detrimental as movement of the body. Left at perfect rest, we may narcotise an animal until the inspiratory act of respiration ceases, and yet the animal may recover; but at this crisis the smallest movement, the merest handling of the body, will prevent all chance of return of power. The same rule holds good when an animal is being resuscitated from chloroform; after the first gasp of inspiration proclaims returning life, rest is absolutely essential to successful recovery. Precisely the same rule holds good with the human subject; yet so little is the fact known that when there are symptoms of collapse it is the most common of practices quickly to lift up or quickly to lower the body. The practice seems of little moment; it may be of infinite moment. In saying this I do not raise objections to the plan of turning the patient once gently over to the left side, as Mr. Bader so strongly recommends, for that I think at first is a good and commendable plan. I speak of the raising and lowering of the body, and the exercise upon it of strong and sudden pressure.

In considering the preparation of the patient for chloroform, a word should be said about *food*. Experience has taught unmistakeably that chloroform should never be administered to a patient whose stomach is charged with food. Persons so circumstanced usually vomit, and, moreover, are readily disposed to become faint. On the other hand, it is very bad practice to administer chloroform to a person exhausted from long deprivation of food. An interval of three hours is sufficient after food, and a longer interval is, I think, injurious if the food last taken be carefully selected. The best food that can be given before administration is, for an adult, a breakfast cup of beef-tea made with Liebig's extract, and charged with grated toast or biscuit. Opinions vary as to the propriety of giving alcohol immediately before administration. If we could put a free quantity of alcohol into the blood before commencing the administration, the introduction of the chloroform would be expedited; but the mere act of giving a glass of sherry cannot have any physical influence. The practice is notwithstanding, good in cases where it is required; it is *morally* good, and when a nervous patient asks for it or is pacified by having it offered, a glass of sound wine should never be withheld. Dry sherry is the best wine on these occasions.

I have not yet said all about the preparatory treatment. As it is bad practice to administer chloroform when the stomach is loaded with food, so is it equally bad when the bowels are loaded with fæces, or when they and the stomach are distended with gas. The Surgeon should never allow a patient to be put under chloroform without previous inquiry as to the condition of the bowels, or without, if he find them loaded, the administration of a gentle purgative. A few grains of grey powder and scammony, followed by an aloetic draught, a day previous to the administration of chloroform is a most valuable preparative for those in whom the diaphragm is impeded in its free action by constipation and flatulent oppression.

The condition of the surrounding air in relation to its dryness and temperature during the inhalation of chloroform; the mode of administration and quantity of vapour; the chemical purity of the agent; these, with one or two other preliminary subjects, remain for consideration. I will treat on them at length in my next lecture, and will afterwards proceed to the study of the mode and cause of death when chloroform induces the phenomenon of death.

ORIGINAL COMMUNICATIONS.

THE CHOLERA EPIDEMIC OF 1866 IN SWEDEN.(a)

Translated by J. W. MOORE, M.B., Ch.M. Dub.; Ex-schol. Trin. Col. Dub.

Cholera (*cholera asiatica, epidemica*), which epidemic had since the year 1859, when it last ceased in Sweden, shown itself almost annually in different places throughout Europe, appeared again in the kingdom during this year (1866), and spread tolerably quickly and widely, being very prevalent in places. During the summer of 1865 a few isolated cases of disease and death had occurred, especially in the provinces of Stockholm, Jönköping, and Calmar. These were reported as perfectly resembling "cholera Asiatica" or "epidemic cholera," but no actual epidemic of the disease broke out. Ever since the beginning of the year at present under discussion, diarrhœa had prevailed epidemically in places, but it diminished on the approach of spring. During May and June, the mean temperature of which last-named month was very high, diarrhœa again began to appear more frequently. Moreover, some isolated cases of cholera occurred in Helsingborg, and also in Stockholm, as well as numerous cases of endemic cholera and "cholerine." It was, however, first on June 25 that a dockyard labourer, a resident at Haga, suburb of Göteborg, sickened with symptoms of cholera at Hisingen, near Göteborg. On the same day also the first suspicions and fatal case of cholera occurred in the town of Goteborg, and this was followed on June 30 and July 1 by several others. After the latter date the epidemic spread rather rapidly in the town, its environs, and to other localities. About the same time, or on

(a) An extract from the Official Report of the Swedish College of Health on the Sanitary State of that year.

June 26, two sailors of a royal vessel, belonging to the coast-guard service of Stockholm, and which was taking part in a training expedition, and, on the 27th, a third who the day before had come into the harbour at Stockholm, on board a vessel belonging to the expedition above-mentioned, sickened with vomiting and diarrhœa.(b) All these three were sent into the garrison Hospital on June 28. Here two of them soon recovered, but the third, who had been long ailing, died on July 16.

On June 28, two men from the same vessel as that to which the men already mentioned belonged, fell sick with symptoms of cholera, and died, one on that, the other on the following day. Up to the close of the month of June, twelve other men, belonging, some to the training expedition, some to the harbour, sickened, of whom four died in June, and two on July 1. Among the civil population of the capital also, there occurred on June 28 a case of cholera in an unmarried woman, 28 years of age, who died on June 29; and on June 30 another in a sailor, belonging to a vessel which had been lying in the harbour of Stockholm for a fortnight, who died on July 1. On this same day, moreover, a journeyman joiner in the Ladu district, and a sea-captain of another vessel that had been lying in the harbour for some time, died. Subsequently, the epidemic spread very quickly during the months of July, August, and September in the city, and from it gradually to a number of other places in the kingdom; and it was possible sometimes to trace with great distinctness and certainty the progress of the disease from the metropolis or other cholera-infected localities.

Almost at the same time in Gefle also, there occurred on July 4 the first, and on July 7 the second, case of the epidemic, which subsequently rapidly spread through the town and its immediate neighbourhood.

In none of these places, where the epidemic first and almost exactly at the same time appeared throughout the kingdom, notwithstanding accurate investigations, was there any reason to assume that the disease was carried to them from other localities by infection that could be traced. From Gefle, Göteborg, Carlstad, and other towns, it has been communicated that the prevalent impression was that the disease had "broken out spontaneously." The epidemic spread with greater or less intensity to all the provinces of the kingdom during the months of July, August, and September. The disease showed itself most widely and frequently, excepting the metropolis, in the provinces of Wester-Norrland, Gefleborg, Wermland, Göteborg, Elfsborg, and Östergötland, and was prevalent, though to a less extent, in Örebro, Westmanland, Skaraborg, and Jönköping. In other provinces only scattered or isolated cases were met with, especially in those of Jemtland, Kronoberg, Halland, Blekinge, the Two Scanias, and Gottland.

According to table H., from 216 communes in all the provinces of the kingdom there have been recorded (apart from 1012 cases of. and 49 deaths from, "endemic cholera" entered in Table I.) altogether 12,799 cases of, and 4503 deaths from, cholera and cholerine (which, in the majority of the returns, have been expressly entered together). And here it must be remarked that. especially in the interior, many cases and deaths took place with which a Physician was not made acquainted. Under these ciphers are to be placed also 3743 cases of, and 114 deaths from, cholerine; so that, after deducting these, there remain 9056 cases of, and 4389 deaths from, true cholera. This gives a mortality of 48·5 per cent.

It was principally in the towns that the disease committed its ravages; but very remarkable partial epidemics prevailed in the interior also, particularly in the districts of Piteå, Hernösand, Torp, Sundsvall, Gefle, Carlstad, Göteborg, Mölndal, Håby, Oroust, Wenersborg, Åmål, Borås, Trollhättan, Gunnarsnäs, and Linköping. Among the towns, Sundsvall, Gefle, Carlstad, Stockholm, Göteborg, Wenersborg, Linköping, Norrköping, and Jönköping were most severely visited; while numerous cases occurred likewise in Uddevalla, Marstrand, Borås, and Åmål. Out of the fifty-three towns that the disease reached, there were reported altogether 9819 cases and 3016 deaths; or, subtracting from these numbers 2904 cases of, and 56 deaths from, cholerine; 6915 cases of, and 2960 deaths from, cholera, showing a mortality of 42·8 per cent.

The disease was at its acme in virulence and frequency during the month of August, and continued almost equally prevalent during September, but began to spread less and also to diminish in frequency during October, and still more decidedly in November; after which only a few isolated cases and one death took place during the month of December.

Of 9131 cases and 3178 deaths—the period of the occurrence of which is reported—6 cases and 4 deaths belong to the month of June, 1291 cases and 483 deaths to July, 3366 cases and 943 deaths to August, 3189 cases and 1209 deaths to September, 1160 cases and 508 deaths to October, 106 cases and 30 deaths to November, and 13 cases and 1 death to December.

Of 4096 cases and 1405 deaths where the sex was reported, 2151 cases and 729 deaths occurred in men, while 1945 cases and 676 deaths occurred in women. Of 4138 cases and 1377 deaths where a note of the age was communicated, 675 cases and 290 deaths were those of children under 10 years; 278 cases and 82 deaths, between 11 and 20 years; 1093 cases and 295 deaths, between 21 and 30 years; 905 cases and 259 deaths, between 31 and 40 years; 642 cases and 209 deaths, between 41 and 50 years; 380 cases and 149 deaths, between 51 and 60 years; and 165 cases and 93 deaths, over 60 years.

Meteorological Notes, from Observations made at the Stockholm Observatory, Lat. 59° 23′ N.

1866.—Mean temperature . = 45·8° F.
Mean barometer . = 29·712 in. (cor. and red.)
Rainfall . . . = 21·34 in.

	Mean Temperature.(c)	Rainfall.
January . . .	= 35·5°	= 0·67 inches.
February . . .	= 24·7°	= 1·05 ,,
March . . .	= 29·6°	= 1·16 ,,
April . . .	= 42·1°	= 0·58 ,,
May . . .	= 49·3°	= 1·95 ,,
June . . .	= 60·4°	= 2·11 ,,
July . . .	= 66·1°	= 4·89 ,,
August . . .	= 66·4°	= 3·93 ,,
September. . .	= 63·5°	= 1·80 ,,
October . . .	= 46·7°	= 0·10 ,,
November. . .	= 30·0°	= 2·93 ,,
December . . .	= 26·6°	= 0·23 ,,
	45·8°	21·40 ,,

	Mean Temperature.	Rainfall.
1862 . . .	= 42·1°	= 12·81 inches.
1863 . . .	= 46·5°	= 14·27 ,,
1864 . . .	= 42·1°	= 13·95 ,,
1865 . . .	= 45·4°	= 12·89 ,,
1866 . . .	= 45·8°	= 21·34 ,,

In connexion with the foregoing, the following facts relating to the outbreak of the disease in Denmark in the same year may be of interest. They are taken from an article on the Epidemic Morhility of Copenhagen during 1866.(d)

"While Asiatic cholera during the summer of 1866 visited almost all the north German and Russian Baltic towns, as well as Göteborg and other places on the west coast of Sweden, together with many sea-ports in Great Britain and Holland, all of which stand in intimate commercial relations with Copenhagen (and this partly through the medium of steamers), the latter city was almost spared by the disease, since among its native population only three cases of cholera occurred, all with a fatal issue. This fortunate result may surely be ascribed, apart from the improvements in the sanitary state of the city which had been effected since the last great cholera epidemic, to the preventive measures which were adopted to preclude the inroad of the disease from the sea. These measures consisted principally in Medical examinations of all ships coming from infected or suspected places before they were allowed intercourse with the shore; in keeping watch at the Copenhagen Custom-house so as to prevent the uncontrolled debarkation of sick-patients from vessels in the roads; in daily Medical examinations of the ships in the harbour which had come from smitten or suspected ports, for the first few days after their arrival; in control over the lodging-houses for sailors, as also in the establishment of a special isolated Hospital (at Smedelinien) for the reception of all cholera patients or suspicious cases of disease. That the city has in no small degree been exposed to the importation of cholera, appears from the fact that in the Smedelinien Hospital there were treated in all 72 patients, among whom were 12 with pronounced cholera (7

(b) Both on June 25 and 26 the vessel in question had been in at Stockholm, where, in the neighbourhood of the mooring ground, dredging operations were in progress. The temperature of the air on the first-named day was 82·5 degrees in the shade.

(c) I give the mean temperature of the months, as the concurrence of the outbreak of the epidemic with the great rise of temperature between May and June is remarkable. The subsidence of the disease also seems to coincide closely with the lowering of the temperature in October.—J. W. M.

(d) "Forhandlinger i det kongelige medicinske Selskab i Kjöbenhavn i Aaret, 1867-1868." "Proceedings of the Royal Medical Society of Copenhagen in the Session, 1867-1868."

died), 27 with cholerine, 4 with cholera-typhoid (1 died), 18 with choleraic diarrhœa; and these, with the exception of two cases of cholera, and some of cholerine which occurred in the town, were all imported from ships in the roads which had come from infected ports (Zachariæ, "Ugeskrift for Læger," December 1, 1866). The three cases of cholera which occurred in the town were met with among the occupants of a cellar-lodging in Queen-street, at Christianshavn, on October 9 and 10. The cellar, after the patients had been removed to the Hospital, was evacuated and disinfected.

"Cholerine and diarrhœa were during the summer months, July, August, and September, somewhat more prevalent than in the remainder of the year, yet they did not nearly reach the extent they had attained in the corresponding period of the year 1865. Of cholerine 14 fatal cases were reported; of diarrhœa 69 for the entire year; 83 in all. Of these 60 occurred in children under 1 year of age, 13 in children aged from 1 to 5 years."

HOW OPIUM CONTRACTS THE PUPIL.

By NATHANIEL ALCOCK, L.C.P.I.,
Assistant-Surgeon 35th Regiment.

EXPERIMENT has taught that division of the third nerve causes extreme dilatation of the iris, and section of the sympathetic its intense contraction, proving thereby that these nerves are antagonistic. The apparently excessive action of either on the removal of the influence of one shows that, in the natural condition, their powers are balanced, but subject to continual variation by calls for additional exertion of nerve force, animal or organic, arising out of collateral requirements.

That the circular fibres of the iris, though supplied by branches of a voluntary motor nerve, should be beyond the control of the will, is intelligible from the fact that they are opposed in the radiating fibres by an equal nervous power coming from an involuntary source, and that the effort of the will is unable to call forth such excess of force as can overcome the resistance. Omitting, then, the results of paralysis of either nerve, which are obvious, contraction of the pupil is but the excess of active motor power over natural tension.

Dilatation is the excess of tension over the active motor power. The former is produced by inflammatory irritation of the brain, by mechanical stimulus applied to the third nerve, and by tetanus. The latter succeeds compression of the brain and epilepsy, in which "the pupils are dilated during the fit, and it is very remarkable how this is associated purely with the epileptic condition." (Dr. Wilkes, *Medical Times and Gazette*, January 16, 1869.)

The influence of the sympathetic on the iris is analogous to its recognised office of preserving the tone or natural tension of the capillaries. The paralysis caused by its section allows dilatation of the capillaries and contraction of the pupil, the third nerve being then unresisted; while its irritation, as in epilepsy, produces contraction of the capillaries and dilatation of the pupil, the third nerve being overcome by the extra nerve-power evolved. By this can be explained the varied actions of those different drugs which are grouped under the head of narcotics, and hence may be derived an index of their value and appropriateness in the treatment of disease. The familiar symptom of contracted pupil in poisoning by opium, and the same effect more recently produced by Calabar bean, demonstrate that in these drugs we possess powerful sedatives of the sympathetic system, which can thus relax the capillaries, a consequence long since admitted by the use of the former in full doses to cut short the first stage of ague, and of late by the administration of the latter to combat the condition of tetanus. On the other hand, the dilatation of the pupil induced by belladonna and hyoscyamus shows that by these substances we are afforded means probably of narcotising the motor tracts, but more certainly of stimulating the sympathetic to increased action, thereby lessening the calibre of the capillaries and dilating the pupil.

A case, copied from the *Medical Record* by the *Medical Press and Circular*, March 24, 1869, in which the poisonous effects of subcutaneous injection of morphia were counteracted, when life seemed extinct, by a similar use of solution of atropia, proves that these are antidotes. The antagonism of nicotine to strychnia is probably also thus explained.

Eliminating, then, the consequences of paralysis, the state of the pupil furnishes us with an index for recognising the narcotism or stimulation of either of the two great nervous centres, the animal or organic. Out of this reasoning arises the question whether the accepted theory, "that the brain during sleep is anæmic," be not open to doubt, which I hope to discuss in another paper.

North Fort, Liverpool.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. GEORGE'S HOSPITAL.

TWO CASES OF DISEASE OF THE AORTIC VALVES —REMARKABLE INSTANCES OF THE "HAMMER PULSE"—RELIEF FROM CHLORAL.

(Under the care of Dr. JOHN W. OGLE.)

Case 1.—Edward A., aged 26, was brought into the Hospital with anasarca of a general character and symptoms of hypertrophy and valvular disease of the heart. At the base of the heart were to be heard both a systolic and a diastolic bruit, and a systolic one at the apex. The pulse was quite regular, but pre-eminently one of unfilled arteries—a genuine instance of the jerking, shot-, or hammer-like pulse so distinctive of aortic regurgitation, and the beating of the arteries of the neck was very unusually visible. The above character of the pulse was very conspicuous in the case of the more distant arteries of the extremities, such as the tibials. Sedatives and diuretics, with ether, gave relief, but digitalis certainly appeared to do harm rather than good, and was soon discontinued. Some good was obtained from cupping to seven ounces between the shoulders, and much quiet and comfort from *forty-grain doses of hydrate of chloral*. The patient recovered so far as to be sitting about in the ward, but died somewhat suddenly. After death excessive atheromatous disease of the root of the aorta was found, and also a long wide fissure in one of the flaps of the aortic valves, with smooth and rounded edges, showing it to have been of long standing. This particular flap was thickened, and its general condition, as well as the fissure, must have allowed of much regurgitation of blood. Hypertrophy of the walls of the left side of the heart existed.

Case 2.—Into the same bed in which the above-mentioned patient had just died was placed another patient with general anasarca and purpura, with hæmaturia, dyspnœa, and cough, and having exactly the same kind of pulse—hard, vibrating, hammer-like, but quite regular. In this case hypertrophy of heart was diagnosed and extensive aortic valvular disease, a systolic and diastolic murmur existing at the base and a systolic bruit at apex. Great relief, very considerable diminution of dropsy and of purpuric symptoms followed treatment, and also great diminution of blood in the urine; but the patient unexpectedly became worse and died rather suddenly, as in the previous case. After death considerable thickening of the mitral valve curtain and of the aortic valve was found, and attached to the anterior surface of the mitral curtain and to the surface and edges of the aortic flap large quantities of firm fibrine—in one case forming a projecting loose mass of about a quarter of an inch in length—were met with.

PNEUMONIA—VENESECTION—RECOVERY.

(Under the care of Dr. JOHN W. OGLE.)

The patient, George J., aged 22, was a working mason, who had been a fortnight ill, complaining of cough, and "wheezing," and "spitting," etc.

On admission (November 4) his breathing was laboured, the respiration being 36 per minute and the face congested; the skin was dry; the pulse was 88 per minute. The middle part of the right lung behind was the seat of fine pneumonic crepitation, and was rather dull on percussion. He was bled at the arm to ten ounces. The blood was not cupped or buffed. He was also ordered the potassio-tartrate of antimony in quarter-grain doses with sulphate of magnesia every fourth hour for forty-eight hours, milk, and beef-tea. Shortly after the venesection the pulse became reduced eight beats, but the respiration remained the same, and at 10 p.m. the pulse was only 78, but the respiration was 48 per minute. At 5 a.m. the following day the pulse was 64 and respiration 36.

On the 6th the crepitation had very materially subsided. The antimony was discontinued, and oxymel of squill with sweet spirits of nitre, and subsequently with ipecacuanha wine, was given every four hours, and large linseed poultices applied to the chest. Eggs and milk were allowed.

Improvement went on without drawback, and on the 15th the lung had almost quite recovered. Meat, potatoes, and porter; and quinine was given. This was followed by cinchona and gr.v. doses of iodide of potassium. On one occasion a blister was applied for pain which seemed to be of a pleuritic nature. He was discharged well at the end of the month.

INTERMITTENT FEVER OF SEVERAL MONTHS' STANDING—CURE BY QUININE.

(Under the care of Dr. JOHN W. OGLE.)

The patient was 36 years of age. The attacks of ague had come on at first every three or four days, then more frequently, and sometimes daily, and had existed for eight months, during most of which time he had been under treatment. He had a pale and rather sallowish look. No enlargement of liver or spleen could be detected. Dr. Ogle determined to try as soon as possible the quinine in largish doses. After a warm bath and waiting two or three days to see whether the attacks came on as described, it was clear that the patient's account was correct, for several fits of ague, always at night, came on. As a preparation for the quinine treatment he had aperients of colocynth, with blue pill and senna, from the last day of December until January 5. On the evening of that day he took a draught containing fifteen grains of quinine and five of dilute sulphuric acid in the infusion of roses. This was repeated nightly until the 17th, and the patient never had a single attack after the first dose. The medicine never produced headache, deafness, or other unpleasant result. On the 10th the syrup of iodide of iron was given daily in addition to the quinine, which on the 17th was ordered only every other night, and on the 21st omitted altogether. The patient was discharged at the end of the month.

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Medical Times and Gazette.

SATURDAY, MAY 14, 1870.

THE LORD PRESIDENT'S AMENDMENTS.

THE course which the Government Medical Reform Bill has taken, is that which we predicted. It has been read a second time in the House of Lords, has been committed *pro formâ*, and the alterations and amendments which Earl De Grey is willing to make in the Bill have been printed. Several of these proposed alterations, we announced as probable in our last number, and they are undoubtedly amendments in the true sense of the word. But other changes have been made in the Bill which we do not hold to be improvements, and which we believe will not be beneficial either to the Profession or the public.

We will take Lord De Grey's principal amendments *seriatim*. In the first place the power of introducing modifications in the schemes for the formation of the new examining boards is transferred from the Privy Council to the General Medical Council. This is an alteration which will be acceptable to all sections of the Profession. It is in our opinion the chief modification which the Bill required, and we are glad that the Government have seen fit to yield the point so readily. The Privy Council, however, very rightly as we maintain, reserve to themselves the power of confirming or refusing to confirm the schemes proposed to them by the General Medical Council, but in case of refusal the amendment provides that the General Medical Council may frame and propose a new scheme. The practical effect of this alteration will be simply that which we have all along recommended. The power of originating regulations for the conduct of Medical examinations will remain in the Medical Profession, whilst the power of confirming or forbidding such regulations will be held by the Government who are responsible to Parliament, and who stand between the Profession — which is a monopoly — on the one hand, and the general public on the other.

In that part of the Bill which refers to examinations and licences, clauses are introduced which will empower the General Medical Council to demand evidence of the attainment of a certain amount of general knowledge from candidates before entering upon their course of Professional study. Such evidence may be obtained either by examinations conducted by the Medical examining board or by examinations in general and scientific knowledge conducted by other bodies. This amendment speaks for itself. It prescribes more clearly than did the Bill as originally drafted, the necessity for a preliminary examination. As in the case of the scheme for the examining boards, so in that of rules for education and examination, the right to propose modifications is to be vested in the General Medical Council, the Privy Council retaining its right of confirming or refusing to confirm. In the latter case the General Medical Council may propose new rules. Clause 16 of the Bill which proposed to allow the registration of "higher" Medical and Surgical titles is struck out.

We now come to a proposed alteration which we think a very dangerous one, subversive of the principle of the Bill, and which we firmly believe will in the course of years render its main provisions nugatory.

Clause 18 in the Bill as originally drafted ran thus:— "After the date fixed for the commencement of the examinations by any Medical examining board under this Act, none of the Medical authorities shall grant any of the qualifications mentioned in Schedule (A.) to the principal Act as amended by this Act or by any of the Acts mentioned in the first schedule to this Act, except to persons registered or qualified to be registered under the principal Act."

This clause the Lord President proposes to abandon. We stated last week that in deference to the wishes of the universities, and especially to that of the London University, the Government would probably cede the right of granting university degrees giving no right to practice to persons who are not licentiates in Medicine and Surgery. The abandonment, however, of clause 18, seems to us to go much farther than this. It gives to the corporations as well as to the universities the power of conferring diplomas in Medicine and Surgery without the recipient being in possession of the new licence. It is true that the corporations will not be able to grant *licences*, but they will be able to grant Fellowships and Memberships to persons who have not entered by the common portal of the Profession. This in our opinion cuts at the very root of the measure. Instead of calling order out of chaos, the Bill will simply increase the confusion. Can any law prevent Members and Fellows of Royal Colleges of Physicians and Surgeons, or Doctors of Medicine of Universities, albeit unregistered, giving advice to patients, and taking *honoraria* which are not recoverable by law? It is absurd to suppose so. Why then are the rights of corporations to be ceded, Acts of Parliament to be repealed, and the Medical Profession to submit to Government dictation, if they will gain neither uniformity nor union by the sacrifice? Instead of the scandal of competing and underselling Medical corporations being abolished for ever, it will be tenfold increased

and encouraged. What law can interfere with the sale of diplomas, which are Medical titles, but which give no legal right to practise? Years of grace will be multiplied according to the needs or avarice of corporations, and the three legalised licensing "shops" will have a hard battle to maintain their own against the contraband traders. We hope that the Lord President will reconsider his resolution to strike out clause 18. If any part of the Bill is, to use an ecclesiastical term, *de fide*, it is this, and its abandonment, in our opinion, will render the measure, which hitherto we have been able consistently and conscientiously to support, worthless. That part of clause 20 which enacts that those of the Medical authorities which receive part of the surplus fees shall confer, if required, their minor Medical titles on the new Licentiates without examination or fee, is likewise abandoned. The clause is also altered to prevent the Universities granting their inferior degrees to the new Licentiates without examination.

A real amendment, first suggested, we believe, by ourselves, has been made in clause 21, which refers to foreign and colonial diplomas and licences. These are not to be described as possibly evidencing a higher degree of knowledge in Medicine and Surgery than the new licence, but the "*like*" degree of knowledge. Thus the apparent acknowledgment of inferiority to colonial and foreign degrees of the proposed licence is removed.

A good clause is introduced for the maintenance of Professional morals. The General Medical Council may erase the name from the register of any one who has been guilty of felony or misdemeanour, or of infamous or disgraceful conduct in a Professional respect; and the duty of bringing the names of such persons before the General Medical Council is entrusted to the Medical authorities. This supplies an undoubted want in the Bill as originally drafted.

Another clause, however, has been introduced which will not meet with the approval of the Profession. It is notorious that it has been granted in the interest of the homœopathic sect, and, if it mean anything, it simply means that the new boards of examiners must not examine in the theory and practice of Medicine as understood by all orthodox Practitioners. It is true that the right of enforcing the clause will rest with the General Medical Council and the Privy Council. But if the clause be not intended to be a dead letter, it must prevent either of the legal Medical examining boards from "requiring any candidate to adopt or abstain from adopting the practice of any particular theory of Medicine or Surgery, or from making such adoption or abstention a condition of admission to or of passing any examination or otherwise." We must say we think this is a heavy price for the Medical Profession to pay for the Bill, and we think our opinion will be shared by our readers.

Lastly, we observe that no alteration has been made in clause 30, which gives the power of acting to the majority of the Medical authorities. The manifest objections to this we pointed out last week.

Setting aside the undoubted improvements in the measure which are to be introduced in reference to the powers entrusted to the Privy Council, the maintenance of Professional morality the prevention of the Universities from giving their lower degrees without examination, and the implied inferiority of the licence to colonial and foreign degrees, we do not think that the Bill has been at all improved by the modifying process to which it has been subjected. The permission to grant diplomas in Medicine, other than licences, to all the Corporations and Universities, and the legalised permission to introduce all sorts of Medical heresies into the Medical examinations of the three kingdoms, are blots which nearly, if not entirely, obscure the original excellencies of the measure, and which, when proposed by the Lord President as amendments, demand, in our opinion, the strenuous opposition of all real Medical reformers.

GENERAL MEDICAL COUNCIL.

The Profession will look with much interest at the debate on Dr. Parkes's motion recommending that the amended Medical Act should give the Medical authorities power to elect their representatives on the Medical Council on an enlarged basis, and we believe there will be a general feeling of regret at the result of the discussion. We cannot at all agree with those members of the Council who objected that such a subject was too large and too important to be considered at so late a period in the session. The question involved has, for a long time, been a matter of agitation in the Profession at large, and it had already been at least once before the Council, so that it might be fairly expected that the members of the Council had duly considered it. When the matter was, on a previous occasion, before the Council, they resolved that, if Government should see fit to enlarge their powers, it would then be desirable that the Profession should have more direct influence in the election of representatives on the Council, and one of their latest acts during this session was to express their willingness to "accept any extension of the powers conferred by section 29 of the Medical Act (1858) as the Government may see fit to grant."

Surely, then, the acceptance of Dr. Parkes's or some similar motion would have been a very fitting and consistent supplement and rider to this expression of willingness to accept enlarged powers. We have no sympathy with the demand made by some for what is called "direct representation of the Profession" on the Council. We think it would entail great expense and trouble, and very mischievous agitation on the Profession, and that it would in all probability result in the election of an inferior class of members of Council. But it cannot be denied that there is a very general feeling that the present system of election of the representatives of the "Medical authorities" is founded on greatly too narrow and contracted a basis, and that it must, sooner or later, be much enlarged. Dr. Parkes's proposal was a very moderate one, and based on a principle which we have frequently advocated—viz., the extension of the franchise to a much larger proportion, if not to the whole body, of the members of each of the Medical authorities; and in rejecting it as they did we think the Council threw away a very good opportunity of showing some sympathy of feeling with the Profession on a very important subject, and of thereby gaining in return an increase of confidence in their labours and sympathy with their difficulties.

Some change will undoubtedly, and most likely ere long, be made in the constitution of the Council, and though it may be quite true that the Government is not inclined to take up this subject just now, we cannot think that the Council are best consulting either their own dignity and influence or the interests of the Profession by merely waiting on the Government, while by taking the initiative, and pointing out the direction in which they think the change should be made, they would have vindicated to the Government their position with regard to, and placed themselves more in harmony with, the Profession.

We must greatly doubt also the wisdom and policy of the resolution declaring it to be not expedient that the duty of prosecuting offenders against clause 22 of the Act should be assigned to the General Council or any branch Council. We agree that if any private person chooses to undertake a prosecution he should be at liberty to do so without the leave of the Council, but if the Council refuse to prosecute in cases which may be brought to their notice, however flagrant they may be, the offenders will generally escape. The Council spend very large sums annually on their sittings and debates, and we hold that they may fairly be expected to use some of the moneys paid to them by the Profession in the prosecution of offenders against the Medical Act.

We fear that the acts and discussions of the Council throughout the Session are rather open to the reproach, that the

Council thought more of the interests of the "Medical authorities"—*i.e.*, of the Universities and the Corporations—than of the Profession and the public; but on the whole good work was done, and some valuable amendments to the Bill were carried. And it is satisfactory that the Council were able finally to express "their general approval of the Bill, and their earnest hope that it may became law during the present Session." The Bill, as originally drafted, undoubtedly, was not all that could be desired; it had grave faults both of omission and commission, but we certainly hold that it was much better than no Bill at all. For years the Profession has been agitated by the expectation of changes in its government and laws; for years the Medical Council have been considering amendments in the Medical Act (1858), and have been entreating Her Majesty's Government to undertake the management and conduct of an Amended Medical Acts Bill through Parliament; and it would, we think, be a grievous mistake if, now that an unusually powerful Government has undertaken the desired work, its efforts were to be frustrated through any jealousies of the Medical authorities—the opposition of any portion of the Profession that may feel dissatisfied because the Bill does not give all that they think desirable, or the indifference of the rest. The passage of the Bill through both Houses of Parliament must, however, be carefully watched lest any mischievous changes be introduced; but, given the amendments we have more than once recommended, we join in the earnest hope of the Council that "it may become law during the present Session." Even if it gave us little more than a period of rest from agitation and fear of change, it would be no slight boon.

LIEBIG ON THE ACETOUS FERMENTATION.

Some time ago, we referred to an important paper of Liebig's relating to fermentation in general, and also to the source of muscular force. At that time Part I., devoted to the alcoholic fermentation alone, had appeared; Part II. and Part III. have been recently published.

Part II., on the acetous fermentation, enforces the same principles as Part I., and, indeed, affords a more striking illustration of Liebig's characteristic views respecting the entire class of phenomena under discussion than the former chapter.

Liebig begins with the statement that the right method of investigating either physiological phenomena or mixed phenomena—such as the process of fermentation—consists in determining the physical and chemical laws which are in operation, and that all we can hope to understand respecting such phenomena is confined to the immediate knowledge of these laws. "To explain a physiological phenomenon means, therefore, above everything else, to establish what physical or chemical laws operate in it, and further investigation has, for its task, to determine how far this operation extends."

The chemical events which take place in the process of fermentation are accordingly referred to a physico-chemical cause—viz., to the propagation of molecular movement from substances in a high state of molecular activity to neighbouring highly complex and fragile chemical structures.

"This theory has met with no support, but in recent times another theory has been accepted representing the great natural processes of the return of complex organic substances to the inorganic state as consisting in the growth and nutrition of lowly organised beings. The old vital force of last century has come back in a modern dress to explain the course of very simple chemical changes."

According to Mitscherlich fermentation is brought about by vegetable organisms and putrefraction by animal organisms. Liebig is merry over the curious properties ascribed to these different kinds of vegetable beings. Thus the *Mycoderma aceti*, which, according to Pasteur, produces acetic acid, is capable of producing succinic acid, and according to Thomson may likewise induce the alcoholic fermentation. Different observers do not concur in their analyses of the plant; Mulder says that it leaves no fixed residue on incineration, whilst according to Pasteur phosphates and alkalies are essential constituents of it. Neither does it seem to be very easy of recognition, being hardly distinguishable from the plant of the lactic acid fermentation. The manifestations of the activity of the latter are even more wonderful, being by no means confined to the production of lactic acid, but embrace the formation of butyric acid, mannite, alcohol, and other substances. In short, though these peculiar plants are said to produce a special and peculiar product as a characteristic act of their vitality, it would appear that they are not very particular, and on occasion will produce almost any kind of organic compound.

Bearing in mind the fact, that in order to convert alcohol into acetic acid, all that is requisite is that a certain quantity of oxygen should act chemically upon it, and that this chemical action is capable of being brought about by purely inorganic substances, such as chromic acid and platinum black; and that the shavings of wood employed in the "quick vinegar process" do not show any signs of the presence of the *Mycoderma aceti*, whilst Schönbein has shown that, in contact with the oxygen of the air, turpentine, ether, aldehyde, and oil of bitter almonds, exert an oxidising action (through the production of ozone, or condensed oxygen), Liebig concludes that the formation of acetic acid from alcohol does not depend on a physiological action; that acetic acid is not a product of the *Mycoderma aceti*, but of a process of oxidation.

THE WEEK.

TOPICS OF THE DAY.

The Medical world has sustained a loss in the death of Sir James Young Simpson which it is difficult to estimate. The Profession has no lack of earnest workers, accurate observers, excellent teachers, learned writers—but, like every other calling and field of labour, it can have but comparatively few men of genius. No great discovery can be made without genius, for genius includes not only accurate perception, but the faculties of induction and almost intuitive generalisation. These, with a spirit of fearless self-sacrifice, a never-satisfied curiosity, and an indomitable love of work, make the discoverer. Simpson had them all. We publish elsewhere a memoir of him from the pen of one who knew him intimately, and was associated with him for a considerable period of his Professional life. It will be read with all the interest which the character and career of Simpson must inspire in members of his own Profession. Our English readers will learn with regret that circumstances have prevented the remains of Sir James Simpson finding a last resting-place in Westminster Abbey. They will, however, appreciate the reluctance of Scotchmen to forego the honour of paying the last tribute of respect to, and of providing a last home for, one of the greatest of their countrymen.

We are informed that at a meeting of the Council of the Royal College of Surgeons, held on Thursday last, Sir William Fergusson placed his resignation as a Member of the Court of Examiners in the hands of the President. It will be remembered that Mr. Quain has already adopted a similar course, and we believe that Mr. Hilton will decline to allow himself to be proposed for re-election on the Court of Examiners when his term of office expires in July next.

The debate in the House of Lords on the second reading of the Lord President's Medical Reform Bill should be, on the whole, gratifying to the Profession. It shows at least that their lordships are not prepared to legislate hastily on so important a subject. The Marquis of Salisbury, although speaking ostensibly as Chancellor of the University of Oxford, we might suppose to have been really the mouthpiece of a body which has a more direct interest in the maintenance of Medical rights and privileges. The amendments sketched by Lord

De Grey in his reply have been printed, and we have elsewhere commented on them. The discussion in committee on the Bill will not, we believe, be commenced until after Whitsuntide.

Dr. Hughlings-Jackson has been appointed Physician to the Hospital for Seamen at Greenwich (late *Dreadnought*).

It is well known that two of the most distinguished Professors of the University of Edinburgh—Professors Christison and Laycock—have been attacked with more than feminine virulence for stating in plain outspoken language their real reasons for objecting to the admixture of the sexes in Medical classes, Hospitals, and dissecting-rooms. Professor Laycock has answered his critics in an address which he delivered to his class in the Edinburgh Infirmary on Tuesday, May 3. From it we extract the following, which we commend to the attention of the noblemen who have been presenting petitions praying for the admission of women to the Medical classes of our schools :—

"I have never intimated, either directly or indirectly, that it was necessary to inquire into the moral character of any ladies who have attended, or who may in future attend, the University as Medical students. All that I said—and I was forced to say it as a trustee of the University in the interests of the public—was, that there were possibilities in the future that might render such an unpleasant, dangerous, and delicate proceeding necessary. The *Times* newspaper thinks all that need be done is to admit women on on the same conditions and testimonials of character as men; but this is precisely the knot of the difficulty. You are all aware that there is no testimonial of moral conduct nor any expression of religious belief required from our students on matriculation. This freedom from all restrictions has occasionally had bad results, although those who matriculate can have no other conceivable object than study. But suppose the other sex admitted as unrestrictedly from all parts of the world, and of the age from 16 to 24. Then, for the male students at least, there would be other conceivable objects than study, and possibly for some of the females. I hardly think it safe to quote the *Times* without risk of being denounced as unmanly and ungenerous, and say 'that the age at which the young men and young women would be attending the University is peculiarly susceptible, and that it is easy to conceive embarrassing interruptions to a strict course of study' under such circumstances. Nothing is more difficult than to speak honestly and truthfully on the various questions involved. Truth, however well gilded, is often a bitter pill, and vexes the soul of the patient in a way you little expect. For example, I thought it right to state that Medical women were apt to become political economists, and in illustration, amongst other examples, mentioned that of a female Physician who, in a lecture to working women, advised them 'not to burden the household with more children than it can bear;' an end to be attained, she said, by a knowledge 'of established physiological laws which should be known to parents.' Now, as this kind of doctrine sometimes leads to crime, I thought it my duty to say so, and, as a consequence, have been accused of the 'loathsome' conduct of saying that this female Physician taught the working women to commit the crime. To any one looking calmly at the matter, the facts are plain enough; but in these heated feminine discussions you never know when you may be perpetrating a detestable *double entendre*. What, then, is true manliness and courtesy to the sex? I answer, when you think their best interests at stake to speak out honestly, but reverentially, to every true woman, for she merits all reverence, as every man must feel who gratefully remembers all that woman's love has been to him. It is for this reason that I do and will speak the truth plainly. Those who do otherwise are not, in my opinion, the true friends of the sex. An eminent member of the Profession resident in London, writing to me to express his great satisfaction that the University had said 'No' to the proposition for intimate mixture of the sexes in Medical teaching, says :—'It is a monstrous proposition, and especially monstrous to those who see in woman all that is excellent and refining to our coarser nature. I feel strongly the necessity in these times of obtaining for women suitable occupations and lives of independence, but of all pursuits, those that involve the questions of sex are to both sexes the most objectionable. They are more than objectionable, they are repulsive; and, with every respect for the advocates for women's claims to Medical education, I have a strong impression that such persons are not among the foremost of those who thoroughly appreciate the real purifying influence of refined women in society, or her true value in her social circle.'"

Under the presidency of Professor Huxley, the Ethnological Society seems springing into new life and vigour. The Society is now holding special meetings alternately at the Royal United Service Institution and the Museum of Practical Geology. The first of these meetings took place on Tuesday at the museum in Jermyn-street, when Professor Huxley occupied the chair and delivered an opening address. A paper was afterwards read by Dr. Nicholas "On the Influence of the Roman Conquest on the Ethnology of Great Britain." On June 7 Professor Huxley is to read a paper "On the Geographical Distribution of the Chief Modifications of Mankind." The meeting will be held at the Museum of Geology, in Jermyn-street, at 8·30 p.m.

The meeting of the Medical Profession called together by the Birmingham Medical Reform Union, which took place on Saturday at the Freemasons' Tavern, does not seem to have been an eminently successful one. We suspect that a larger attendance would have been secured had not the directing body of the Union appeared in some of its recent publications to adopt extreme views on the subject of Medical reform—views which could only be carried into effect by making a clean sweep of all existing institutions, and by burdening the Medical Profession with all the evils of periodically contested elections for the General Medical Council. We are very far from thinking that there should be no representation of the Profession in that body. We would place the election of representatives of the Medical Universities and corporations on a far wider basis than that on which it rests now, but we have grave doubts whether the majority of the 9724 gentlemen who signed the Birmingham memorial would wish to plunge the Profession into costly and vexatious elections, the expense of which may be calculated from the large sum which the Birmingham Medical Reform Union has already expended in getting up its organisation and memorial.

The House of Commons has determined apparently to learn a lesson from the fair sex, and as women are insisting on intruding on what have been considered the domains of man, man shall in return claim a share in what are as yet supposed to be the special rights of women, and as a beginning the House has in a clause in the Naturalisation Bill made provision for persons "born of a father." Lord Westbury objected to this as "a thing physically impossible," but the Lords let it pass, not being gallant enough to interfere.

The debate in the House of Commons on the subject of opening the British Museum at night was signalised by an announcement from the Chancellor of the Exchequer that he intended in the present session to make some propositions to the House on the subject of building the new museum for the reception of the natural history collections. We suppose that both parties in the House are so thoroughly pledged to the South Kensington scheme, that there is but small hope of preventing the removal of the most interesting part of the national collection to a suburb. We trust, however, that the subject will again be debated before the site is irrevocably fixed. During the summer months the Museum is, on Monday and Saturday, to be open until eight o'clock.

THE GOVERNMENT MEDICAL BILL.

THE resolution of the Council of the St. Andrews Medical Graduates' Association, noticed by us last week, approving of the single examining board for each part of the United Kingdom, and protesting against giving the universities power to grant degrees without special examination, has been communicated to Earl De Grey. In acknowledging the receipt of

the letter, the Medical officer of the Privy Council is instructed to inform the Association that "his lordship intends to move, as an amendment to the Bill, the omission of university degrees from clause 20."

BOUNTY AND PRIZE MONEY.

We trust that Mr. Cardwell, while devising a plan by which enlistment for the army may be carried on without the injurious adjunct of bounty, will, at the same time, direct his attention to the equally or even more injurious results of the distribution to soldiers of large sums of money, either as prize or as working pay, particularly in India. We have on more than one occasion, in noticing the published reports of the Army Medical Department, remarked upon the fact that such distributions are invariably followed by an increased rate of sickness and mortality among soldiers in consequence of the drunkenness which follows in their wake. We have even suggested that all money so becoming due to soldiers should be funded for them at a fair rate of interest, and only given to them on their final discharge from the service, or to their legal representatives in case of death. Circumstances will of course occur under which exceptions to this rule would be desirable, but they should be thoroughly investigated and well-established by commanding officers before recommending any departure from it. There can be no doubt that the health and *morale* of the army would derive signal benefit from some such system.

PRIVILEGED COMMUNICATIONS.

Mr. Baron Pigott, in chambers on Monday last, decided that the Medical reports furnished to a railway company before the commencement of an action against it for compensation for injuries, were "privileged communications." They were consequently not open to the inspection of the plaintiff. This is no doubt perfectly consistent with law and justice, but it is a striking illustration of the evils of the present system of assessing damages for injuries received on railways. The companies receive the reports of their Medical officers, and act to a certain extent upon them. In cases where the injury is severe and lasting, they offer no objection, as a rule, to arbitration, but they almost invariably refuse to do justice to the plaintiff. The case is then carried into court, and the judge and jury, after hearing the most conflicting evidence, arrive at a summing-up and a verdict, which may or may not be just. This, however, is certain, that a more righteous conclusion could in all cases be arrived at by submitting the case to the arbitration of a Medical tribunal, with power to inspect reports and call witnesses. Now it is curious that the chief opponents of this plan are the railway companies themselves, who rather incur heavy legal expenses than submit to it. It is difficult to understand their reasons, particularly if it be true, as stated, that the legal expenses of the late New-cross accident amounted to three-fifths of the money that it cost the Company. A worse state of things cannot be imagined, and no change could be for the worse.

A USEFUL METEOROLOGICAL CONTRIVANCE.

Mr. H. C. Russell, B.A., of the Royal Observatory in Sydney, has published in this country a card, the value of which is that it enables an observer almost at a glance to determine from the readings of the dry and wet bulb hygrometer the relative humidity of the atmosphere. At the present time it is the practice either to calculate the latter from the given data, with the expenditure of a good deal of time and trouble, or to use the extended tables published by Mr. Glaisher. The card, about 18 inches long by 14 inches deep, is marked by straight vertical lines corresponding with the degrees of the dry-bulb thermometer; and crossing these are a series of lines, the curves of which have been carefully calculated, and which terminate on the right-hand side with figures indicating the degrees of humidity. A separate slip of card is furnished, marked with degrees of the wet-bulb thermometer. The table is used thus:—The index slip is placed vertically on the line corresponding with the dry-bulb reading, and then the mark corresponding to the wet-bulb reading touches the curved line on the card, by following which with the eye to its extremity the degree of humidity is ascertained. The curves are very curious, and worth study, as showing the manner in which different atmospheric temperatures affect the result of the readings of the wet-bulb instrument. We can recommend this card after a trial. It may be obtained of Mr. W. D. Thomson, 166, Upper-street, Islington.

MANCHESTER MEDICAL AND SURGICAL REPORTS.

We have received a circular intimating that a new volume of Hospital reports is about to be published with the above title, and that the editors, Dr. Whitehead and Mr. Bradley, have secured the most talented and distinguished of the Manchester Practitioners as collaborateurs. They say in their circular "there is a very general feeling of regret amongst Medical men that, rich as Manchester is in Medical charities, she should be so poor in Medical literature. With sixteen Hospitals and public Dispensaries there are no annual Hospital reports or collated statistics." Now, while regretting as much as any that the vast resources of Manchester from a Medical point of view should not be made more generally useful to the public, we question very much whether the publication of an annual volume of reports is the best way to utilise the material there available. We have ourselves devoted no small amount of time to the investigation of the Manchester Medical charities, and have given a large amount of space to reports on some of them. We have further examined and reported on other places whose resources were on a much smaller scale, and we have not unfrequently found that from the smaller place the Profession reaped much more benefit than from the larger. And why? because the Medical officers made their cases and conclusions known to the Medical world through journals such as our own or our contemporaries, thereby insuring a world-wide circulation, instead of being limited to a small local circle of readers. The growing system of Hospital reports is, we think, fraught with danger to the success of our great societies, and is further calculated on a shortsighted policy as far as the writers are concerned. It is easy to start a volume of reports and to keep it afloat for a year or two, but after that the editors find the task of whipping-in too great, and the reports cease. The consequence is a disjointed collection of reports and cases difficult of reference, and too often overlooked. We sincerely trust the projectors of this scheme will count the cost before they embark in it. They may be assured that good papers are always welcome to this journal and to our contemporaries; bad papers it would not pay any one to publish. But to secure a permanent record, easy of reference, and in the hands of all, an annual volume is not the medium to be selected.

FROM ABROAD.—PROFESSOR ANDRAL ON THE TEMPERATURE OF INFANTS—STATISTICS OF OPERATIONS—M. SÉDILLOT ON OPERATING WITH THE ELECTRIC CAUTERY — ACTION OF CHLOROFORM ON MAHONIA.

The venerable Professor Andral read a paper at a recent meeting of the Académie des Sciences on the "Temperature of New-born Infants," based upon the examination of the temperatures made one or several times on fifteen infants from the moment of their birth up to the twenty-second hour of their extra-uterine existence. The mensurations are given in detail in several of the cases, and these are the general conclusions stated:—

"Every time that the axillary temperature of the infant has been examined immediately after its birth, it has been found in three cases out of four as high as that of an adult suffering from fever. It is highly probable that this excess of heat is

derived from the uterus. Half an hour afterwards the temperature was found, in two of the four infants, to be below the lowest limit of the normal temperature of the adult; in one the descent was very slight, and in the other pretty notable. It is to be remembered, however, that there are adults who exceptionally, while exhibiting all the conditions of health, only have at the axilla a temperature of 36·2° C., or even of 36°. From the second hour to the twenty-second hour the temperature was always found to be like that of the adult with all its physiological varieties. Thus, it oscillated in seven cases between 36·8° and 37·5°. These facts, corroborated by those observed by John Davy, Baerensprung, and Roger, prove (contrary to the opinion deduced from the observations made by W. Edwards and Despretz), that the first hour of extra-uterine life once past, the temperature resembles that of the adult. I believe therefore, that we should only receive as the expression of some special cases, and not as the representation of a general law, the opinion so generally entertained that the temperature of infants remains lower during the two days succeeding their birth. But to assert that very shortly after birth infants have the same temperature as adults, is not to deny the fatal influence which cold exerts upon these infants, who are, as shown by the researches of Villermé, just as mischievously affected by a very high atmospheric temperature. Should the lower temperature which the infant presents during the first half-hour of extra-uterine life be attributed to the fact that the respiratory function has not yet attained its full development, and is therefore incomplete? I am disposed to believe that this is the case, rather than to accidental cooling, dependent upon the evaporation of the liquor amnii, or upon the impression made by the colder medium into which the child is introduced."

Professor Simonin, of Nantes, read a paper at the meeting of Delegates of Learned Societies, recently held in Paris, detailing the results of his thirty-four years of practice in the same Hospital with respect to the great operations, distinguishing those performed prior to, and those subsequent to, the introduction of chloroform. The operations were 250 in number. Of these the results in amputation and hernia are as follows:—Amputation of the thigh without anæsthetics 7, with 4 deaths, or 57 per cent.; with anæsthetics 23, and 8 deaths, or 35 per cent. Amputations of the leg 11, and 5 deaths, without anæsthetics, or 45 per cent.; and 14, with 3 deaths, or 21 per cent., with them. Strangulated hernia, 25 operations and 9 deaths (36 per cent.) without, and 10 operations with one death, or 10 per cent., with anæsthetics.

At the last meeting of the Académie des Sciences, M. Sédillot submitted a note on "The Suppression of Pain after Operations." He observed that a patient may undergo an operation in a state of absolute insensibility, but a state of suffering awaits his arousing from this condition, which it should be our object to avert. Opiates, refrigerants, chloral, etc., have been tried with this object without attaining it. The various kinds of cauterisation render traumatic surfaces insensible and exempt from accidents. The actual cautery effects this, but the rapidity with which it cools, and the superficial character of its action, much restrict its employment. M. Nélaton tried the gas cautery, but the eschars this produces are too superficial, and the same may be said of those induced by a flame of oxygen and hydrogen experimented on by M. Sédillot. Of all measures of this kind the electric cautery, as perfected by the late Professor Middeldorpff, of Breslau, is the best and most certain. The degree of heat can be instantly varied as desired, rendered intermittent or continuous, and directed into the deepest cavities, or employed for the division of every description of tissues. To prevent loss of blood, it must be employed at a white heat, taking care to divide or destroy the tissues with extreme slowness. In this way M. Sédillot has performed numerous operations without loss of blood, and with great success. Burns, he observes, of the third degree cause but little pain; and he has seen persons mortally burnt preserving for several days their appetite and sleep and hopes of cure. This absence of suffering in the severest burns is explained by the destruction of the nerves. And in the same way the electric cautery renders the wound it causes insensible, so that persons operated upon by its agency under chloroform experience on awakening no suffering. Later, at a period varying from the third to the ninth day, an inflammatory reaction is set up, but it is generally very slight, fever either being entirely wanting or soon ceasing.

At the same meeting a note was read from M. Jourdan detailing the results of "Experiments on the Action of Chloroform on the Irritability of the Stamens of Mahonia." It has long been known, he observes, that the stamens of this plant, like those of the *Berberis*, are endowed with irritability—suddenly rushing on the pistil when a foreign body is brought in contact with the lower part of the inner surface of this filament. A branch of mahonia in flower was introduced under a glass bell, of about a litre in capacity, in which some cotton upon which some drops of chloroform had been dropped was placed, the temperature being at 14° or 15° C. At the end of a minute the stamens were forcibly bent backwards, as in a tetanic state, and remained rebellious to all stimulus. On the plant being exposed again to the open air the irritability reappeared after eight or ten minutes, at first feeble and partial, and exhibiting itself first in the flowers least blown. At the end of twenty-five or thirty minutes the stamens had recovered the same amount of sensibility which they possessed prior to the exposure to the chloroform. When the exposure was continued for two or three minutes the same results followed, the irritability only requiring more time for its reappearance. After an exposure for ten or fifteen minutes all irritability became completely and permanently destroyed, the plant not recovering on gaining access to the air, but next day becoming black and dead.

PARLIAMENTARY.—THE MEDICAL ACT (1858) AMENDMENT BILL.

On Thursday, May 7, in the House of Lords, the Marquis of Clanricarde presented a petition from the College of Physicians in Ireland, praying that this Bill might not proceed till there had been further inquiry into its effect on this and other Medical corporations.

Earl De Grey then proceeded to move the second reading, and in doing so he repeated the substance of the explanation he had offered on introducing the Bill. He believed that the examinations were of higher character than they were some years ago, but there was a natural tendency in the nineteen licensing authorities to underbid each other; and there were undoubted cases in which persons "plucked" at one place had passed elsewhere. Last year the General Medical Council appointed a committee, which reported strongly against the inequality which existed in the qualifications demanded by different licensing bodies, and stated that the Profession could never be put upon a satisfactory footing unless provisions similar to those contained in the Bill were adopted; the chief of these being the establishment of one board of examiners for each of the three kingdoms. As regarded certain clauses which had been objected to, he should be happy to modify them so as to meet the views of the universities, whose feelings he desired as far as possible to consult. As to the petition presented by the noble marquis, he had only to say that there were members of the Medical Profession in Ireland who approved of the measure; and the General Medical Council had yesterday passed a resolution by 15 to 3 expressive of a general concurrence in the Bill.

Lord Clanricarde thought that the three weeks which had elapsed since it was ordered to be printed were not sufficient to enable the Profession throughout the three kingdoms to make themselves masters of its provisions.

Lord Cairns said the University of Dublin, of which he was Chancellor, had a Medical school second to none in the United Kingdom for extent and reputation. That University would certainly rejoice to see established uniformity of examination, and that might be secured to an even greater extent than was provided for in the Bill by enacting that the examining board in any one of the capitals should have upon it representatives of the other two. The serious objection to the bill was that, disguise it as the noble earl might, it was a proposal to constitute the Privy Council the granter of Medical degrees. The Profession in each country might draw up what scheme they please, but the Privy Council would have power to amend, modify, and alter it as it thought fit. The proposal was, in fact, to create a new Medical degree, and it was a degree that, for anything that appeared to the contrary, might be obtained

without walking the Hospitals or attending a single chemical lecture, if only the applicant had acquired by any process of "cramming" the requisite amount of information. He certainly thought that the Bill ought not to be pressed through Parliament without allowing sufficient time for its due consideration. (Cheers.)

The Marquis of Salisbury complained that it had been laid on the table just as the vacation of the Universities was commencing, and that therefore no real opportunity had been given them of considering its provisions. The haste of the noble lord seemed to betray a little guilty consciousness. The truth was that the Bill was one of a class of which there had been too many of late—namely, bills which cut the Gordian knot by handing over the business of the legislature to somebody else. The permanent officials of the Privy Council, as was well known, had immense power. The officer who looked after the education of the people, that who looked after diseases of cattle, and that who looked after the health of the people—all wrote under the mystic name of "My Lords;" and he (the noble marquis) was not willing to abolish the nineteen examining bodies for the sake of installing Dr. Simon in their place. We had heard a great deal about competitive examination in this country, and the noble earl when in the other house was an ardent worshipper at that shrine; but he did not think the noble earl would like to have his leg cut off by a man who had done nothing but read about cutting off legs. He hoped that ere the Bill passed the powers proposed to be given to the Privy Council would be reduced to a mere form of approval. (Cheers.)

Lord De Grey, in reply, denied that he had shown any undue haste in pressing forward the Bill, for the Universities had had ample opportunity of making themselves acquainted with its contents. As to the power of modification given to the Privy Council, he had not inserted the provision in the Bill till he had taken advice as to whether it would bear the construction put upon it by his noble friend—namely, the power that it would give the Council of practically upsetting the scheme submitted to it. His idea was not to confer on it power over any Professional matter at all, but only to enable it to deal with such questions as fees. He should, however, be glad to submit that portion of the measure to the closest scrutiny of the committee. Nor was it the intention to grant licences to mere students of books; and if a scheme embodying any such proposal were submitted to him, he should unquestionably feel it his duty to veto it. If their lordships would now agree to the second reading he would fix the committee at a somewhat distant day; and he would very shortly lay on the table certain amendments which he would propose with a view to obviate the objections that had been made to the Bill.

Lord Granville added that while there was a division in the University of Dublin as to the Bill, the English and Scottish Universities were all in favour of it. The Bill was then read a second time.

In the House of Lords on Thursday, May 5,

Earl De Grey presented a petition from the Manchester Medico-Ethical Association, in favour of certain amendments in the Medical Acts.

Lord Leigh presented a petition, signed by thirty-one women of Birmingham, praying that women may be allowed to study in Medical schools and take degrees.

On Tuesday, May 10,

Earl De Grey presented a petition from Miss Martineau, in favour of the admission of women to Medical degrees; also similar petitions from inhabitants of Leeds; Professors of Edinburgh University; Miss Becker, of Manchester, and others; Medical Practitioners of Edinburgh, Aberdeen, and elsewhere; female inhabitants of Shipley; inhabitants of Shipley, Waterford, and Manchester; female inhabitants of Colchester; inhabitants of Colchester and Darlington; female inhabitants of Darlington; and female inhabitants of Surrey.

On the order for going into committee on the Medical Act (1858) Amendment Bill, Earl De Grey stated that he believed the most convenient course would be to commit the Bill *pro formâ*, in order that it might be reprinted with the amendments which he proposed to introduce, and be recommitted on the 19th inst.

The Duke of Richmond hoped there would be a longer interval before recommitment, as the amendments would have to be considered by various bodies in Scotland.

Earl De Grey was willing to defer the recommitment to a later date, his wish being that there should be ample opportunity for considering the measure.

The Bill was then passed through committee *pro formâ*.

THE OPENING OF THE NEW BUILDINGS OF THE UNIVERSITY OF LONDON.

The eleventh of May will henceforth be marked with a white stone in the calendar of the University of London; for on that day the university, which hitherto has been only a lodger, entered into formal and active possession of the house that has been erected for her at the national cost. And furthermore the building, which is handsome and striking enough to befit the eminent position the university has attained among the educational bodies of the empire, was opened by her Majesty in person. We shall not attempt to give our readers any description of the building, over which the battle of the styles was fought for some years with varying success—at one time the Gothic, at another the Italian gaining the victory; we must be content to remark that the result is an edifice, Italian in style, of much beauty and elegance, though neither grand nor magnificent, while the interior arrangements seem well adapted to meet all the requirements of the university. The central hall, staircase, and some of the rooms are very handsome, though still unfinished, the walls not having yet received their intended decorations. The theatre was the main centre of interest, as there the address was to be presented, and her Majesty was to declare the opening of the building. This theatre or lecture room, which is lofty and well proportioned, is calculated, we believe, to contain about 800 people, and by 12 o'clock was well filled, but presented a decidedly sombre appearance. For the fair sex were, with a very few exceptions, confined to the gallery which runs along one side of the room, and the great majority of the Graduates, who filled the seats in the body, wore black gowns with only the varied hoods of their respective degrees. Here and there, indeed, the black robes were relieved by the scarlet and puce of the Doctors of Medicine, the scarlet and blue of the Doctors of Law, and the scarlet and brown of, we believe, the Masters of Arts. Two or three heads of houses of Oxford University were also present in their robes of black velvet and scarlet; Mr. Simon and one or two others wore the handsome robes of the Oxford D.C.L., and the full dress robes of the Doctorate of Medicine of the Sister Universities were to be seen; but all these together were hardly more than enough to give a somewhat patchy appearance to the assembly. The hoods worn presented an almost bewildering variety of colours, brown, puce, blue, maize, purple, pink, and we know not how many more, and we observed one gentleman in scarlet and blue robes with two hoods on; but the colour of the hoods was not sufficient to relieve the black of the robes, and was almost entirely lost when the wearers were seated.

Opposite the Royal Dais was a half circle of chairs, the central five of which were occupied by the only ladies allowed to be seated in the body of the theatre, and the rest by visitors of rank and distinction — as Lord John Manners, General Sabine, the Vice-Chancellor of the University of Oxford, and so on, while the ladies were guarded on their immediate right and left by the Prime Minister, and the leader of her Majesty's most faithful opposition. The entrance of the latter was, indeed, the first lively incident of the day. He was greeted, as he everywhere is, by loud and continued applause, and we have no doubt that immediately innumerable people asked each other, "Have you seen Lothair?" Mr. Gladstone was also very warmly welcomed, but we did not hear any one mention the "Juventus Mundi." Little excitements like these were gladly welcomed to relieve the somewhat dreary waiting till one o'clock, while the theatre grew decidedly hot and close; and many were the longing glances addressed by the graduates and visitors in the lower regions to the height where the fair sex sat enthroned, their presence revealed by tantalising glimpses of light spring dresses, and a gentle murmur of musical sounds.

At last, at one o'clock, the distant strains of the National Anthem announced the arrival of her Majesty, and very shortly afterwards she entered the theatre, accompanied by the Prince and Princess of Wales and the Princess Louise, and escorted and followed by the Chancellor, Vice-Chancellor, and other officers of the University, by the Member (who wore the gold robe of the Chancellor of the Exchequer), and by the Senate. As soon as her Majesty had ascended the dais, the Chancellor, Earl Granville, presented a short, and we believe very good, address, which he read with very successful indistinctness. The Queen handed him a reply, and then, in her still beautifully clear, silver voice, announced, "I declare this building to be open." A *fanfare* from silver trumpets echoed the declaration, and the loyalty of the audience, restrained thus far by etiquette, burst forth in right hearty ringing cheers, over and over again repeated, for the Queen. Her Majesty, who, we are glad to say, looked remarkably well and in good spirits, appeared much gratified by the noisy warmth of her loving subjects, and still more pleased when the cheers rang out again for the Princess of Wales, whom her Majesty immediately led forward to acknowledge the greetings. The Prince of Wales and the Princess Louise then were loyally welcomed — the royal party departed, and the ceremony was over.

After the Queen had left the building, all the officials and dignities of the University returned to the theatre to distribute prizes and confer degrees; and the rights of women being now asserted, the ladies were admitted into the body of the theatre, and it assumed a much brighter and more picturesque appearance. The ladies, flowing into every part of it, distributed themselves with an instinctive appreciation of artistic effect and happy combinations of colours that lightened up and glorified the place wonderfully, recalling the brilliant appearance of the Sheldonian Theatre at Oxford on Commemoration days. It seemed a happy augury of increased success and brilliancy in the future career of the University.

"Who shall fix
Her boundaries? Let her work prevail.

Floreat semper.

NEW BOOKS, WITH SHORT CRITIQUES.

Studies on Functional Nervous Disorders. By C. Handfield Jones, M.B. Cantab, F.R.S., Physician to St. Mary's Hospital. Second edition. London: John Churchill and Sons. Pp. 839.

*** Most people will rejoice in a new edition of a work so interesting as Dr. Handfield Jones's "Functional Nervous Disorders." Dr. Jones as an observer and as a thinker is so original and suggestive that the very points wherein the reader differs from the author are those which interest and please most. As for the book itself, it may be said that in point of size it is considerably increased, mainly by the addition of new and valuable material, but also by the rewriting of certain of its chapters. The chief things noted as fundamental are primary functional paralysis, inhibitory paralysis, an unsuitable stimulant becoming a paralysing irritant, the affinity between spasm and paralysis, the loss of retentive power in the capillaries under influences which paralyse nerve power, the analogy between central and so-called peripheral nerve disorders or those of separate centres, and the prevalence of miasms capable of causing neuralgia and its congeners. "The Practitioner," says Dr. Jones, "who has familiarised his mind with these views will find himself better able to comprehend and to deal with the varying phenomena of very many maladies." The author is also—most justly, as we think—strong on the necessity of something more than mere verbal diagnosis. There are many who, having said the disease is so and so, fancy all said, and there are many who, having named a disease, proceed to treat that name, leaving the conditions of the individual suffering entirely out of sight. To expose this fallacy is enough to secure its condemnation, but we are quite sure Dr. Handfield Jones has done good in insisting on a point so often neglected. It need hardly be said that we cordially commend the work to our readers.

Lectures on Ekzema and Ekzematous Affection with an Introduction on the General Pathology of the Skin and an Appendix of Essays and Cases. By Erasmus Wilson, F.R.S., F.R.C.S., Professor of Dermatology in the Royal College of Surgeons of England. London: John Churchill and Sons. Pp. 386.

*** These lectures and essays have for the most part already made their appearance in the *Journal of Cutaneous Medicine*, and are here reproduced for convenience of reference. It is well known to our readers what importance Professor Wilson places on eczema (to use the conventional spelling): he looks upon it as being essentially *the* inflammation of the skin, and hence as supplying the key-note to the majority of other cutaneous affections. Besides eczema, the anatomy, physiology, and pathology of the skin are here discussed, as are the diagnosis and etiology of cutaneous diseases. Therapeutics in cutaneous medicine also receive due consideration, and the last portion of the opening chapter includes the classification of diseases of the skin. The concluding portions of the volume include some most instructive notes and cases regarding eczema. The final chapter on the therapeutics of eczema is curious.

On Comparative Longevity in Man and the Lower Animals. By E. Ray Lankester, B.A.

*** A most interesting volume upon a subject just now attracting very great attention. The author remarks that the subject of his essay does not admit of very satisfactory treatment from a scientific point of view; but he has accumulated a great number of facts, and argues upon them with much ability. He has exhausted the subject with rare power and pleasantness of style.

A Treatise on Medical Electricity, Theoretical and Practical, and its Use in the Treatment of Paralysis, Neuralgia, and other Diseases. By Julius Althaus, M.D., M.R.C.P., Physician to the Infirmary for Epilepsy and Paralysis. Second Edition. London: Longmans. Pp. 676.

*** As Dr. Althaus truly says, electricity, as a remedial agent, occupies a very different place in 1870 from what it did in 1859, when the first edition of this book was published. Its use and, we may also add, its abuse are better known now than then, especially as the physiological as well as therapeutic effects of static and dynamic electricity or the induced and continuous currents are more generally understood. The work is a useful one, entering into the whole subject of applied electricity, including instruments, physiology, therapeutic effects, etc. Dr. Althaus's experience is exceedingly large, and it is here utilised for the benefit of his Medical brethren.

A Manual of Qualitative Analysis. By Robert Galloway, F.C.S., Professor of Applied Chemistry in the Royal College of Science for Ireland, etc. Fifth Edition, Rewritten and Enlarged. London: John Churchill and Sons. Pp. 443.

*** Professor Galloway's work has always been favourably known as an exceedingly practical introduction to chemistry, both theoretical and analytical. Indeed, it has been such that the student with no previous knowledge of theoretical chemistry could set to work and acquire for himself by its guidance a very thorough knowledge of the principles of that science. We have carefully examined the present edition, and can say that it exhibits everywhere the marks of most careful attention on the part of the author to the wants of the student, and of its kind is one of the most complete works we know.

The Pathological Society of London.—On Tuesday, May 17, 1870, at 8 p.m., the following specimens will be exhibited:—Dr. Peacock: Aneurism of aorta; perforation of vermiform appendix. Mr. Bellamy: Tumour from tendon of transversalis musele; horny growth from vagina. Dr. Dickinson: Lymphoid growth in spleen. Dr. Whipham: Syphilitic disease of larynx and liver. Dr. Cayley: Renal dropsy without albuminuria. Dr. Crisp: Abscess of kidney, with disease of supra-renal capsules. Dr. Quain: Malignant disease of the pylorus. Dr. Bristowe: Hæmorrhage on surface of brain; peritoneal cancer. Dr. Murchison and Dr. B. Sanderson: General lymphadenoma. Dr. Murchison: Dissecting aneurism. Dr. Greenhow: Pearl buttonmaker's lung. Sir H. Thompson: Vascular tumour of bladder. Dr. Leared: Cancer of kidney. Dr. D. Powell: Cerebral hæmorrhage. Dr. Payne: Disseminated tubercle of peritoneum; fibrous growths of peritoneum.

Medical Discovery.—Dr. C. Drysdale finds that the most valuable articles in the Pharmacopœia in the treatment of the cases of phthsis coming under his care in the North London Consumption Hospital, are the perchloride of iron, iodide of potassium in large doses, and cod-liver oil.

SIR JAMES YOUNG SIMPSON, BART.

One of our greatest men has passed from amongst us; Simpson is dead!

This announcement, although scarcely unexpected, has come as a severe blow, not only to science but to humanity. Over the entire scientific world, wherever Medicine is practised, the news will spread a thrill of regret. No Physician in our time —scarcely, indeed, in the whole history of Medicine—has left so broad and deep a mark in the annals of Physic as the celebrated Professor of Midwifery in the University of Edinburgh. Simpson was truly so remarkable a man, and one whose genius was so transcendent, that no passing notice in a weekly journal can do adequate justice to his memory.

Born at Bathgate, in 1811, of respectable but by no means wealthy parents, he raised himself entirely by his own exertions to the position of highest eminence in his Profession. That indomitable energy, that power of self-help so characteristic of his whole working life, seemed even to be foreshadowed at his birth. In the memorandum-book of the local Practitioner who attended his mother on the day he was born is appended the note "Arrived too late." The great man had struggled into the world unaided, and without even the safeguards ensured by the presence of a competent Medical man. Simpson's parents had other sons, and they were scarcely in a position to give any of them an education so liberal as to fit them for the learned professions. James Young, therefore, would, in the ordinary course of events, have found his occupation for life in some office or shop but for the impulse of his own ambition and the innate force of his talent and industry. The system of the Scottish Universities rendering education there more accessible than in the sister institutions in England, it is not unusual for the sons of the better class tradesmen to be sent to complete their schooling by attendance on some of the university courses in Edinburgh or Glasgow. In this way young Simpson, aided in a pecuniary sense by his elder brother, was sent to the University of Edinburgh, and became a member of the humanity class there, under Professor Pillans. The venerable Professor Pillans always believed that his counsel and encouragement at this time had greatly influenced Simpson's subsequent career, and he used to relate with great unction how, impressed with the versatility of his pupil's acquirements, he had urged him to compete for a Stewart bursary, a scholarship which carried money with it, and being tenable for three years, helped the holder to continue his studies in the University. To succeed required extended study of classics, which might well have deterred an aspirant from a country school, but Simpson carried off the bursary, and eventually became a student of Medicine.

He took his M.D. degree in 1832, and became assistant to Professor Thompson in the chair of Pathology. Thus he became familiar with a branch of scientific Medicine which constitutes the very foundation of sound Medical practice. He lectured sometimes in place of the Professor, and even then gave indications of originality, and of a desire to advance beyond the then received teachings on a subject as yet in its infancy. The old Professor was sometimes startled out of all propriety by the new doctrines which he heard had been taught in his own class-room, and which were so expounded and illustrated as to be very attractive to the students. On one occasion, having overheard a portion of one of Simpson's lectures, and having become excited in listening, he saluted his assistant somewhat hotly in the retiring room with the rejoinder, "I don't believe a word of it, Sir."

About this time, so little had he foreseen his future celebrity, that he experienced the first bitter disappointment of his life, in failing to secure the post of Medical Officer at Inverkip, a small village on the Clyde, where his great talents would inevitably have been buried.

Soon after this he began practice, and became a lecturer on Midwifery in the extra-Academical School of Edinburgh. He continued as an extra-academical lecturer for three years, when, in 1840, he was elected Professor of Midwifery in the University of Edinburgh after a severe competition. Some sort of idea may be formed of his perseverance and energy at this time by looking over the testimonials he offered to the patrons of the university as a candidate for the chair. The whole constitutes an octavo volume of more than 200 pages, and in it are to be found certificates of recommendations from all the principal Professors and teachers both in this country and on the Continent, showing that, even at this early period of his career, his reputation was established. In the same volume is a catalogue of his private museum, formed, he states, in the short space of three years, which occupies more than sixty pages, and consists of nearly 700 obstetric preparations.

From this time forth a new era began for the Professor, and the dawn of a new day commenced for the department of practice of which he was the exponent Although various prophecies were made by his opponents, the ibecause he had been elected instead of his better known competitor Dr. Evory Kennedy, the fame of Edinburgh as a school of midwifery would go down, his class-room soon became one of the most frequented in the University. He was a most impressive and instructive teacher, and absolutely fascinated his audience by the force of his arguments and the fertility and appositeness of his illustrations. There was no need to call the roll or take cards, as was the custom in Edinburgh, at Simpson's lecture. Every seat was occupied by no more persuasion than the attractiveness of the lecturer, and old Practitioners who were on furlongh from the army, or who could find time in the occupations of civil practice, deemed it a privilege to listen to his prelections.

At home, his consulting rooms were crowded with patients who had heard of his fame, and who came from all quarters of the world to consult him. Medical men came from every country eager to see something of his practice, and to have the pleasure of an interview with so celebrated a man. To these he ever showed special honour and hospitality, and many can testify to the unbounded attention and kindness lavished upon them by the Edinburgh Professor when they had no other recommendation to him than the kinship of scientific brotherhood. To show these his crowded consulting rooms was a special gratification to him, and it was evident to all who knew him well that he loved the bustle and excitement of unceasing occupation to any amount of peaceful leisure that might have been afforded to him. Throughout life he preferred rather the tribute which was paid to his fame by the constant overflow of patients than the pecuniary remuneration which might have been derived from so extensive a practice; and very numerous were the sufferers who benefited by his skill without rendering any equivalent beyond the outpouring of grateful hearts.

So crowded were his consulting rooms, that many patients had to wait day after day in the hope of an interview; and ludicrous stories are current of ladies affected by minor ailments waiting in bed for prolonged periods, hourly expecting a visit from the great Professor, who was too occupied with graver matters elsewhere, to visit and release them.

Every moment to the looker-on seemed so full of occupation that the Professor had scarcely time for eating and sleeping. His breakfasts and luncheons were among the most curious studies of Edinburgh society. "Assembled," writes a well-known poet, "unceremoniously in a moderate-sized room, with little in common save the wish to meet their host, you found a company drawn together from every latitude and longitude, social and geographical. Of all this motley party there is probably hardly one who is not notable, and the grades and classes of eminence run through the whole gamut of social distinction from duchesses, poets, and earls, down to the author of the last successful book on cookery, the inventor of the oddest new patent, a Greek courtier, a Russian gentleman, or a German count. At your elbow, the last survivor of some terrible shipwreck is telling his story to the wife of that northern ambassador, who is meeting, with the softest Scandinavian dialects, the strong maritime Danish of the clever state secretary opposite. Behind you a knot of American Physicians, just arrived, are discussing, in a loud voice, a speech in Congress, or agreeing, *sotto voce*, on the particular Professional topic upon which they have come to consult the great authority. "Turn for a moment from this sculptor, who is waiting to ask the opinion of the many-sided Professor on the sketches which he is now showing to that portrait painter, and to learn which of them shall be done in marble for the nobleman whose attention the Doctor has found time to direct to the rising young

artist, and you may catch something of yonder violent discussion between those arrivals from Australia, who have come from the land of gold in search of what gold cannot buy."

Amid the bustle and anxiety of perhaps the largest practice ever possessed by one Physician, he constantly found time for experiments, and for writing essays full of original thought and practical suggestions. Many of these contributions were written in the night, in an ante-room, close to the patient he was compelled to wait and watch for. His occasional few days' retirement from practice because of illness or fatigue were generally occupied in the writing of some article professional or antiquarian. If he went to a country consultation he added to the fatigues of his journey some laborious excursion to see a sculptured stone or to explore some Roman camp or curious cave. He gave himself no rest, and the wonder came to be not that Simpson should die, but that he was capable of bearing so much and yet survive. It needed an iron constitution to bear for thirty years the constant tear and wear of overstrained days and disturbed nights, complicated by journeys to distant parts. Now that he is gone his friends must chiefly regret that as he grew older he could not be persuaded to lessen the pressure of his occupations, and possibly to prolong so valuable a life, by recognising the necessity for less work and more prolonged periods of rest.

It is generally understood that if he had been elected Principal of the University of Edinburgh, to which office he aspired on the death of Sir David Brewster, he would have resigned his Chair of Midwifery, and thus have eased the burden. But his love of work was so indomitable that even then it is doubtful if he would have allowed himself more rest. Probably he would have found fresh occupation arising out of his changed position, and the fervour with which he embarked upon any new enterprise favours the belief that, had he succeeded, it would only have put additional strain upon him. This may lessen in some degree the regret of those who, knowing how much lustre the fame of Simpson had shed on the University of Edinburgh, were disappointed at the result.

"No braver or more brilliant soldier in the army of Medicine," says a daily journal, "has in these days been carried to the rear." He may be said to have died in harness. Up to near the time of his death he was occupied not only by Professional avocations but by scientific pursuits outside the Professional pale.

In a letter to one of his friends written in February last, at the beginning of his fatal illness, he dates it "in bed," and continues, "I am laid up in bed with a severe rheumatism in the walls of my chest, but it is better to-day, and I hope to rise to-morrow." Towards the end he says—"Yesterday I read Paul Ferrol, and invented in bed here a new cephalotribe."

The versatility of his genius was one of the most remarkable things about him. Not only did he enrich Medical literature in every department by some of the most important contributions of modern times, but he was reputed to be one of the best antiquarians in Scotland, and one of the most remarkable addresses he ever gave, was delivered before the Antiquarian Society of Scotland, and was so rich in erudition and antiquarian lore, as to excite the admiration of all.

It was impossible to meet Sir James without being impressed with the diversity of his attainments and his almost universal knowledge. His memory was prodigious. It was remarked he was always the first to know about all new scientific inventions, and that he was in advance of his neighbours in information on all sorts of problems, political, scientific, or religious. To notice all his Professional works would take more space than the limits of this brief memoir can afford. Among the more remarkable may be noted his first literary contribution, "On the Diseases of the Placenta," his memoir "On the Uterine Sound," "On the use of Sponge-tents in the Detection and Treatment of Uterine Polypi," "On the Treatment of Displacements of the Uterus by Intra-uterine Pessaries," "On Turning as a Substitute for Craniotomy and the long Forceps," "On Separation of the Placenta before the Birth of the Child in Placenta Previa." These are comprised with many other subjects in his "obstetric works," consisting of two large octavo volumes edited by Drs. Priestley and Storer.

An extended series of lectures and contributions not elsewhere published have graced the pages of this journal, and constituted some of its most valuable archives.

The great feature in all his contributions is their originality and wonderful lucidity of expression. The most ordinary topics of Medical discussion shone out in a new light, when illumined by his touch, and matters of apparently trifling significance assumed an unsuspected importance under his treatment. He was constantly breaking new ground, and in doing so often ran counter to former notions and old prejudices. He proposed to stamp out small-pox by isolation, and in his paper on "Hospitalism," in which he advocated the separate system for patients in Hospital, he startled and alarmed the supporters of colossal buildings for purposes of Medical charity. But those who most dissented from his conclusions were nevertheless bound to admit the ingeniousness of his reasoning, and the practical necessity of remedying the evils he had pointed out.

His antiquarian "Notices of Leprosy and Leper Hospitals in England and Scotland," the article "Hermaphroditism" in the Cyclopædia of Anatomy and Physiology, his paper on "the Introduction of Syphilis into Scotland," are models of accurate scientific and learned research, and his two volumes on "Homœopathy, its Tenets and Tendencies," and on "Acupressure" are each of them, taken alone, remarkable enough to have established the reputation of their author.

Contributions less known to Medical practitioners probably, are his "Ancient Roman Medicine Stamps," "Was the Roman army provided with Medical officers?" his "Sculptured Stones of Scotland," and other works which gained for him his reputation as an antiquarian.

But it is the introduction of chloroform as an agent for allaying the pangs of parturition and abolishing the pain of operations, Surgical and obstetrical, that will render Simpson's name most famous in public estimation hereafter, and rank him as equal with Harvey, Hunter, and Jenner. His other efforts and successes for the benefit of humanity can only be vaguely mentioned in ordinary conversation; this great boon can be understood and appreciated by all. Who can compute the sum of mortal agony which this single discovery has been the means of erasing from the lot of humanity?

Hearing of Morton's and Jackson's experiments with sulphuric ether in America, Simpson deliberately set himself to find some other agent which might be free from the disadvantages of ether. Taking his life in his hand, he fearlessly tried the experiment on himself of inhaling various substances, likely and unlikely, until, after various perils and disappointments, the discovery of chloroform was made. What, in ancient or modern times, has been more striking as a scientific discovery or a greater boon to mankind?

If great statesmen and generals receive public honours after they have passed away, what does the memory of Simpson deserve, whose work during life has conferred benefit on the whole human race?

Sir James was not without recognition of his great merits during his lifetime. For his discovery of chloroform he was, in 1853, elected a Foreign Associate of the French Academy of Medicine, and in 1856 he received from the French Academy of Science the Monthyon prize of 2000 fr. "for the most important benefit done to humanity." For the same cause he received the Royal Order of Knighthood of St. Olaf from the late King of Sweden. In 1866 he was created a baronet by her Majesty Queen Victoria, and, in the same year, he received the D.C.L. of Oxford. In 1869 the freedom of the city of Edinburgh was conferred upon him as a special honour by his fellow citizens. He was President of the Royal College of Physicians in Edinburgh in 1849, of the Medico-Chirurgical Society in 1852; he held the appointment of Physician Accoucheur to the Queen in Scotland; was Foreign Associate of the Academies of Medicine in Belgium and New York. Hon. Fellow of the King's and Queen's College of Physicians, Ireland, and member of a legion of other learned and scientific societies.

Personally, Sir James was amiable as he was great, tender-hearted as a woman to the sick and suffering, always ready to give succour where the need was greatest, irrespective of the social position of his patients. He was the warmest and most genial of friends, one who loved dearly a sensational story, and whose company was always entertaining. On the other hand, he had a liking for controversy, and was a dangerous adversary, for by force of intellect and ingenuity of argument he was pretty sure to push his antagonist into a corner. His personal appearance was remarkable. His short, thick-set figure, bearing the massive head with its long hair, like "Bacchus crowned with head of Jove," was very familiar both to residents and visitors in Edinburgh, where hotels and lodgings were almost peopled by his patients. None who met him failed to recognise the influence of his presence and the power of his wonderful eye. The old students of his class well remember how the least deviation from propriety was instantly quelled by a single glance, indicating that there was thunder beyond. Quite recently, when summoned as a witness on the famous Mordaunt trial, it will not be forgotten how his personal influence and manner held the Court, as it were,

enthralled while he gave unchecked, as on ordinary occasions, a lengthy exposition, almost amounting to a clinical lecture on the case. Many of his patients have testified how, when aggrieved by the failure of his oft-repeated promises to visit them, and angry at his persistent neglect, his first look and word has dispelled all their displeasure and perfectly healed the breach again.

Sir James Simpson, like other mortals, had his faults: the eagerness with which he rushed into a fray, and the lusty blows he dealt about him wounded some so sorely by the way, that it was no marvel if some were to be found who spoke unkindly of him. The subject of this memoir was, however, generous to a fault, and it is reported that, not long before his death, he sent letters to all whom he thought he might have hurt in the heat of controversy, expressing unfeigned regret, and praying their forgiveness. Of late years he had strong religious convictions, which he pursued with the same enthusiasm observed in all his undertakings. He even preached and lectured on religious subjects. In one of his last conversations with his minister, he was asked—"Can you lay a firm hold on Christ?" "I fear not," said Sir James, "but I think I can touch the hem of his garment."

The immediate cause of Simpson's death was angina pectoris, associated with heart disease. He suffered severely from paroxysms repeated from time to time for some weeks previous to his death, and bore the pain with exemplary fortitude. When aware that his illness was likely to prove fatal his chief regret was that he should be unable to do a little more for Hospital reform. So thoroughly was his heart in his work.

There is reason to believe that Simpson's last journeys to London to give evidence in the Mordaunt case were largely concerned in bringing about his last illness. He was obliged to come twice because of the late delivery of a telegram informing him of the postponement of the trial. He complained much of the intense cold then, and said he had never suffered more from it in travelling. On his return to Edinburgh he gave his last lecture of the winter session, and then went home racked with rheumatic pains. He never left the house again.

At one time hope was entertained of his recovery, as he seemed better, and was able to leave his bed. On the Saturday preceding his death, however, his intellect became confused, and there were other evidences that an imperfect supply of blood was sent to the brain. After this he gradually grew worse, and he lay in a condition of semi-consciousness until his death, which took place on the following Friday.

Sir James leaves a widow and three sons and one daughter.

His now eldest son, Walter, succeeds to the baronetcy, his elder brother, Dr. David Simpson, a young Physician of much promise, having died in the same year that his father was created a baronet.

(Since the above was written we have received the following details of the post-mortem examination):—

The *Brain* weighed 54 oz. The sulci were deep; the convolutions numerous. The substance was natural. The vessels at the base were atheromatous, and somewhat rigid. There was some degree of subarachnoid effusion. The *Heart* was loaded with fat, which had towards the apex encroached considerably on the muscular substance. The cavities were dilated. The mitral valve was thickened. The walls were thin and the muscular substance soft and easily torn. Towards the apex there was a clot which appeared to be connected with a portion of the wall of the left ventricle, in which aneurismal dilatation had occurred. The lungs were congested and œdematous. The liver and other abdominal organs presented no special abnormality beyond some traces of embolism in the kidneys. It may be interesting to mention that Dr. Chalmers' brain weighed 53 oz., and Cuvier's was the same. Dr. Abercrombie's weighed 63 oz.

A MEETING of the Association of Medical Officers of Health will be held at 7·30 p.m., on Saturday, May 21, at the Scottish Corporation Hall, Crane-court, Fleet-street, when the following communications will be made:—"On the action of various Antiseptics on Fermentation and Putrefaction," by Mr. F. Crace Calvert, F.R.S., F.C.S. "On the present aspects of the sewage question in relation to the public health, with a brief review of the first report of the commissioners appointed in 1868 to inquire into the best means of preventing the pollution of rivers," by Dr. Henry Letheby.

THE EPIDEMIC SMALL-POX IN PARIS.—The deaths from small-pox have declined for the last week, ending May 7, to 133, of a total mortality of 1217.

MEETING OF THE GENERAL MEDICAL COUNCIL.

SPECIAL SESSION FOR THE CONSIDERATION OF THE GOVERNMENT MEDICAL ACT (1858) AMENDMENT BILL.

FIFTH DAY (*continued*).—TUESDAY, MAY 3.

UPON Clause 18,

Sir D. CORRIGAN moved, "That it is desirable that the several 'Medical authorities' of the United Kingdom legally authorised to grant degrees or licences in Medicine or Surgery, or in Medicine and Surgery, shall be entitled, as heretofore, to grant such degrees or licences at such times and under such regulations as may seem fit to them respectively, it being, however, understood that any such degrees or licences shall not entitle the holder to be registered without having undergone and passed the examination of some one of the conjoint examining boards proposed to be constituted under this Bill." He said Dr. Storrar's resolution dealt merely with the option to be given to students to apply for the licence or degree of the universities before going in for the conjoint examination. There was no use in that unless the universities and corporations *per se* had the power to grant it. The learned baronet then gave an analysis of the number of graduates in the Queen's University who had proceeded to registration after taking their degrees, from which it appeared that out of 207 who had passed the examination within the last five years about one-third had not registered, or, in other words, did not intend to practise in the United Kingdom. Dr. Storrar's motion, unless modified as he now proposed to modify it, would seriously injure the universities.

Dr. AQUILLA SMITH seconded the resolution.

The CHAIRMAN said he felt bound to vote against it, because it would, if carried, endanger the passing of clause 22 (prescribing penalties for the illegal assumption of titles) through Parliament.

Dr. ALEXANDER WOOD did not wonder at Sir D. Corrigan proposing such a motion; but at the same time he could not see his way to supporting it. It would have the effect of stultifying the provisions of the Bill by entirely preventing the penalties from being imposed. In fact, he believed if this resolution were carried the Bill would halt upon one leg, and would not be able to get through the House of Commons.

The motion was put to the vote, and lost by a majority of 12 to 2.

Clause 19, after a brief discussion, was read and approved.

Clause 20 (conferring of minor Medical titles by Medical authorities).—"Any of the Medical authorities may confer on a licentiate under this Act without requiring him to pay any Fee or pass any further examination in Medicine or Surgery, the lowest Medical or Surgical degree granted by such authority, or the Membership of such authority, or (in lieu of any licence granted by such authority before the passing of this Act) the title of Associate or other title determined, with the approval of the Privy Council, by such authority, and may give to the person on whom such title is conferred the like rights and privileges, so far as relate to members of that body among themselves, as he would have had if such licence had been conferred on him. Where any scheme under this Act provides that all or any part of the surplus of income derived from fees shall be applied for the support of any museum, library, or lectureship under the control of any of the Medical authorities in any part of the United Kingdom, or in contribution to any public purpose of any of the Medical authorities in any part of the United Kingdom, such Medical authority, if required by the scheme, shall, subject to the provisions of the scheme, confer such degree, membership, or title, as aforesaid (in this Act referred to as minor Medical titles), upon any Licentiate who has obtained his licence in the same part of the United Kingdom and claims the same, without requiring him to pay any fee or to pass any further examination, and shall, subject to the provisions of the scheme, give to the person on whom the title of Associate or other title is conferred, the like rights and privileges as aforesaid. Any of the Medical authorities may send a list of the persons on whom any minor Medical title is conferred as aforesaid to the Registrar, who shall thereupon enter in the Register in the column (if any) provided for that purpose, the name of such Medical authority opposite to the name of each recipient of such title."

Dr. STORRAR moved—"That clause 20 should not apply to

universities." His feeling was that university degrees should be higher than the State licence, both in subjects and in the extent of the examination in each subject. No university degree should be dragged down to the level of the licence, and if the time should arrive that the State Licence degree was raised to the level of the M.B., then the M.B. should be raised proportionately. Referring to the next paragraph of the clause, relating to the surplus fund, it was still more objectionable. He did not see what claim the universities had to this fund. The application of it to the corporations was conceived with the distinct idea of replacing such fees, as they might have lost by consenting to the Government scheme.

Dr. CHRISTISON seconded the motion.

Dr. ALEXANDER WOOD said when he ventured yesterday to oppose a clause which Dr. Storrar carried, and stated that it was the first of a series of clauses which were to put the universities in a particular relation to the Council, the statement was strongly objected to by gentlemen on the other side of the table. The proof, however, had not been long in coming, because this motion of Dr. Storrar was neither more nor less than a proposal to exempt the universities from the operation of this Bill, thus making it a Bill which would apply only to the corporations. Admitting the generally high character of university degrees, he reminded the Council that one at least of those bodies had not fulfilled hitherto what they thought was requisite either in extent of study or strictness of examination. If this resolution were carried, the Bill would be rendered nugatory, for the graduates of Universities would not be required to pass through the portal examination which the Bill professed to make a *sine quâ non* to registration.

Dr. CHRISTISON said there was nothing in the nature of an exemption from the operation of the Bill attempted to be claimed for the Universities by the resolution, and there was no desire or intention on the part of the Universities to obtain such an exemption.

Sir D. CORRIGAN thought the resolution was founded on the principle adopted by the marauders of old—"What's yours is mine, and what's mine's my own." Because, although they proposed to exempt themselves from the first part of the clause, no exemption from receiving their share of the surplus fund was asked for.

Dr. CHRISTISON on behalf of the Universities of Scotland said they would not expect to receive a penny.

Sir D. CORRIGAN: Have the universities given you a specific authorisation to say that?

Dr. CHRISTISON: I am ready to take the responsibility upon myself, and to say that neither of the universities that I represent under such a proposition as Dr. Storrar now makes would ask for, or accept any remuneration.

Sir D. CORRIGAN: Will you give us that undertaking in writing? (Laughter.)

Dr. MACROBIN said it was possible some universities might be led to take the State qualification as the basis for conferring a degree—thus lowering the character of university degrees. Dr. Storrar's motion would guard against that.

Dr. PARKES treated the motion as a sort of "self-denying ordnance" on the part of the universities. It should come direct from the universities themselves; and he was quite clear Lord De Grey would not consent to alter his Bill unless he received the assurance of the universities themselves that they desired it. Dr. Storrar's resolution did not guarantee that no university would lower its degrees to a mere formal qualification. There were difficulties, no doubt, about the matter; but, for his part, he thought it was a great pity that the universities did not accept the clause as it stands, and simply refrain from acting upon it if they do not desire it.

After some remarks from Drs. SHARPEY and THOMSON,

Dr. STORRAR asked if this would make his meaning clear:—"That, in reference to clause 20, it is not expedient that university degrees should be conferred on licentiates without additional and higher qualifications than those required for licentiates."

Dr. ANDREW WOOD: Hear, hear! We all agree to that.

Dr. QUAIN: It is just the same as the other. I second it just as I would have seconded the other; it is simply the positive form instead of the negative.

Dr. APJOHN moved as an amendment, that clause 20 be omitted from the Bill.

Dr. A. SMITH seconded the amendment, but on being put to the vote, only two hands were held up in its favour.

The resolution was carried *nem. dis.*

Dr. A. SMITH said there were two other matters in reference to the 20th clause to which he wished to call the attention of the Council. He had not been able to collect whether under it a gentleman who had attained the State licence could take as many degrees from the different Medical authorities as he chose, or whether that was limited in any way. As far as he could see, he would be entitled to take the qualifications of five Medical authorities. The other point was with reference to the words "minor Medical titles." The Council would recollect the difficulty they had felt in determining upon what were higher titles. It appeared to him the same difficulty would arise with reference to minor titles. The words occurred several times, and he thought there should be a clear understanding upon those points. He did not propose, however, to move anything.

Dr. HUMPHRY then moved, and Dr. QUAIN seconded, the following resolution:—"That it is desirable that the words 'if accepting and continuing to receive any part of such surplus' should be inserted after the word 'authority' in line 33 of clause 20 of the Bill."

The resolution was carried.

Mr. HARGRAVE moved, and Dr. ALEXANDER WOOD seconded—"That it is desirable that the following words, 'subject to the by-laws of the said authorities,' be added to the end of the second paragraph of clause 20 of the Bill."

The resolution was carried.

Clause 21.—"Where any Medical diploma, degree, or title, granted by any University, College, or body in any British possession, or in any foreign country, is granted in respect of a higher degree of knowledge in Medicine and Surgery than is required for obtaining a licence under this Act, the General Medical Council may from time to time place such diploma, degree, or title upon a list to be kept and published by them, and if at any time any such Medical diploma, degree, or title ceases to be granted in respect of such higher degree of knowledge as aforesaid they may remove the same from such list. All holders of any Medical diploma, degree, or title placed upon such list shall be entitled, with or without examination, and on such terms (but so that the fees do not exceed the ordinary fees) as the General Medical Council may from time to time determine, to be registered under the principal Act No person who has obtained any such Medical diploma, degree, or title before the same is added to such list, or the earlier date if any (whether before or after the passing of this Act), fixed by the General Medical Council, shall be entitled to be so registered, and the removal of any diploma, degree, or title from such list shall not deprive any person entitled before such removal to be registered, of his right to be so registered. Where the General Medical Council are satisfied of the eminent Professional acquirements and character of any person who for more than ten years has been practising Medicine or Surgery in any British possession or Foreign state, they may, by a special order, direct such person to be registered under the principal Act."

Sir. D. CORRIGAN said this clause would operate unfairly towards British graduates, because if a man presented himself with the very highest university degrees in the United Kingdom, he would not be permitted to put his name on the register without examination, whereas foreign graduates would be exempted from that disability.

Dr. ANDREW WOOD thought this a dangerous clause because it was not left in the option of the Medical Council to decide upon the registration of those graduates, but they would be called upon to decide whether their degrees were higher than the licence or not. With every disposition to act in a liberal spirit towards foreign and colonial graduates, he thought with Sir Dominic Corrigan that it was unfair that they should be placed on a higher footing than our own. He thought the words "if they see fit," should be added, which would leave them some liberty of action.

Dr. ALEXANDER WOOD would go further than that, and would say that the clause as it stood was a great encouragement to young men to go out of the United Kingdom, take a foreign degree, and then come back and get their licence; because in that way they would be exempted from the examination of the conjoint board.

Dr. A. SMITH thought it was desirable the first three paragraphs of the clause should be omitted, and he moved a resolution to that effect.

Dr. APJOHN seconded the motion.

Dr. PARKES: Then you would not allow the registration of any foreign diplomas unless they had been practising Medicine for ten years?

Sir D. CORRIGAN: They might go in for examination.

Dr. PARKES pointed out that the Government attached very

great importance to this clause in favour of foreign and colonial degrees.

The PRESIDENT also reminded the meeting that several successive Governments had attached great importance to the registration of foreign and colonial titles. The clause in the draft Bill was more objectionable than the present one, because it actually gave a right to the Privy Council to put upon the list the graduates of foreign universities and other bodies, whether, in the opinion of the Medical Council, or not they were duly qualified. Representations were made to Lord De Grey upon that matter, and he was satisfied that it was not fair or just. He at once agreed that that power should be struck out of the Bill, and made other modifications in the clause.

Sir DOMINIC CORRIGAN had no objection to alter the ten years into five, but he thought it was a most dangerous clause, because in Belgium and half a dozen petty States of Germany a man would be able to get qualifications for the mere asking.

Dr. ALEXANDER WOOD moved as an amendment—"That it is desirable that the holders of foreign and colonial Medical degrees, diplomas, and titles should not have advantages beyond those granted to graduates of our own universities. That, in the opinion of this Council, it is desirable that in clause 21 the words in line 9 beginning with 'is granted' to the words 'this Act' in line 11 should be erased, and that the words 'if they appear to the Council to be conferred on conditions which guarantee the possession of a sufficient knowledge of Medicine and Surgery' be substituted for them." He thought that would answer every purpose.

The amendment was seconded by Dr. ANDREW WOOD, and negatived.

Dr. A. SMITH'S motion—"That it is desirable that the first, second, and third paragraphs of clause 21 be omitted"—was then put to the vote, and also negatived.

Clause 22 of the Bill was then read—"'Unregistered persons.' If any person who for gain either practises Medicine or Surgery, or any branch of Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries, and is not registered under the Medical Acts, 1858 to 1870, takes or uses any of the designations enumerated in Schedule (A) to the principal Act as amended by this Act, or by any of the Acts in the first schedule mentioned, or the designation of Licentiate in Medicine and Surgery, or Licentiate in Medicine or in Surgery, or in any branch of Medicine or Surgery, Professor of Medicine, Professor of Surgery, Physician, Surgeon, Doctor, or any designation used to distinguish duly qualified Practitioners of Medicine or Surgery, or any branch of Medicine or Surgery, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding £20. If any person who, for gain, either practises Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries, wilfully takes or uses any of the abovementioned designations to which he is not entitled, he shall for every such offence be liable, on summary conviction, to a penalty not exceeding £20. The General Medical Council, and also any branch Medical Council, may take proceedings against any person for the contravention of this section; and no proseeution for the contravention of this section shall be instituted by any private person, except with the consent of the General Medical Council, or some Branch Medical Council. If any person shows that he is not a British subject, and not ordinarily resident in the United Kingdom, and holds a Medical diploma, degree, or title from some university, college, or body, in any British possession or foreign country, entitled to grant the same, such person shall not be liable to any penalty under this section. Nothing in this section shall impose any penalty on any person engaged solely in the cure or treatment of the diseases or injuries of animals, and not of human beings."

Sir D. CORRIGAN moved—"That it is desirable, in reference to clause 22, that the consent of the General Medical Council shall not be deemed necessary towards the prosecution of any person contravening this clause." Great inconvenience and expense would be caused by requiring the consent of the Medical Council. The Council would rise in July, and an offence might be committed in Augnst, in which case no prosecution could take place for twelve months.

Dr. A. SMITH seconded the motion.

Dr. BENNETT said the clause provided that any branch of the Medical Council should have the power.

Sir D. CORRIGAN said the same objection applied. A meeting of the branch would have to be summoned, and the expense would be enormous.

Dr. ALEXANDER WOOD warned the Council that he did not know where the funds would come from if the Council were to be made public prosecutors. He had had experience of the expense of prosecuting a man in the London police-courts on behalf of the College of Physicians in Edinburgh. Besides this, the Council would often be made both judges and prosecutors upon the same case.

After some further discussion, the motion was put to the vote and carried.

It was then moved by Mr. HAWKINS, and seconded by Dr. ALEXANDER WOOD, "That it is not expedient that the duty of proceeding against any person for the contravention of the sections of clause 22 of the Bill should be assigned to the Medical Council or any Branch Council."

The motion was carried.

The Council then adjourned until the following day at 12 o'clock.

SIXTH DAY.—WEDNESDAY, MAY 4.

The minutes of yesterday's meeting were read and confirmed.

Mr. HAWKINS moved and Dr. EMBLETON seconded "That it is expedient to draw the attention of the Lord President to the danger of clause 22 being infringed in consequence of the vagueness of the term 'ordinarily resident' in the 19th line."

The motion was carried.

Dr. EMBLETON stated that the second section of the same clause referred to unregistered persons. If unregistered persons were not allowed to take titles to which they were not legally entitled, the Medical Profession ought to take care that its members did not assume titles to which they had no legal claim. If it were to apply to registered as well as unregistered persons he had no objection to it. He proposed that the second section should read thus, "If any registered or unregistered person," and so on.

After some further discussion, Dr. EMBLETON intimated his willingness to leave it as it stood.

Upon clause 23, Sir DOMINIC CORRIGAN moved and Dr. APJOHN seconded "that clause 23 be entered as read." After some discussion the motion was lost.

Clauses 24, 25, 26, 27, 28, and 29, were then read and declared carried.

On clause 30 Dr. HUMPHRY proposed and Mr. HARGRAVE seconded the following resolution:—"It is desirable that clause 30 should be so altered as to permit the powers given by this Act to Medical authorities to be exercised and done by the governing bodies of the Medical authorities." The question was, who was to exercise the power as Medical authorities. The motion was put and negatived.

Mr. HARGRAVE proposed that at the end of the clause these words should be added:—"The minority, if they feel aggrieved, should have the power to appeal to the Privy Council."

The PRESIDENT stated that not only the minority, but any one Medical authority would have the power of appeal.

Sir D. CORRIGAN inquired whether the clause meant that whatever was done should be deemed to be done by the majority of the Medical authorities of that part of the United Kingdom, or by the majority of any one Medical authority.

The PRESIDENT replied that the obvious meaning was the majority of the bodies.

On clause 31, Sir D. CORRIGAN moved and Mr. HARGRAVE seconded the following resolution:—"That it is desirable in reference to clause 31 that the same resolution should apply to the Apothecaries' Company in all parts of the United Kingdom, and that, in accordance with this principle, section 55 of the Medical Act of 1858 should be repealed, and also section 26 of the 31st George III. regulating the profession of an apothecary throughout the kingdom of Ireland, and that due provision should be made for the regulation and practice of pharmacy in Ireland as at present enforced in England, in accordance with the regulation of the General Medical Council July 6, 1868, and laid before the Home Secretary, which is as follows:—"That from and after the passing of this Act, dispensing chemists or druggists duly qualified to open shops or establishments in England for the compounding of medicine, shall in like manner be deemed to be duly qualified to open like shops or establishments in Ireland, and shall not be liable to a penalty or fine for so doing; and then in like manner persons licensed in pharmacy and registered by the Apothecaries' Hall in Ireland should not be liable to a penalty or fine for so doing."

The PRESIDENT inquired whether Sir D. Corrigan proposed to have the whole of section 55 repealed?

Sir D. CORRIGAN replied that the first part had been repealed by the former Act, that chemists and druggists were no longer permitted to compound without having undergone an examination, and he proposed that the last part of it with regard to duly licensed apothecaries also should be repealed. By clause 26

of the Act of George III. every person not registered compounding medicines forfeited a sum of £20. Unless something of the kind were done the Apothecaries' Company of Ireland could prevent anybody who had not obtained a licence in Medicine and Surgery from practising as an apothecary. The result was that at the introduction of the Pharmaceutical Bill there was not a single dispensing chemist or druggist in Ireland. The principle that legislation as to apothecaries' companies throughout the country should be the same was one which could hardly be disputed.

Dr. LEET supported the motion, and stated that the Government were about to introduce a Bill to open pharmacy to chemists.

Dr. ANDREW WOOD inquired whether by the proposed Bill the rights of registered Practitioners were reserved.

Dr. LEET replied in the affirmative.

Dr. PARKES moved the following amendment:—"That as the Council understand that a Bill is to be shortly introduced into the House of Commons affecting the practice of pharmacy in Ireland and the interests of the Apothecaries' Hall in Ireland, the Council beg to direct the attention of the Lord President to this Bill and to express an opinion that the practice of pharmacy in Ireland ought to be assimilated to the practice in England and Scotland."

Dr. LEET seconded the amendment.

Sir D. CORRIGAN could not adopt Dr. Parkes's amendment, because it left untouched the point that under clause 52 of the Medical Act of 1858, if that be not repealed, a man who compounded medicines, even though he obtained a license in Medicine and Surgery in any part of the United Kingdom and the license of Pharmaceutical Chemist in England, would be subject to a penalty of £20.

Dr. PARKES observed that the clause would naturally come under the consideration of the law officers of the Privy Council.

The amendment was put as a substantive motion, and declared carried.

Schedules 1, 2, and 3 of the Bill were then read.

Dr. ALEXANDER WOOD moved, and Dr. ANDREW WOOD seconded, "That, in schedule 3, the words 'higher titles' be omitted, and 'additional titles' be substituted."

The motion was carried.

Sir D. CORRIGAN proposed that the heading "part of the United Kingdom where examined" should be omitted, and that it should only show that the person was duly qualified to practise as a licentiate in Medicine and Surgery.

Dr. APJOHN seconded the motion.

Dr. ACLAND was not prepared to abolish the column, but it should be a register of the titles referred to in clause 29. There should be a column to show the university to which the person was attached, which was a question of major or minor degrees.

Dr. SHARPEY thought that Dr. Acland need not be solicitous upon that point, because it was already provided for.

Mr. HAWKINS was not satisfied that he could vote for the motion.

The motion was carried.

Mr. HAWKINS moved, and Dr. STORRAR seconded—"That it is desirable that the attention of the Lord President be drawn to the fourth schedule, by which many important duties are affected in regard to the Medical authorities in England, without any reference to the laws affecting the Medical authorities in Scotland and Ireland, and that it is very desirable that the application of such laws in Scotland and Ireland in the Medical Bill should be considered by the legal advisers of the Privy Council."

Dr. PARKES thought it a very reasonable proposal.

Sir D. CORRIGAN did not quite understand the resolution. He would vote for it if it did not include Scotland and Ireland, but he did not want to assent to a proposition of which he knew nothing.

Dr. STORRAR thought if it were a right thing for England, it would be equally so for Ireland.

The motion was carried unanimously.

It was then moved by Dr. ANDREW WOOD, and seconded by Dr. PARKES—"That the Council now resume, and that the proceedings of the committee of the whole Council be adopted by the Council," which was carried unanimously.

Dr. PARKES wished to refer to the 22nd clause. He held a very strong opinion that there was no more fatal act taken by the Council than when they struck out the section giving the Council power to take proceedings against any person for a contravention of the 22nd section, and he desired to know whether the Council would permit that special point to be opened again without opening any other points.

Sir D. CORRIGAN and Dr. ALEXANDER WOOD objected to the question being reopened, and after some discussion the application was withdrawn.

Dr. PARKES then said that he had given notice of two motions, and asked permission to transpose the order in which they stood. He moved, "That this Council, having carefully considered the principles of the Amended Medical Bill introduced by Lord De Grey, and having directed a deputation to confer with Lord De Grey on the wording of certain clauses, desire now to express their approval of Lord De Grey's Bill, and their earnest hope that it may become law during the present session." In moving this resolution he would make but few observations. The Council must be aware that Lord De Grey had taken the matter up at their own request. He had attempted to carry into effect the resolutions carried by a very large majority at the last meeting of the Council, and he had listened with the greatest courtesy to their suggestions—in fact, he had in every way attempted to carry out the wishes of the Council and of everybody interested in Medical education. It was, therefore, in his (Dr. Parkes's) opinion, their duty in all respects to strengthen Lord De Grey's hands as much as possible by giving a unanimous vote, and not to allow the opponents of the Bill in Parliament to say that any members of the Medical Council were opposed to it. The members of the Council had had full opportunity of discussing every clause, and they had made a series of modifications, to which there could be no reasonable objection. He would therefore ask the Council to vote without discussion in the terms of the motion which he had read.

Dr. HUMPHRY seconded the motion.

Dr. A. SMITH could not at all consent to the motion, as he understood it would bind the Council to accept the Bill under any circumstances. The Council did not know what the Bill might be a week hence; they did not know how far Lord De Grey might adopt the suggestions or alterations made by the Council. The Council had already expressed its opinion very fully with reference to the Bill. He assumed that Lord De Grey would make the alterations suggested in the Bill as far as they could consistently be made, and what was referred to was the approval of the Bill as altered by Lord De Grey in the House of Commons in consequence of representations made to him by the Council and other bodies.

Dr. ANDREW WOOD suggested the following resolution:—"That this Council, having carefully considered the principles of the Amended Medical Bill, introduced by Lord De Grey, and having directed a deputation to confer with Lord De Grey on the wording of certain clauses, desire now to express their approval of its principles, and their earnest hope that it may become law during the present session."

Dr. ALEXANDER WOOD observed that the Council ought to be very grateful to Lord De Grey for the trouble he had taken; and, if the motion were restricted to thanking Lord De Grey, there could be but one opinion. But at the same time, if the Council were called upon to approve the principles of the Bill as it existed, it would be exceedingly absurd, seeing that they had tried to amend those principles. If, on the other hand, the motion called upon the Council to approve of the details, it would be equally absurd, because they had altered the details and suggested others. He thought the safer course would be to thank Lord De Grey for the trouble he had taken, and to express a hope that a suitable Medical Bill would pass this Session. Suitable was a word of delightfully vague generality, which might mean anything or nothing.

Dr. HUMPHRY suggested that they might notify their general approval of the Bill.

Dr. STORRAR said he had intended to propose the following resolution—"That this Council, while submitting the proceedings of their present meeting to the favourable consideration of the Lord President of the Privy Council, desire to express their general concurrence in the provisions of the proposed Bill."

Sir D. CORRIGAN proposed the following amendment, "That the Medical Council are thankful to Lord De Grey for his unwearied attention to Medical legislation, and that they will continue to give his Lordship their most earnest assistance in reference thereto."

Dr. ANDREW WOOD was inclined to vote for Dr. Storrar's motion; it was so worded that it did not pledge them to all of the details.

Dr. ALEXANDER WOOD moved and Dr. A. SMITH seconded "That the cordial thanks of the Council be given to Lord De Grey for the trouble he has taken in preparing and introducing into Parliament the Medical Bill, and for the courtesy with which he has received the suggestions which the Council have felt it their duty to make. The Council trust that Lord De Grey may succeed during the present session of Parliament in

carrying the Bill with such amendments as will be satisfactory to the Profession and beneficial to the public."

Several other suggestions as to resolutions were made, and ultimately Dr. Parkes intimated his willingness to substitute the following for his original motion:—"That this Council having carefully considered the principles of the Amended Medical Bill introduced by Lord De Grey, and having learnt the readiness of Lord De Grey to adopt suggestions from the Medical Council as to some of its provisions, desire now to express their general approval of the Bill, and their earnest hope that it may become law during the present session."

After some further discussion Dr. Alexander Wood's amendment was put to the Council and declared lost.

Dr. Parkes's original motion was then put to the meeting.

Sir D. Corrigan proposed the following amendment:—"That the General Medical Council having proposed several amendments to several clauses of the Medical Bill, desire to explain to his Lordship that they approve of the Bill taken in connection with their suggestions for its amendment." He thought the Council were not bound to express approval or disapproval of the Bill in its general principles. After some further discussion the amendment was withdrawn and Dr. Parkes' substituted resolution was put and declared carried.

It was then moved by Dr. Sharpey, seconded by Dr. Fleming—"That the best thanks of the Council be respectfully offered to Lord De Grey for the great kindness and courtesy with which he had attended to the representations of the Council and the great trouble he has taken in preparing the Bill," which was carried unanimously.

The President drew the attention of the Council to what passed between the Lord President and the deputation with reference to the power of the Privy Council as to clauses 7 and 11, and he proposed that the following words should be added at the bottom of page 2, and again at the end of clause 11:—"that if the General Medical Council are of opinion that such modifications" — that is, the modifications made by the Privy Council—"are inconsistent with the general principles of the scheme as proposed by them, they may if they think fit withdraw such scheme, and shall proceed to frame a new scheme in lieu thereof."

It was proposed by Dr. A. Smith, and seconded by Sir D. Corrigan that those words be added.

The motion was agreed to.

The President stated that Lord De Grey had intimated his willingness to consider, if the Council desired it, whether the powers given by section 29 of the Act of 1858 should be extended; but it was a question which would require a good deal of discussion, and he did not propose to enter into it now.

Dr. Andrew Wood moved "That it be remitted to the Executive Committee to consider the 29th clause of the Medical Act of 1858 to consult Mr. Ouvry on the matter and to confer with the Government if necessary."

Dr. Bennett proposed "That this Council will be willing to accept any extension of the powers conferred by section 29 of the Medical Act of 1858 as the Government may see fit to grant."

Dr. A. Smith seconded the motion.

After some discussion it was carried.

Dr. Parkes then said he regretted that the next motion he wished to make came on at so late a period of the session for two reasons, first, because it would hardly give the Council time to properly consider so very important a subject, and secondly, it afforded no time to bring the matter properly under the notice of Lord De Grey. He moved the following resolution:—"That it is expedient that a Clause should be introduced into the Amended Medical Act, giving the Medical authorities power to elect their representatives on the Medical Council on an enlarged basis; and that the clause shall be so worded as to allow the modes of election to be hereafter settled between each Medical authority and those Registered Medical Practitioners who have received from it any diploma or degree higher than the minimum diploma granted after passing the examination of one of the conjoint boards." He had considered whether it was not advisable to withdraw the motion, and he would have done so but that it appeared certain that some movement in the matter would be made when it got to the House of Commons, and that the feeling of the Medical Council upon it might be called for and certainly should be given. For that reason he persevered in the motion, but at the same time intended to make as short a speech as possible. He believed that it was very desirable indeed that the members of the Council should be elected by as large a body as possible, that they should represent as many of the Profession as possible. It appeared to him that, of the various modes of enlarging the representation of the Medical Council, by far the best way was that which gave increased powers to the corporations to enlarge their constituencies and cause a greater number of persons connected with them to take a part in the election of the members of the General Medical Council. A plan had been proposed which was likely to be strongly urged before the House of Commons, of sending to the Council gentlemen chosen by the Profession at large, by registered Medical Practitioners, who should vote for a certain number of members by reason of their being Medical Practitioners. He had considered the subject, and it appeared to him very objectionable. The Council had a very limited object: it was not a Council dealing with the Profession at large; its province was very restricted—namely, the province of education and of registration. It seemed to him that, by a most happy intuition, the Government which passed the Bill in 1858 selected the various corporations and universities connected with Medical education either immediately or as influencing the course of instruction at the various schools, as the proper persons to send representatives to the Council. He conceived that in that respect the Government had correctly and logically chosen the best means in selecting the corporations. He thought those corporations, engaged as they were in education, were necessarily the proper persons to send representatives to the Council; and that, on the other hand, if representatives were sent by the general body of the Profession, men would be selected by persons who were not specially instructed in Medical education, who would probably give it no amount of thought, and who therefore would not be likely to choose persons specially qualified to discuss the important matters brought before the Council. Another objection to the representation on the Council of the general Medical public was the extreme inconvenience, trouble, and expense which would be incurred by such a system. A third objection, and a very important one was this—if the door were once opened to this system of representation on the Council, and the members of the Council were to be elected from the great body of Practitioners, the Council would be driven to adopt what might be called equal electoral districts. He contemplated the result with great dissatisfaction. His Irish and Scotch friends might contemplate it with more satisfaction, but the result would be that there would be upon this Council an enormous preponderance of Englishmen. That would be an unsatisfactory result. He had great confidence in his countrymen, who were as fair and honest and as desirous to do right as any one in the world; but he thought it wrong to have a preponderance. At present Medical education was tolerably fairly divided. By the last return there were 530 fresh Medical students in England, 317 in Ireland, and 317 in Scotland, and Medical education being divided so equally, and the corporations of the three countries being so nearly equal in number, it seemed to him only right that, on the Medical Council, each country should be tolerably equally, and fairly represented. The proposed plan had the advantage that the bodies specially acquainted with the subject with which the Medical Council dealt would send representatives to the Council. The question then was how these different corporations should elect their representatives on this Council. He thought it would be well that every corporation should, as far as possible, enlarge its basis. The corporations would thereby do themselves a great deal of good, by having greater power in various ways, and he was sure it would do great good to the Council, because the influence of the Council was increased if it represented a large section of the Profession. He had seen remarkable instances of the effect on various corporations, and even on some universities, of the extension of the basis on which the corporation or university was governed. He would instance the College of Physicians, and the benefit that had resulted to that College from the fact of its more liberal constitution, which had been brought into play within the last few years. Since that corporation had pursued a liberal course, and had brought to bear on its affairs the opinion of a considerable number of Medical men connected with it, it had risen immensely in influence. The same was the case with the College of Surgeons, and still more remarkably with the University of London. The like effect would be produced on the Council; so that, for the benefit of the corporations and of the Council, it was desirable that the representatives should be chosen by the greatest possible number of persons connected with the Profession. There were two or three matters which were of considerable importance with regard to the extension or enlargement of the number of persons voting for representatives of the corporations on the Council. The privilege was restricted to those who had passed one of the higher examinations, or some examination other than that passed before the conjoint board. The reasons were these —first, that it produces a certain degree of limitation on the

number of votes for representatives on the Council, and therefore would very much facilitate the mode of election on the part of some bodies which have a large number of persons connected with them; secondly, it would have the effect of bringing to bear on the members of the Council the very best minds in each case connected with the corporations. For these reasons he thought it would be better not to admit as voters for representatives on the Council any of those persons who joined the corporation or university in consequence simply of passing the conjoint board; but that it should be the condition that they should have passed one of the higher examinations. In that way the constituency would be comparatively limited to those of the best class. He introduced into this motion a statement that the modes of election should be hereafter settled by the different bodies amongst themselves. In that respect he thought each Medical authority might conduct its election in its own way, and render it unnecessary to introduce into any Bill any particular statement of how the election might be carried on. According to his mind it would be left to the College of Surgeons to decide whether it would continue as at present, or whether it would throw the election open to the whole body of Fellows. If this motion were carried, there would be a very considerable accession of persons interested in the election of members of the Council, which he thought would be desirable. There were two bodies, the Society of Apothecaries of London, and the Apothecaries' Hall of Ireland, in both of which cases they gave no higher degrees, and therefore would not have any body of men who could elect. He would propose to provide for that by a special provision that they should be exempted, and be allowed to elect as at present until such time as either body might have a class of Practitioners connected with it who had taken higher degrees than that of the conjoint board. His only fear was that it was too late in the session to go into the question. He felt that owing to the shortness of time he was developing it very imperfectly, and that his arguments were incomplete. He would not dilate on the subject, but would ask the Council to consider whether it was not possible to introduce an enabling clause of the kind he suggested, which might permit the object of his motion to be carried out—namely, that the Medical Council should represent a larger number of persons in the Medical Profession than it does at the present time.

Dr. Andrew Wood in seconding the resolution said he had never altered his opinion that it was in vain to expect that the Profession would be satisfied as long as the constitution of the Council, and the constituencies of its members, remained upon the present basis. There was a wide-spread feeling that the electors were too few. Universal suffrage would probably not give satisfaction because it would give a preponderance to England. There had, however, been a middle course struck out by Dr. Parkes, which was to leave the Medical authorities, as at present, to send representatives, but to enlarge the basis of their constituencies which was now extremely limited. He thought it would have one good influence—viz., that it would be an inducement to many who were at present contented with taking minor qualifications in the profession to take the higher ones. There might be some difficulties with the universities. He thought, at all events, in Scotland the university constituencies were too liberal. If it were held out to the graduates of the Universities of Scotland that by taking M.D. they would secure a vote, it would form good constituencies of men holding high positions. If popular election were instituted, the country would have to be divided into electoral districts. There would be constituencies of 3000 or 4000 in each, and the expense and trouble of canvassing those bodies would be such that he did not know where the money was to come from to pay the expenses, if it did not come from the pockets of the constituents. He trusted that the Council would not discard Dr. Parkes' moderate proposal. It was a step in the right direction. He thought they would get good practical members sent to the Council; and a very much larger number of gentlemen would be interested in the debates of the Council than at present. He thought from a want of interest the Council had not exerted the amount of influence that it ought to have exerted.

Dr. A. Smith agreed with Dr. Parkes that it was a question which unfortunately had come on too late in the session. It was a question of considerable importance, and he was quite satisfied it could not be discussed fairly and fully in the time that could be devoted to it. He would be willing to take the motion as it stood as to the first four lines, but there were many parts of the remainder that would compel him to raise questions that would involve the Council in a very long discussion. What was really required would be accomplished if the Council would adopt the first four lines. The second part of the motion was objectionable in his opinion; and he moved as an amendment—"That the Council shall adopt so much of Dr. Parkes's resolution as says — 'That it is expedient that a clause should be introduced into the Amended Medical Act, giving the Medical authorities power to elect their representatives on the Medical Council on an enlarged basis.'"

Mr. Harorave seconded the amendment.

Dr. Storrar could not help thinking that Dr. Parkes was labouring under a misapprehension. The Medical Act of 1858, under which the Council was constituted, never attempted to indicate what persons in the several bodies should be electors. The bodies represented on the Council elected according to the constitution of their respective charters. If the College of Surgeons of England considered it advisable that its representative should be elected by a larger number of electors than according to the present constitution was possible, steps should be taken by the College of Surgeons to get its charter altered. The fact was the Medical Act of 1858 left the different bodies to discover, according to their charters, by whom they were to elect.

Dr. Bennett was of opinion that Dr. Parkes's argument was a very good one so far as regarded the various authorities that sent representatives to the Council. Dr. Parkes had said a good deal worthy of consideration, which perhaps might induce them to modify the plans upon which they had hitherto acted in sending representatives to the Council; but he had said nothing which would induce the Council to issue recommendations to those bodies, or to the Lord President. He held that it was most inopportune to discuss the whole question now; and that this was a most undesirable suggestion to make to the Government. The proposal would not quiet the clamour that existed, and would lead to the election of a far inferior Council to that which at present existed. The best suggestion he had seen was that of putting the whole thing in the hands of the Government. There would be no objection to Dr. Parkes's motion if it were limited to a certain portion of the Medical authorities having more enlarged basis than at present existed. He questioned whether that would produce any modification of the Council. The clamour arose from a misconception of the functions of the Council. He was quite sure that any arguments would receive due attention from Parliament, and he would much prefer that it should be left to be mooted and discussed in Parliament.

Dr. Christison was of opinion that the time of the Council was so short that the measure could not be considered with proper care and deliberation this session. Lord De Grey had the subject before him, and he would scarcely be disposed to view any proposition of the Council with favour that was not based on their careful consideration. He thought it desirable to extend the constituencies in a moderate degree, but the principle suggested by Dr. Parkes would act very unequally. In the London College of Surgeons the constituency would be considerably increased if voting papers were used, while with regard to the College of Physicians the extension under any system would be small because the fellows amount only to 120. But with reference to the Universities it was a fearful thing to consider. In the University of Edinburgh there would be a constituency of about 5000, and the trouble and expense would be enormous. Although he was in principle inclined to agree with Dr. Parkes, he thought it undesirable that the Council should come to any opinion upon the matter at the present time.

Sir D. Corrigan felt the difficulties Dr. Christison had put forward, and thought it would be better if Dr. Parkes withdrew his motion; if not, he had an amendment to propose.

Dr. Apjohn said the Medical authorities had the power of doing what was contemplated; they could themselves enlarge the constituencies. He would propose to restrict the constituency to M.B.'s who had graduated in arts. The question was so difficult that in his opinion it was impracticable to arrive at any useful result at that period.

Dr. Acland thought if Dr. Parkes withdrew his motion it would disappear from the minutes, which, he thought, would not be desirable. On the main principle he would support the motion. If the Government were induced to open the whole question in the House of Commons, and to consider the constitution of the Council, the results could not be foreseen. The Council did not know that Dr. Parkes's suggestion would be adopted; they did not know that a chance vote in the House of Commons might not land them in the trouble which would necessarily ensue from universal suffrage; nor did the Profession know that the result of a chance vote might not be to land the whole business in a commission. It surely was a question of

internal administration; therefore he would move the previous question.

Dr. Bennett seconded Dr. Acland's motion.

The President expressed his approbation of Dr. Parkes' resolution. He thought it was a moderate one. It was only an enabling clause, and he did not believe the authorities had in all cases the power of extending their constituencies. If the question had been first mooted on the present occasion, he should have said it was unbecoming to moot it at all; but the question had been discussed in the Profession for years.

Sir D. Corrigan thought the moving of the previous question a very cowardly way of getting rid of it. He had intended to move this amendment:—"That it is desirable that a clause should be introduced providing that the Profession generally should be empowered to send representatives to the General Medical Council, and that the representatives should be elected by the members of the Profession resident in each division of the United Kingdom."

Dr. Parkes, in reply, said that, as the President had told them, the clause was simply an enabling clause; but if under the Act of 1858 the Medical authorities had power to enlarge the basis the clause would still be useful. Many of them had not the power of enlarging their basis, as in the case of the University of London. It had been urged that he should withdraw the motion; but under the circumstances he thought it better to let the matter go to a vote.

The previous question was then put to the Council, and there being an equal number of votes, the Chairman gave a casting vote against the motion for the previous question.

Dr. Smith's amendment was then put, and declared lost.

The original motion of Dr. Parkes was put to the Council; and 8 hands being held up for the motion and 10 against it, it was declared lost.

The names were taken down as follows:—

Majority, 10.—Dr. Bennett, Mr. Hawkins, Dr. Storrar, Dr. Alexander Wood, Dr. Fleming, Dr. Macrobin, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Christison.

Minority, 8.—The President, Mr. Cooper, Dr. Acland, Dr. Humphry, Dr. Andrew Wood, Dr. Sharpey, Dr. Parkes, Dr. Quain.

Declined to Vote.—Dr. Thomson, Dr. Apjohn, Sir D. Corrigan, Bart.

The Council then proceeded to the election of the Executive Committee, and the members of the last session were re-elected.

Dr. Alexander Wood moved—"That, on February 28, 1870 (Minutes, vol. viii. p. 37), this Council passed a resolution requesting the universities and Medical corporations established in each division of the kingdom to concert a scheme for the constitution and regulation of a conjoint examining board for that part of the kingdom to which they belong, and to transmit such scheme for the consideration of the General Medical Council before June 1, 1870. That by the Medical Act Amendment Bill now before Parliament a provision is made which renders the request in that resolution unnecessary if the Bill becomes law. That, should the Bill not pass, such resolution is unnecessary. That the Council do therefore resolve to rescind the aforesaid resolution."

The motion was seconded by Dr. Andrew Wood.

Mr. Hawkins did not see why because the date of June 1 was out of the question the whole resolution should be rescinded. He proposed to alter the date to October 1.

Dr. Alexander Wood having withdrawn his motion, Mr. Hawkins's amendment that October 1 should be substituted for June 1 was put to the meeting and carried.

The Report of the Committee on Returns and Registration of Students was read.

Dr. Fleming moved, "That the return from the licensing bodies of Professional examinations and their results and on the registration of students for the year 1869 be received and entered on the Minutes." The return had been compiled with great care by Dr. Embleton.

The motion was seconded by Dr. Smith, and carried.

Dr. Andrew Wood moved, "That the Committee on Education be reappointed and directed to report at a future meeting of Council."

Dr. Alexander Wood seconded the motion, which was carried.

Dr. Alexander Wood moved, "That the State Medicine Committee be permitted to report to the next, instead of the present, meeting of the Council."

The motion was seconded by Dr. Andrew Wood, and carried.

Dr. A. Smith stated that with reference to the consideration of the amendment of clause 13 of the Medical Act of 1858 he thought the better course would be to refer it to the Executive Committee.

The usual votes of thanks were proposed and carried unanimously, and the proceedings terminated.

GENERAL CORRESPONDENCE.

SIR JAMES SIMPSON AND WESTMINSTER ABBEY.

Letter from Mr. Jonathan Hutchinson.

[To the Editor of the Medical Times and Gazette.]

Sir,—I believe it will cause general satisfaction to your readers to know that the honour of burial in Westminster Abbey was very nearly secured for the hero whom we have just lost. The proposal originated in London, and was warmly taken up by a large number of those who admired Sir James Simpson's character and his unselfish devotion to the advancement of our art for the benefit of humanity.

All the steps taken in the matter were necessarily hurried, for there was no time to be lost, and it was not a subject fitted for discussion at a public meeting. At little more than a few hours' notice a committee for promoting the object was formed, which included, with others, the following names:—Sir William Fergusson, Dr. Risdon Bennett, Dr. Garrod, Dr. Gull, Dr. Stewart, Dr. Peacock, Dr. Davies, Mr. Hilton, Mr. Cock, Mr. Simon, Mr. Bowman, Dr. Sieveking, Dr. Sutton, Dr. Little, Mr. Flower, Dr. Priestley, Mr. Spencer Wells, Mr. Henry Lee, etc.

Had the intention been persevered with, probably most of the prominent names in the Profession would have been added to the list. On Tuesday a conditional inquiry was made as to the wishes of Sir James's family, and a favourable reply was received. On the following day, however, late in the evening, Sir Walter Simpson telegraphed that, "under the circumstances, the family had decided to decline the proposal." It will be seen that the application was made rather late, and after all arrangements had been made in Edinburgh for a public funeral there.

Thus the matter has ended. It will be now for the Profession to determine whether in some other manner it cannot find means of expressing its appreciation of the man whom we have lost.

It is with great pleasure that I have to add that the Dean of Westminster, in reply to a private inquiry (through Mr. Flower) made on Monday, stated, with the utmost kindness, that he should at once accede to the proposal, and made suggestions as to the details. No deputation waited on him, as it was thought best to get the consent of Sir James's family before making it. So far, however, for showing the most ready willingness to confer upon a member of our Profession, on account of Medical work, the high honours of which he is the custodian, the Dean of Westminster deserves our warm gratitude and thanks. It would have been a great event, not in honour alone of the deceased, but also of the Profession which he would have represented, could the plan have been realised. It is very long since such a national recognition of the value and merit of work done in connexion with our art has been accorded. Hunter was, I believe, its last recipient, and he received it only long after death. It is almost a national disgrace that Jenner was not placed there, and that he has never even had a tablet placed there to his memory. Perhaps, indeed, for the latter object it is not even yet too late.

Let no one attempt comparisons of merit between Sir James Simpson and Hunter, Jenner, Brodie, or any other of the veterans still with us. It is enough to know that he was great in himself, and that, endowed with rare genius, he used it with rare industry, fed its fire with the enthusiasm of philanthropy, and achieved very remarkable results.

No one claims for him that he was exempt from human frailties, nor will any one acquainted with the facts doubt that the public has accorded to him a larger share of credit in reference to anæsthetics than was his due, and some will be ready with pain to admit that, at moments, he appeared to yield somewhat to the seductive temptation to accept praises which were offered in a degree of error. It is rather to his life's work that his friends appeal. They cite with confidence his zeal in medics, antiquarian research, his eloquent antagonism to quackery, his discoveries in therapeutics and in operative Surgery, and the great fact that a large part of his laborious career was devoted to subjects which had no relation to his practice, or to his own special part of the Profession. His ten years' work at acupressure, if it be to end

at last in failure, came as close as possible to a glorious success, and reflected the utmost credit on both his head and heart. For a time it seemed likely that it would be accepted by the whole Medical Profession. Lastly, his exertions to reduce the mortality of large Hospitals were undertaken from a most noble motive, and will doubtless result in the greatest good.

It is too early, immediately after his removal, to attempt to estimate a man's character, especially if he fall in the prime of life. Sir James Simpson's reputation will ripen with years, jealousies will be forgotten, and antagonisms will be buried. I believe that in future years, it will be a matter of universal regret, that circumstances have prevented the realisation of the proposal which has just been put aside. Meauwhile, it is much to know that it was planned, and that the Profession has been honoured by its most courteous reception on the part of those in authority. It is to be hoped that the latter fact will not be forgotten in the future, and that amongst a crowd of poets, politicians, philosophers, and warriors, a resting-place in our Abbey may now and then be found for a hero of Medicine.

I am, &c. JONATHAN HUTCHINSON.

MEDICAL REFORM UNION.

LETTER FROM DR. EDWARDS CRISP.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to forward to you the resolutions passed at a general meeting of the Medical Profession held at the Freemasons' Tavern, May 7, 1870, and called by public advertisement by the Medical Reform Union, Mr. Sampson Gamgee, of Birmingham, in the chair. I am, &c.

EDWARDS CRISP, M.D., Sec. *pro. tem.*

29, Beaufort-street, Chelsea, May 7.

1. Moved by Dr. George Harley, and seconded by Dr. Rodgers—"That this meeting greatly regrets the omission in the proposed Medical Act Amendment Bill of a clause to secure the direct representation of the registered members of the Medical Profession on the Medical Council, and suggests that a clause giving direct representation to the whole of the registered members of the Profession be inserted in the proposed Bill."

2. Moved by Dr. Dudfield, and seconded by Dr. Davey (Bristol)—"That, in the opinion of this meeting, the senates, councils, or governing bodies of the several universities and Medical corporations should be elected by the entire body of graduates, Fellows, Licentiates, and Members respectively belonging to these universities and corporations."

3. Moved by Dr. Felce, and seconded by Dr. Allen—"That this meeting disapproves of the power proposed to be conferred upon the Privy Council by the Medical Bill now before Parliament."

4. "That the foregoing resolutions be forwarded to the Lord President of the Privy Council, the President of the General Medical Council, and the Presidents of the several Medical and Surgical Corporations."

THE LATE DR. HODGKIN.

LETTER FROM DR. W. DOMETT STONE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Those of your readers who were acquainted with the late Dr. Hodgkin will be gratified to learn that there has recently been erected in the cemetery at Jaffa an obelisk of syenite granite about six feet high, standing on a rectangular pedestal of about 2½ feet, and bearing the following inscription:—"Here rests the body of Thomas Hodgkin, M.D., of Bedford-square, London, a man distinguished alike for scientific attainments, Medical skill, and self-sacrificing philanthropy. He died at Jaffa the 4th of April, 1866, in the 68th year of his age, in the faith and hope of the Gospel.

Humani nihil a se alienum putabat.

The epitaph inscribed by his deeply sorrowing widow and brother to record their irreparable loss." On the obverse is the following:—"This tomb is erected by Sir Moses Montefiore, Bart., in commemoration of a friendship of more than forty years, and of many journeys taken together in Europe, Asia, and Africa." I may add that I saw the monument on my way through Palestine in February last. I am, &c.

Medical Club, May 6. W. DOMETT STONE.

THE LIVERPOOL CHAIR OF SURGERY.

LETTER FROM MR. E. W. BICKERSTETH.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your Liverpool correspondent records the fact that, in consequence of changes recently made in the hours of lecturing, which seriously interfered with other Professional engagements, I have been obliged to resign the Chair of Systematic Surgery in the Liverpool Royal Infirmary School of Medicine.

I should, however, like it to be understood that it was with the greatest reluctance I took this step, and, rather than have done so, would have sacrificed my private interests had it not happened that at this juncture the Honorary Surgeons of the Royal Infirmary intrusted me with the more important position and responsibilities now devolving on me as Clinical Teacher and Lecturer to the Surgical Classes of the Royal Infirmary. I am, &c. E. W. BICKERSTETH, F.R.C.S.E.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Court of Examiners on the 10th inst., and, when eligible, will be admitted to the Pass Examination:—

Baker, John H., of St. George's Hospital.
Bates, William, of the Birmingham School.
Bishop, E. Stanmore, of the Manchester School.
Blake, Frederick G., of the Bristol School.
Bomford, Gerald, of King's College.
Boon, Alfred P., of St. Mary's Hospital.
Booth, P. Lancashire, of the Manchester School.
Cooke, Thomas, of the Manchester School.
Edge, Abraham M., of the Manchester School.
Hartley, Robert, of the Manchester School.
Hill, Alfred, of the London Hospital.
Johnstone, J. Lawson, of the Liverpool School.
Morris, Richard T., of the Manchester School.
Needham, Walter, of the Manchester School.
Randolph, Charles, of the Bristol School.
Rees, Albert B., of the Liverpool School.
Russen, Henry Kirke White, of the Manchester School.
Savory, Arthur H., of the Charing-cross Hospital.
Sealy, George James, of Guy's Hospital.
Shearman, W. Millar, of the Manchester School.
Taylor, R. F. Stopford, of the Sheffield School.
Tulford, W. Edward, of the London Hospital.
Walker, W. Newman, of University College.
Warden, C. J. Hislop, of St. George's Hospital.
Whittingham, George W., of the Manchester School.
Wilkinson, Auburn, of the Newcastle School.

The following passed on the 11th inst., viz.:—

Amades, Antonio Jose, of Philadelphia and Paris.
Arthur, Walter, of the Westminster Hospital.
Ayling, Arthur H. W., of the Middlesex Hospital.
Bestall, Charles A., of the Dublin School.
Bland, George, of St. Bartholomew's Hospital.
Bradbury, J. Batley, of the Dublin School.
Breeze, R. Goodwin, of University College.
Davoren, J. Lucius, B.A. Trin. Coll. Dub., of the Dublin School.
Ellis, J. Harrison, of the Dublin School.
Ghose, Kristo Dhan, of Calcutta.
Lloyd, William, of the Middlesex Hospital.
Morton, Albert, of the London Hospital.
O'Leary, Morgan P., of the Dublin School.
Peregrine, Hugh L., of St. George's Hospital.
Price, David, of Guy's Hospital.
Robson, E. Sheddon, of Guy's Hospital.
Smith, J. Onsdon, of the Manchester School.
Snell, John, of the Leeds School.
Steane, W. Crawshay, of St. Bartholomew's Hospital.
Wallis, William, of Guy's Hospital.
Whately, G. F., of the Middlesex Hospital.

The following passed on the 12th inst., viz.:—

Cartwright, Alexander, of King's College.
Hughes, Robert Harry, of Guy's Hospital.
Kindon, Joseph, of Guy's Hospital.
Oshorne, John Henry, of University College.
Payne, Algernon Archibald, of the Sheffield School.
Stiles, Edward Marsh, of the Dublin School.
Temple, C. E. A., B.A. Cantab., of Middlesex Hospital.
Tipple, Edwin, of Guy's Hospital.

New Fellows.—At a meeting of the Council of the Royal College of Surgeons on the 12th inst., the following Members of the College having been elected Fellows at previous meetings of the Council, were admitted as such, viz.:—

Ross, Daniel, of Commercial-place East.
Rudderforth, Edward Henry, L.R.C.P. Lond., of Au street, Piccadilly.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medi-

cine, and received Certificates to practise, on Thursday, May 5, 1870 :—

Blacker, Walter Campbell, Ifield Vicarage, Crawley.
Grigson, Robert Edward, Watton, Thetford, Norfolk.
Packman, Augustus T. Vance, Sheffield.

As an Assistant in Compounding and Dispensing Medicines:—

Hellings, Henry, Neath, Glamorganshire.

The following gentlemen also on the same day passed their First Professional Examination :—

Barrow, Henry John Waller, Guy's Hospital.
Barrow, Frank Edward, Guy's Hospital.
Dickson, Thomas, St. Thomas's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Whitehall, May 3.—The Queen has been pleased to appoint Arthur Mitchell, M.D., to be one of the Paid Commissioners in Lunacy for Scotland, in the room of Alexander Francis Browne, M.D., resigned.

NAVAL AND MILITARY APPOINTMENTS.

Dr. James Young, Staff Surgeon to the *Pembroke*, additional, for service with the Royal Marines at Deal; Dr. Patrick Digan, Staff-Surgeon to the *Fisgard;* John R. Anderson, Surgeon to the *Pembroke;* and Francis McAree, Surgeon, to her Majesty's ship *Hector*.

War Office.—The following appointments have been made:—Royal Artillery: Surgeon John Duff, M.D., having completed twenty years' full-pay service, to be Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867. 3rd Foot: Staff Surgeon John Lyster Jameson, to be Surgeon, *vice* Surgeon-Major Alfred Crocker, appointed to the Staff. 25th Foot: Staff Surgeon Frederick Mackenzie Skues, to be Surgeon, *vice* Surgeon-Major Thomas Moorhead, M.D., appointed to the Staff. 34th Foot: Staff Surgeon Sydney Alder, to be Surgeon, *vice* Surgeon-Major Michael Fenton Mamfold, appointed to the Staff. 46th Foot: Staff Surgeon Robert Speedy, to be Surgeon, *vice* Surgeon-Major James Leitch, M.D., appointed to the Staff.

Medical Department.—Staff Surgeon-Major James Macbeth, M.D., to be Deputy Inspector-General of Hospitals, *vice* George Thomas Ferris, who retires on half-pay; Surgeon-Major Thomas Moorhead, M.D., from the 26th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Frederick Mackenzie Skues, appointed to the 26th Foot; Surgeon-Major James Leitch, M.D., from the 48th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Sydney Alder, appointed to the 34th Foot; Surgeon-Major Michael Fenton Mamfold, from the 34th Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon John Lyster Jameson, appointed to the 3rd Foot; Surgeon-Major Alfred Crocker, from the 3rd Foot, to be Staff Surgeon-Major, *vice* Staff Surgeon Richard Cooper, having completed twenty years' full-pay service, to be Staff Surgeon-Major, under the provisions of the Royal Warrant of April 1, 1867.

Bengal Army.—Medical Officers to be Surgeons: Assistant-Surgeon John Armstrong Purefoy Colles, M.D.; Alexander Dugald Campbell, M.D.; Sydney Charles Courtney, M.D.; Charles Prentis; Rajendra Chandra Chandra; Robert Lidderdale, M.D.; James Edward Tiernay Aitchison, M.D.; Leonard Horner Lees, M.D.; Thomas Stick Veale; Bamlet Walker Switzer; Cyrus Octavius Daniell, M.D.

The Militia.—The Right Hon. the Earl of Howth, Lord Lieutenant of the County and City of Dublin, has appointed Henry Wilson, F.R.C.S., to be Surgeon of the City of Dublin Artillery, in place of Edward Howell Scriven, M.D., deceased.

MARRIAGES.

Esdaile—Dobell.—On May 10, at St. George's, Hanover-square, William Crowder Esdaile, Esq., Grove Lodge, Hendon, to Mary, eldest daughter of Horace Dobell, M.D., of 84, Harley-street, London.

Harris—Taylor.—On April 30, at St. George's, Walthamstow, Francis Alexander, youngest son of the late Henry Barham Harris, M.D., to Emma Jane, second daughter of Andrew Taylor, Esq.

Tonge—Johnston.—On May 5, at the parish church, Hampstead, Morris Tonge, M.D., Harrow-on-the-Hill, son of George Tonge, Esq., Brighton, to Eliza, second daughter of the Rev. Robert Johnston, Hampstead.

DEATHS.

Collier, W. Charles, M.D., etc., at 20, Fitzroy-square, W., on May 6, aged 84.

Evans, Harry Paynter, Captain H.M.'s 104th Bengal Fusiliers, eldest son of the late R. D. J. Evans, M.D., Hertford, on May 8, at Hertford.

Fotherby, Frederick and Benjamin Guy, twin sons of H. J. Fotherby, M.D., at 3, Finsbury-square, on May 8 and 10 respectively, aged six months.

Jones, Richard, M.R.C.S., at Brackley, on May 6, aged 44.

Pritchard, Nicholas Tyrconnell, second son of the late Thomas Pritchard, F.R.C.S., at Clevedon, on May 7, aged 27.

Rossiter, J. G. T., M.R.C.S., at Redland, Bristol, on May 7, aged 45.

Saville, Robert, M.D., of Sunderland, county Durham, in London, on May 7, in his 56th year.

Simpson, Sir James Y., Bart., M.D., F.R.C.P., etc., at 52, Queen-street, Edinburgh, on May 6, in his 60th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

City of London Lunatic Asylum, Stone, near Dartford, Kent.—Assistant Medical Officer; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials, under cover, to Henry F. Youle, Clerk to the Visitors, Guildhall, London, E.C., on or before the 19th instant.

City of London Lying-in Hospital, City-road.—Surgeon-Accoucheur. Candidates must reside in the neighbourhood of the Hospital. Applications and testimonials to the Secretary on or before May 17. Election on the 18th.

Droitwich Poor-law Union.—Medical Officer to the Union House and the Droitwich Medical District of the Union. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to H. Beareroft, Clerk to the Guardians, on or before the 24th inst. Election the same day at 11 o'clock, a.m.

Evelina Hospital, Southwark-bridge-road.—Clinical Assistant. Applications and testimonials to the Medical Committee on or before the 18th inst.

Liverpool Royal Infirmary.—Junior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee, on or before May 28.

Newport Infirmary.—Resident Medical Officer; must be M.R.C.S. Lond., Dublin, or Edinburgh, and L.S.A. Applications and testimonials to the Secretary on or before May 18.

Nottingham Dispensary.—Assistant Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before June 13. Election the same day at 12 o'clock.

Ripon Dispensary.—House-Surgeon and Resident Dispenser. Applications and testimonials to the Hon. Secretary.

South Staffordshire General Hospital.—House-Surgeon; must be F. or M.R.C.S. London, Dublin, or Edinburgh, and L.R.C.P.L. or L.S.A. Applications and testimonials to the Secretary on or before the 28th inst. Election on June 14.

Sunderland Infirmary.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

Weston-super-Mare Hospital and Dispensary.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before May 31.

Winchcomb Union, Gloucestershire.—Medical Officer for the Hill District. Candidates must possess the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to Henry Plumbe, Clerk to the Guardians on or before May 19. Election on the 21st. A Medical Officer is also required for the Union Workhouse.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Lexden and Winstree Union.—The Eighth District is vacant; area, 11,640; population, 3366; salary, £60 per annum.

Lincoln Union.—Mr. Walter Smith has resigned the Fourth District; area, 13,043; population, 3169; salary, £25 per annum.

North Witchford Union.—Mr. A. Hensman has resigned the Fourth District; area, 14,126; population, 2785; salary £40 per annum.

APPOINTMENTS.

Bellingham Union.—Edward C. Robertson, L.R.C.P. Edin., L.R.C.S. Edin., to the Third District.

Chelmsford Union.—Edward H. Carter, M.R.C.S. Eng., L.S.A., to the Second District.

Hartley Wintney Union.—William J. Mickle, M.R.C.S. Eng., L.S.A., to the Farnborough District.

Kidderminster Union.—John Hillman, M.R.C.S. Eng., L.S.A., to the Wolverley District.

Kirkby Moorside Union.—Arthur Wood, L.S.A., for the Union and Workhouse.

Merthr Tydfil Union.—James B. Colthurst, M.R.C.S. Eng., L.S.A., to the Tir Phil District.

Plomesgate Union.—Charles B. Rendle, M.R.C.S. Eng., L.S.A., to the Saxmundham District.

Wallingford Union.—Arthur A. Harris, M.R.C.S. Eng., L.S.A., to the Dorchester District.

Collegiate Lectures.—From an announcement in another page, it will be seen that the lectures at the Royal College of Surgeons for the present year will be resumed on Monday the 30th inst., by Professor John Birkett, F.R.C.S., who will deliver six lectures on the nature and treatment of new growths. Mr. J. W. Hulke, F.R.S. will deliver three lectures on the minute anatomy of the eye, commencing on Monday the 13th proximo, and in continuation of his course of last year.

The Royal Society.—The following members of our Profession have just been selected by the Council for election into the Society as Fellows in the ensuing month:—E. H. Greenhow, M.D., Upper Berkeley-street; James Jago, M.D. Oxon., Truro, Physician to the Cornwall General Infirmary; Maxwell Tylden Masters, M.D., of Ealing; William Henry Ransom, M.D. Lond., of Nottingham, Physician to the General Infirmary, Nottingham; and Samuel Wilks, M.D., Grosvenor-street, Physician to Guy's Hospital.

Royal Institution of Great Britain.—At the general monthly meeting, on Monday, May 9, Sir Henry Holland, Bart, M.D., D.C.L., F.R.S., President, in the chair, John Tyndall, Esq., LL.D., F.R.S., was re-elected as Professor of Natural Philosophy.

NEW REGULATIONS OF THE MEDICAL BRANCH OF THE INDIAN ARMY.—The *Bombay Gazette* of April 5 has an able leading article on the impending change in the prospects of the Medical department of the Indian Army. It states that it is somewhat more than rumour now which declares that Doctors for the future are to form a body elect of themselves; that they are no longer to be posted permanently to corps, but merely attached. The writer dwells with much force on the injustice of this regulation, which affects chiefly Staff-Surgeons. Besides the hardship inflicted on individuals, it is undeniable that a Medical officer permanently posted to a regiment naturally feels more interest in it than he would if only attached, and that this feeling exists throughout all ranks. There can be no doubt that the new regulation is not a wise one, and will meet with strong opposition from the members of our Profession connected with the Indian Army.

PROCEEDINGS OF THE COLLEGE OF SURGEONS.—The following is an abstract of the unconfirmed minutes of the extraordinary Council which assembled on the 29th ult. for the consideration of the Government Medical Act (1858) Amendment Bill, and the report of the committee on the conjoint examining board thereon: when it was moved by Sir William Fergusson, and seconded by Mr. Quain—"That, with reference to clauses 3 and 13 of the Bill, this Council cannot consent to the formation of a new examining board which shall grant licences in lieu of the proposed conjoint licence of the College of Physicians and Surgeons." Whereupon it was moved as an amendment by Mr. Humphry, and seconded by Mr. Hawkins—"That this Council assents to clauses 3 and 13 of the Bill, but is of opinion that it is highly important that the examinations contemplated under clauses 4 to 10 should be so arranged and conducted as to maintain as far as possible a close relation between the members of the Profession and this and the other Medical authorities." And the votes of the Council having been taken on the amendment, a majority was in favour thereof. The Council then proceeded to the consideration, paragraph by paragraph, of the report of the committee, which was approved and adopted. The following additional resolutions with respect to clauses 9 and 30 of the Bill, the former moved by Mr. Busk, seconded by Mr. Hilton, and the latter moved by Mr. Humphry and seconded by Mr. Quain, were adopted by the Council:—"That the Council cannot approve of those provisions of the Bill which propose to vest the power of making schemes for the establishment of the examining board, and making rules for regulating examinations in the institutions mentioned in the Bill, of which the Medical corporations, representing the Medical Profession, are only a minority." "That the Medical authorities may propose a scheme for examinations as well as a scheme for the formation of the examining board." In conclusion, it was resolved that a deputation, consisting of the President, Vice-Presidents, and Mr. Hilton, be appointed to wait upon the Lord President of the Council with the object of expressing the views of the Council in reference to the Bill.

COLLEGIATE EXAMINATIONS.—At the primary or anatomical and physiological examination for the diploma of membership of the Royal College of Surgeons, when 87 candidates presented themselves, no less that 11 candidates were rejected the first day, 14 on the second, and 7 on the last day, when only 15 were examined, making a total of 32 out of the 87 candidates. At the written examination the following questions were submitted to them—viz., 1. Describe the course and relative position of the brachial artery. Name the branches it gives off, and trace the profunda branch to its termination. 2. Mention the different secretions which imbue the food in the mouth and in the stomach during mastication and digestion. State the chemical composition of each secretion, and its physiological purpose. 3. Describe the structure of the uterus; and mention the changes which take place in the organ during gestation. 4. Describe the fifth pair of nerves within the cranium, and mention the openings by which it leaves the cavity. Describe the course, distribution, and function of the third division of the fifth pair. 5. Describe the position, attachments (origin and insertion), and the precise action of the pterygoideus externus muscle. 6. Describe the coverings of the testicle. Mention the different structures which composee the spermatic cord; and state whence they are derived, and where they terminate.

A SOCIETY has been established at Leamington, called "The Mutual Medical Aid Society," the object of which is to enable persons to provide ordinary Medical attendance and medicine for themselves and their families for a fixed annual payment.

ROYAL ALBERT ASYLUM FOR IDIOTS AND IMBECILES OF THE NORTHERN COUNTIES, LANCASTER.—The Central Committee of the Royal Albert Asylum, which is intended for the care and training of idiots and imbeciles belonging to the seven northern counties, have recently issued a circular embodying the regulations for the admission of patients. As to the conditions of admission, the committee deem it important to explain that the asylum is not intended for epileptic, paralytic, or insane persons, and idiocy complicated with blindness or deafness will also be a disqualification. There will be two classes of patients of both sexes—viz., 1. Free patients to be admitted for seven years by the votes of the subscribers at periodical elections. 2. Paying patients to be admitted by the Central Committee only. In respect to free admission, it must be shown that the friends of the candidates are above the position of paupers. Candidates must be between six and fifteen years of age. Applications must be made to the Central Committee at Lancaster, through the secretary, Mr. James Diggens, from whom all necessary forms may be obtained. A certificate will be required from some Medical man knowing the case, who can testify as to its improvableness. The application will be referred to the nearest local committee for further inquiry. It will then be investigated by the Central Committee, and if approved will be placed upon the eligible list for the county to which the candidate belongs. Patients admitted free will be retained for seven years, and be provided with board, lodging, and clothing for that time. In order that they may retain their home associations, they will be allowed, at the discretion of the Central Committee, to visit their friends during the month of August. Parents and friends may, under certain necessary restrictions, visit the patients at the asylum. Appended to the regulations for free admission is a scale of charges for paying patients.

ACADÉMIE DE MÉDECINE.—M. Eugene Caventou was at the last meeting elected into the Section of Pharmacy, although last on the list of the Committee of Recommendation. This placed M. Lefort on the first line, MM. Personne and Roussin on the second, and MM. Caventou and Jeannel on the third. The contest was, however, between MM. Caventou and Lefort, and a close one it was. At the first ballot, present 77 votes, M. Caventou obtained 34 and M. Lefort 30 votes; and at the second, out of 79 votes, M. Caventou obtained the votes of 40 to 39 of M. Lefort.

HEALTH OF SCOTLAND.—2101 deaths were registered in the eight towns during April, of whom 1225 were males and 1176 females. This number, after allowance is made for increase of population, is 89 under the average for the month during the previous ten years.

ANTHROPOLOGICAL SOCIETY OF LONDON, May 3.—Dr. R. S. Charnock, V.P., in the chair. Moore A. Cuffe, Esq., LL.D., 9, Camden-crescent, Bath, was elected a Fellow. A paper was read by Major W. Ross King, F.R.G.S., F.S.A.S., on the "Aboriginal Tribes of the Nilgiri Hills," namely, the Todas, Khotas, Erulas, and Kurumbas, especially noticing the former, as being the most singular and important. The author, who was three years among these tribes, described in turn the characteristic features and peculiarities of each, with detailed information as to their very curious social customs, and religious rites and ideas; showing the marked distinctions existing in every point between tribes occupying one and the same area, and in constant communication with each other; pointing out the fact that each people retained its own language; and their remarkable isolation from the surrounding enormous population of the plains. The striking similarity between the rites, practices, and monuments of the Todas and those of the ancient Celts of Britain was shown; a passing allusion was made to the evidences of an early western migration as traceable through intervening countries in the existence of similar rites and customs; and the presence on the Nilgiri hills of Druidical circles, cromlechs, kistvaens, and tumuli was described, precisely similar to those so well-known in our own country. While commenting on the analogies thus apparent between the ancient Celts, and some of these Hill Tribes, the author took occasion also to remark on their similarities in other respects to the Jews of old, to the Kaffirs, and to the Ancient Romans, not as being likely to lead to any theory of origin in those quarters, but as possibly qualifying the reliance to be placed on every point of Celtic resemblance. In conclusion, the author, who illustrated his paper by the exhibition of several drawings, and of some interesting native ornaments, etc., summed up the various theories prevailing as to the probable origin of these tribes, of whose history we are still so ignorant, and recom-

mended the subject to the Society as one worthy of their investigation.

County and City of Cork Medical Protective Association.—The report for the year ending March, 1870, has just been published. The following resolutions were adopted, printed and circulated:—That, in relation to any proposed changes affecting the working or the constitution of the Medical Council of Great Britain, nothing has occurred to alter our frequently expected conviction, that the interests of the public and the Profession can never be efficiently served by a large board representing very varied interests, and meeting only once for a few days or weeks in each year. It has long appeared to us, that nothing short of the close and undivided attention of a much smaller number continuously devoted to the work, can be expected to carry out the important and comprehensive details, both educational and otherwise, which constitute the duties of the Medical Council. That we cannot expect to see that confidence in the Profession, on the part of the public, or that degree of really beneficial service to the community, which may rationally be looked for from a soundly educated body of Practitioners, until, in connexion with an intelligent and energetic Council, there be established a thoroughly independent central board of examiners, who shall test, both theoretically and practically, the qualifications of every man in these kingdoms who shall practise the healing art. That the fact of the Poor-law Medical Officers' Superannuation Bill having passed into a law may be considered a matter of congratulation to the country. Already, by its provisions, several districts have been supplied with young and efficient Medical officers; and the apprehension that the Act would be unduly availed of by others than the really incapacitated appears to be, so far, practically without foundation.

Royal Institution of Great Britain.—At the annual meeting held on Monday, May 2, 1870, Sir Henry Holland, Bart., M.D., D.C.L., F.R.S., President, in the chair, the annual report of the Committee of Visitors for the year 1869 was read and adopted. Forty-seven new members were elected in 1869. Sixty-three lectures and nineteen evening discourses were delivered during the year 1869. The following gentlemen were unanimously elected as officers for the ensuing year:—*President:* Sir Henry Holland, Bart., M.D., D.C.L., F.R.S. *Treasurer:* William Spottiswoode, Esq., M.A., F.R.S. *Secretary:* Henry Bence Jones, M.A., M.D., F.R.S.

Slaughter of Carp by Toads.—M. Duchernin communicated a fact at the last meeting of the Académie des Sciences which he believes is unknown to naturalists. A friend of his has an immense pond in his park abounding in carp which thrive exceedingly well all the year except just at the beginning of spring when, every year, the mortality becomes extraordinary. The dead carp floating on the surface of the water were always found to be blind, a kind of membrane covering the eyes and even a portion of the head. On opening their bodies no lesion was discovered except slight oily congestion of their tissues. In order, therefore, to discover the cause of the occurrence every live carp contained in the pond was examined, and each carp found sick had an enormous toad fixed on its head, having its paws closely applied to the eyes of the unfortunate fish. The toad seemed as it were grafted on its victim, which it must have secured at the edge of the water, and continued thus seated until the struggles of the fish exhausted it. Whether the venom of the toad had anything to do with the catastrophe is uncertain.—*L'Institut*, April 13.

Composition and Quality of the Metropolitan Waters in April, 1870.—The following are the returns of the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction	17·97	0·050	0·092	0·001	14·8	3·8
West Middlesex	19·63	0·050	0·110	0·000	15·0	4·1
Southwark & Vauxhall	18·47	0·046	0·079	0·002	15·0	4·0
Chelsea	18·53	0·054	0·067	0·001	15·0	4·0
Lambeth	19·03	0·064	0·067	0·000	15·1	4·0
Other Companies.						
Kent	27·13	0·007	0·151	0·000	21·2	5·1
New River	18·07	0·021	0·110	0·000	14·6	4·6
East London	20·17	0·043	0·092	0·000	14·9	4·1

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 96,809,161 gallons; and the number of houses supplied was 477,184. This is at the rate of 30·5 gals. per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 25·7 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

H. Letheby, M.B.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. Charles Bell Taylor.—It is not usual for gentlemen to send a paper on professional subjects to more than one Medical journal.

A pamphlet on "Public School Reform" (Booth, London), will, we understand, shortly appear, from the pen of a lady who has given much attention to social and sanitary questions, and who no doubt, has some useful suggestions to offer on school dietaries and other matters which must be interesting to our readers.

Salivation in Pregnancy.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Can any of your readers kindly help me in the treatment of a case of excessive salivation occurring in, and due to, pregnancy?

May 6, 1870. I am, &c. M.D. Lond.

Rank of Army Medical Officers.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As it would appear that an alteration is to be made in the nomenclature of Medical officers, it may not be unreasonable to direct attention to the misnomer "Surgeon-Major." This title is applied to a Medical officer upon attaining the relative rank of Lieutenant-Colonel. It is admirably adapted to conceal this fact, and to mislead the public. Would it not be better to call a Medical officer "Surgeon-Major" when he attains the relative rank of major, and, after twenty years' service, to call him "Surgeon of Brigade," if Surgeon-Colonel be considered a cacophony, though why should not it in time be considered as euphonious as "Surgeon-Major" or "Surgeon-General?" As we are fond of borrowing in military matters, we might take a paragraph from the American Army Regulations, and give Medical officers military authority in their own department. Other departments have it, and the advantages of this arrangement must be obvious to every Medical officer of experience.

I am, &c. Procul.

"Hospital Sunday."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Several well known philanthropists are now engaged in solving the problem, whether London cannot have an "Hospital Sunday" as well as the provinces. Manchester, Birmingham, etc., have acted nobly and set the metropolis an example. It now remains to be seen whether those most interested will push this noble mission of mercy onwards. All persons friendly to such a simple and powerful plan to help unendowed Hospitals and Infirmaries, now struggling to benefit the "sick poor," are invited to address the undersigned at once, and thus co-operate in establishing a powerful lever in developing Medical mind and alleviating physical suffering. A committee and public meeting will of course settle details. For the present united action and energy with expressions of sympathy in this noble cause are solicited. I am, &c.

46, Great Coram-street, Russell-square, W.C., May 11. G. Reed.

The Baths of Tarasp.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have received the following letter from Dr. Killias, the Resident Physician at the Baths of Tarasp, in reference to the error in the published analysis of the St. Lucius spring to which I drew attention in my communication to your journal of April 23. I am, &c.

60, St. James's-street, April 29. J. Burney Yeo.

"Coire, le 27 avril 1870.

"Monsieur et honoré confrère,—En suite d'une réclamation envers M. le Dr. Planta, l'auteur des analyses des eaux de Tarasp, je viens d'apprendre qu'il faut réduire le natrium iodatum dans l'eau de St.-Luce à 0·0015 gr. pour la livre (ou 16 onces), ainsi que vous avez remarqué. Pour mon compte je dois ajouter, que M. Planta avait reproduit son erreur dans *deux* éditions de son analyse originale, *que la sommation de son analyse avec* 95·6225 *gr. de parties fixes est tout-à-fait d'accord avec la supposition de* 1·5360 *gr. de natr. iod.*, et que malgré la communication de diverses brochures, programmes, etc., il n'avait jamais fait la moindre observation. En suite, je croyais pouvoir reproduire le résultat de ses analyses *authentiques* en bonne foi. Maintenant que l'erreur a été constatée par l'auteur lui-même, je n'hésite pas à avouer franchement la mienne suivant la devise, qui seule doit nous guider dans notre science, 'Amicus Plato, sed magis amica *veritas*.' Au contraire, je me sens obligé de vous remercier de m'avoir aidé à redresser une erreur, ce qui me donne la meilleure épreuve pour l'intérêt que vous avez bien voulu dédier aux eaux de Tarasp.

"Agréez l'expression de ma considération distinguée,

"Votre bien dévoué,

"Dr. Killias."

The Medical Amendment Act.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I am not quite sure whether or not you would advocate in your suggestions the one portal and one title plan acceptable to many and the public, who cannot and do not care to enter upon our various self-elected designations. The minimum or in part qualification to practise Medicine and Surgery is an evident fraud and injustice upon the public. A man licensed to practise, as matter of course, is liable to be called to any description of case, especially among the poor. His examination, therefore,

should as much as may be required pass over the whole field of Medicine and Surgery, although it is well known he must of necessity call in occasionally assistance from persons of more experience and talent than himself. This must be always more or less so, and would be under the one title or the several. Now that the Profession no longer keeps within the boundaries formerly assigned to the Physician, Surgeon, and general Practitioner, and men are no longer scared from any or all practice by being called mongrels, and all the general Practitioners almost are pressing to be dubbed Doctor, why should not every man licensed to practise Medicine and Surgery have that degree? Does not the Surgeon and apothecary of the present school unite in himself the functions of Physician and Surgeon and therefore practically is as much entitled to be called Doctor as any other Doctor? I am aware that a classical and general higher education may be considered to attach to the pure M.D. or F.R.C.S., but if all of us were designated alike, the same exterior qualifications would exist and superior mind would make for itself character and renown. There would still be of necessity consultants and specialists. There are great men and little men of all colleges and universities. Different titles under present circumstances seem to be invidious distinctions among Medical men; and the title of Doctor is sought for more as a social status or preferment than a real practical acquisition; for what does the individual know after getting the coveted cognomen more than he did before as to the treatment of his patients? I am, &c. THOMAS STOKES.

Nailsworth, May 2.

COMMUNICATIONS have been received from—

Dr. EDWARDS CRISP; Mr. WOOD; Mr. E. R. BICKERSTETH; Dr. W. V. LUSH; Dr. W. MURRAY; PROCUL; Dr. C. J. B. WILLIAMS; Dr. MCKILLIAM; Mr. LAWSON TAIT; Dr. STEWART; Mrs. BAINES; Dr. DOMETT STONE; Mr. COPPIN; Mr. J. BRAXTON HICKS; Mr. H. WILSON; Mr. C. WARD JACKSON; Dr. VINEN; Dr. SEDGWICK; Dr. MACCORMACK; Mr. GEORGE REEO; Mr. JAMES DIGGENS; Mr. CHARLES REED; Dr. B. W. RICHARDSON; Mr. J. CHATTO; Dr. ANGUS SMITH; Mr. JONATHAN HUTCHINSON.

BOOKS RECEIVED—

Canada Medical Journal, April—l'Electricité appliquée à la Thérapeutique chirurgicale, par M. le Dr. J. Abeille—Traité clinique et expérimental des Embolies capillaires, par V. Feltz—American Half-yearly Compendium of Medical Science, part 5—Chapman on the Medical Institutions of the United Kingdom—Drs. Meigs and Pepper on the Diseases of Children—Sadler's Report of the Sanitary Condition of the Borough of Barnsley—Report of the County and City of Cork Medical Protective Association—American Journal of the Medical Sciences, April—Report of the Committee on the Relations of Alcohol to Medicine, Philadelphia—Report of the Board of Managers of the Woman's Hospital of Philadelphia—The Annual Announcement of the Woman's Medical College of Pennsylvania—Valedictory Address to the Graduating Class of the Woman's Medical College of Pennsylvania, by Ann Preston, M.D.—Dr. Miller (Louisville) on Chronic Inversion of the Uterus—American Journal of Insanity, April—Inaugural Address delivered on the Twenty-ninth Anniversary of the Medical Society of London—Dublin Quarterly Journal of Medical Science, May—Donovan's Handbook of Phrenology—Dr. Arnott's Observations on National Education.

NEWSPAPERS RECEIVED—

Nature—Edinburgh Daily Review—Bombay Gazette—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

May 14. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

ROYAL INSTITUTION, 3 p.m. Prof. Grant, "Comets."

16. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

17. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ANTHROPOLOGICAL SOCIETY, 8 p.m. Meeting.

PATHOLOGICAL SOCIETY, 8 p.m. Meeting.

ROYAL INSTITUTION, 3 p.m. Prof. Blackie, "Moral Philosophy."

18. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

SOCIETY OF ARTS, 8 p.m. Meeting.

19. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

HARVEIAN SOCIETY, 8 p.m. Meeting.

LONDON INSTITUTION, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "Electricity."

20. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Williamson, "Atoms."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 7, 1870.

BIRTHS.

Births of Boys, 1148; Girls, 1129; Total, 2277.
Average of 10 corresponding weeks, 1860-69, 2044·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	680	634	1314
Average of the ten years 1860-69	674·3	655·9	1330·2
Average corrected to increased population	...	...	1463
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	2	6	15	...	9	1	2	2	...
North ...	618210	5	13	22	...	7	4	1	2	3
Central ...	383321	...	14	3	1	4	...	2	3	1
East	571158	...	5	9	...	9	3	3	1	5
South... ...	773175	2	11	25	...	4	...	3	4	5
Total	2803989	9	49	74	1	33	8	11	12	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·917 in.
Mean temperature	45·6
Highest point of thermometer	60·9
Lowest point of thermometer	31·5
Mean dew-point temperature	38·5
General direction of wind	Variable.
Whole amount of rain in the week	0·02

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 7, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending May 7.	Deaths Registered during the week ending May 7.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2277	1314	60·9	31·5	45·6	7·55	0·02	0·05
Portsmouth ...	122084	12·8	88	51	64·1	32·9	47·4	8·55	0·04	0·10
Norwich	81087	1·09	56	34	57·5	35·0	43·6	6·44	0·26	0·66
Bristol	171382	36·6	118	101	65·5	31·4	45·3	7·39	0·02	0·05
Wolverhampton ...	72990	21·5	59	37	67·0	32·2	45·8	7·66	0·02	0·05
Birmingham ...	369604	47·2	244	142	62·2	35·3	46·1	7·83	0·28	0·71
Leicester	97427	30·4	84	37	62·7	33·0	45·1	7·28	0·18	0·45
Nottingham ...	88888	44·5	57	41	62·0	32·5	45·8	7·66	0·32	0·81
Liverpool	517567	101·3	384	243	57·4	37·5	45·5	7·50	0·05	0·13
Manchester ...	374993	83·6	263	187	65·0	30·8	46·1	7·83	0·03	0·08
Salford	121580	23·5	94	36	63·4	30·5	45·1	7·28	0·09	0·23
Bradford	143197	21·7	94	72	63·8	35·0	45·7	7·61	0·23	0·59
Leeds	259527	12·0	272	120	64·0	36·0	45·7	7·61	0·26	0·66
Sheffield	247378	10·8	205	98	63·0	35·5	46·1	7·83	0·08	0·20
Hull	130869	36·7	90	46	60·0	29·0	42·9	6·06	0·32	0·81
Sunderland ...	94257	30·5	45	29	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	102	61	57·0	34·0	43·1	6·17	0·13	0·33
Edinburgh	178970	40·4	137	88	59·7	36·0	48·3	9·05	0·00	0·00
Glasgow	468189	92·5	423	268	65·0	31·1	47·4	8·55	0·01	0·03
Dublin (City, etc.*)	321540	33·0	181	134	61·0	33·0	48·0	8·89	0·08	0·20
Total of 20 Towns in United Kingd'm	7209603	33·8	5273	3139	67·0	29·0	45·7	7·61	0·13	0·33
Paris—Week ending May 7	1889842	242	...	1217	...	...	...	...	...	...
Vienna—Week ending April 30 ...	605200	167	...	490	...	...	51·3	10·75	...	...
Berlin—Week ending May 5 ...	702437	112	664	432	...	...	48·9	9·38	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·917 in. The highest barometrical reading was 30·16 in. on the 7th inst., and the lowest was 29·37 in. on the 1st inst.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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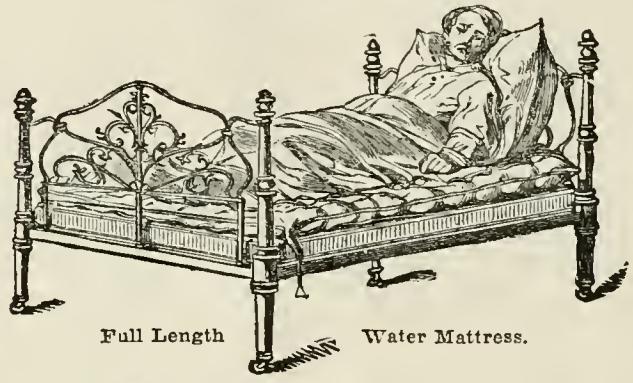

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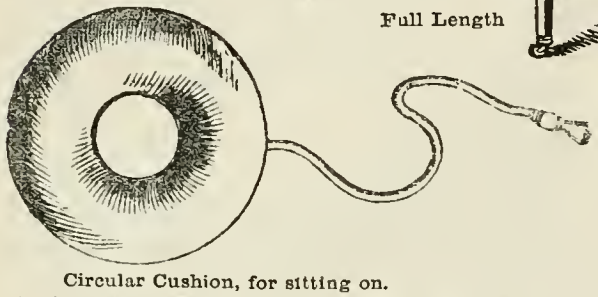

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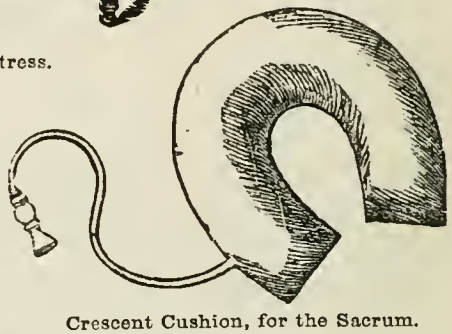

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ORIGINAL LECTURES.

SIX LECTURES ON PRACTICAL HELMINTHOLOGY,

ILLUSTRATING

THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE

Medical College of the Middlesex Hospital

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

LECTURE V.

GENTLEMEN,—Before passing to the next case, let me caution you as to pronouncing definitely upon a cure in all cases where you may be fortunate enough to discover the head. Of course, if only one parasite be present your prognosis may be absolute in the patient's favour; but, like a good accoucheur, always consider the possibility of encountering twins. Here is a case which occurred to myself:—

Case 13.—S. S. W., an engineer, who had contracted tapeworm in India some three or four years previously, and who had frequently taken kousso and other drugs without success, placed himself under my care in April, 1867. Except some trifling discomfort arising from the escape of the "joints" *per anum*, he had suffered nothing from its presence. In this instance a single administration of the male-fern extract, followed by a suitable purgative, brought away about ten feet of a tapeworm at the first movement of the bowels, the remainder of the parasite, including the head, not coming away until after the employment of a second dose of the drug. Naturally one would have supposed a complete cure to have been affected, especially since there were no fragments of a second tapeworm detected at the time. However, very shortly afterwards—I think about five weeks—the "segments" reappeared, but as the patient now considered himself competent to undertake his own case, I do not know what result followed a repetition of the course of treatment I had previously pursued. It was quite clear, however, that at least two parasites were originally present, one of them having successfully resisted the poisonous effects of the drug. I have no doubt a foot or more of the second worm had been dislodged with the first. Had there been a larger proportion of the second parasite, it is not probable that it would have escaped my notice.

In all ordinary cases, where it is possible, a diligent search should be made for the head of the worm; otherwise it is impossible to clear your patient's mind as to the likelihood or otherwise of a return of the disease. Though in many cases I have effected cures without these necessary examinations of the fæces, yet such cases are not altogether satisfactory.

Case 14.—P. P. For this person, who formerly resided at Cheltenham, I was induced, under peculiar circumstances, to prescribe, although I could ascertain results only through those who requested my Professional aid. During a period of several years she had, I understood, been treated unsuccessfully, taking at times large doses of turpentine, which had acted violently. In this case I prescribed three-quarters of a drachm of the ethereal extract, combined with abundance of mucilage, etc. This treatment effectually dislodged the parasite. As there has been no return of the disease, it is quite certain that the head passed either at the first or second movement of the bowels. This unhappy patient had suffered severely from nervousness, and was now gradually losing her sight. The cure in this case not only saved her vision, but also her life, which was in jeopardy from her rapidly declining general health, with consequent emaciation.

Case 15.—M. M. R., a captain in the Royal Artillery, consulted me (in January, 1866). He states that he has suffered for six years from tapeworm. Though previously robust, he has been gradually losing strength and flesh, being at the time above mentioned extremely debilitated. Faintness, vertigo, occasional difficulty in "keeping the saddle," and consequent depression of spirits, are some of the more important symptoms. As in several of the foregoing cases, he had taken kousso and other remedies without success. My first administration in this obstinate case only dislodged a few feet of the worm, but, after allowing the creature to redevelop itself, I treated the "host" again, bringing away a well-nourished specimen of the beef-tapeworm measuring about ten feet in length. In this case the head was not found at the time; but, as there appears to have been no return of the parasite, the head probably passed at an evacuation subsequent to those immediately resulting from the employment of the drug.

The next case is similar, being in all probability attended with an entirely successful result:—

Case 16.—S. A., a gentleman from Peru, South America, has been infested by tapeworm for several years, having taken the usual remedies without success. Consulting me (in February, 1869), he complains chiefly of nausea, frequent gnawing pains at the pit of the stomach, rendering him at times almost hypochondriacal. He appears to have contracted the disease in England, before going abroad. Here, again, pursuing the male-fern method, I brought away, at the second dose, a nearly perfect example of the beef-tapeworm measuring nine feet in length. The neck segments, up to within some three or four inches of the head, had come away separately. In this instance I did not obtain the head, but I have little doubt that the cure was complete. In the hope of dislodging the head separately, I prevailed upon this patient to take a third prescription, which, curiously enough, brought away a solitary specimen of the so-called common whipworm (*Trichocephalus dispar*).

The following is another case in which a cure was effected, the head of the worm having certainly passed during the only motion which was allowed to escape my examination and scrutiny:—

Case 17.—L. A. J., a lady residing near London, consulted me (in May, 1869). She has for nine years been troubled by a tapeworm, which has hitherto resisted the usual remedies; male-fern itself being included in the long list of drugs taken. Among the more prominent symptoms are spasmodic pains across the abdomen, nausea, sickness, and loss of appetite. Here, although the doses of male-fern given by me were unusually large, six or eight separate administrations were necessary, the parasite (*Tænia mediocanellata*) being only brought away piece-meal. This is one of the most obstinate cases I ever encountered, as the worm for a time successfully resisted the most vigorous treatment. However, this patient's courage at length enabled me by perseverance to accomplish the desired end. She is now perfectly free of the parasite.

Case 18.—Y. Y., a gentleman residing in Ireland, requested me to advise and prescribe for him (July, 1866), although I should have no opportunity of personally ascertaining by inspection, the results of my treatment. He had suffered from tapeworm for two or more years. The male-fern preparations which he procured with my sanction in Dublin, apparently produced little or no effect; but the medicine (made up from the same prescriptions) which I subsequently instructed a London druggist to send him, were most efficacious. It seems that the whole parasite came away at the first dose; at all events, there has been no return of the disease. This patient appeared considerably astonished, and was certainly gratified by the result.

Case 19.—B. C. C., a lady residing at the west end of London, had contracted tapeworm at Poonah, in India, and had been passing segments continually during the last six months. She consulted me in January, 1868, when I found that her general health had suffered considerably, and though of stout build, she was remarkably anæmic. The male-fern method of treatment brought away a well developed beef tapeworm, upwards of ten feet in length. The head was not found at the time, and had probably been unintentionally removed from the stool contents with other matters. In this case also the cure was complete, for there has certainly been no return of the disease, and the patient is in the enjoyment of perfect health.

THE TOAD AND THE CARP.—In addition to his former communication to the Académie des Sciences, which we recently noticed, M. Duchemin has addressed another note containing confirmatory observations that have been forwarded to him from various places, although, as far as he is aware, this "animosity" of the toad to the carp had not been noticed by any prior observer. Additional observations of his own show that the toad, which he believes is *Bufo calamita*, always looses his hold when the fish has died, but as long as there are signs of life he has to be torn from his victim. All the carp which were delivered from the reptile, which had placed its two feet in front of the eyes, were more or less blinded, and none of them, although carefully tended in a separate pond of water, survived the infection imparted by the toad.—*L'Institut*, May 4.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture III.

I.—DISEASES OF INFLAMMATION.

Inflammation of the Skin from Common Causes.

(Concluded from page 463.)

Pemphigus *is an eruption of large vesicles or blisters filled with a serous fluid, and arising upon a hyperæmic base; the blisters or bullæ range in dimensions from a few lines to an inch or more in diameter; they are preceded by an erythematous patch, often of small size, and upon this patch the bulla gradually but rapidly expands.*

The bulla is transparent at first, then becomes opalescent and milky, and, later on, yellowish or purplish; and, in the first instance, fully distended, it subsequently becomes wrinkled and collapsed, and subsiding on its base, dries up into a thin brownish or blackish scab.

The changes of colour of the bullæ admit of the same explanation as that already given in reference to similar alterations taking place in the miliaria. At first the effused serum is colourless or yellowish and transparent; then the serum becomes opalescent as it is apt to do out of the body; pus is sometimes mingled with the serum, and renders it opake, and the purplish tinge it occasionally assumes is due to admixture with blood. If the bulla be broken by pressure or friction, an inflamed surface is brought into view, the exposed derma is irritable, often bleeds and suppurates, and sometimes yields to gangrene.

The varieties of pemphigus are founded upon certain variations in the phenomena of the affection. In its ordinary mode of manifestation, it is developed in clusters in one or several parts of the body; this is *pemphigus vulgaris*. Sometimes a single bulla only is produced, which is then termed *pemphigus solitarius*; and sometimes the solitary bulla may attain very considerable dimensions. When instead of healing directly, or in a short time the vitality of the skin is exhausted, we have before us a case of *pemphigus gangrænosus*. An extensively spreading form of the eruption accompanied with bullæ which collapse quickly and dry up into thin leaf-like scabs, has been denominated *pemphigus foliaceus*. And another form of the disease associated with severe itching, has received the name of *pemphigus pruriginosus*.

In the whole of these forms the mode of development of the bulla is the same, namely, an erythematous blotch, the gradual but somewhat rapid evolution of the bulla from the centre, or from the whole surface of the blotch; the occupation of the entire of the hyperæmiated disk by the bulla, with the exception of a narrow margin of redness which surrounds its circumference, and the increase in size of the bulla by the concurrent creeping onwards of the red marginal border and of the blister. But you are prepared for variations, and I shall now mention two which give an altered character to the eruption; the one is where the erythematous disks are circular, and the phlyktænæ are developed around, but within the border of the disk, *pemphigus circinatus*, sometimes described from the small size of the bullæ as herpes circinatus; and the other is a form of eruption which I have already noticed, namely, erythema iris, but with a bulla in the centre instead of simple erythema, and surrounded by a halo of lines of various colours, this is *pemphigus iris*.

It is evident that, in these phlyktænous forms of inflammation—namely, in miliaria and pemphigus — we have before us an illustration of depressed innervation and lowered vitality of the skin. In the one instance, heat and prolonged sweating, acting upon a debilitated frame, are the cause of the serous effusion, in the other—namely, in pemphigus, exhaustion originating in other causes may always be detected as the *causa morbi*, even if the local affection were not sufficient for the purpose. But, in these instances we are unable to fix upon any single nerve or set of nerves as the prime movers of the subsequent phenomena. Now, however, I have to call your attention to an affection in which such a connexion is directly traceable; which may be referred to an individual nerve or nerve district or to the peripheral distribution of the nerves of the morbid part. The affection in question is herpes, and herpes must be regarded as a local exhaustion of innervation, consequent upon an intense irritation of the offending nerve. It is no longer a broad expanse of the general surface or the whole of that surface which is attacked as in miliaria and pemphigus, but a surface limited to the district supplied by one or two nerves in the midst of the healthy and unaffected integument. Moreover, as the irritation is more concentrated than in the previous forms, as it is localised in an organ of sensation and one of great sensibility, we have an addition to the symptoms already investigated. There are phlyktænæ as in miliaria and pemphigus, but larger than the one and smaller than the other. They are developed at once instead of in succession; they exhibit a higher form as well as degree of inflammation; they are attended with more pain and suffering, and, above all, they have a strictly limited course.

Herpes *is an eruption of large vesicles on a patch of inflamed skin, occurring upon any part of the body. The patches are sometimes single, sometimes multiple. They range in size from a few lines to several inches in diameter. Upon each patch a cluster of vesicles is developed, the number of vesicles ranging from three to thirty, or more. The eruption is unilateral, following the direction of a nerve or branches of a nerve, and it has a regular course of five to ten or twelve days, ending by resolution of the inflammation and the drying up of the vesicles into hard brown or black scabs, the latter, at their fall, leaving behind them indelible cicatrices.*

Herpes occurs very commonly in the course of one or two of the lower intercostal nerves, occupying the portion of skin supplied by its posterior, middle, and anterior cutaneous branches. In consequence of partially encircling the waist, this form of the eruption has been denominated zona and zoster, from the Greek words signifying a girdle or belt; or, according to the Latins, cingulum; and, from the corruption of cingulum, we get the popular term *shingles*. The extreme rarity of the manifestation of the eruption on both sides of the trunk at the same time has given origin to the words attributed to Pliny: —"Zoster appellatur, et enecat, si cinxerit." And one of its symptoms, burning heat, has gained for it the additional name of zona ignea.

The development of herpes on other parts of the body, besides the waist, has been suggestive of the various appellations by which it is known; but the distinction between the affection of a trunk or large branch of a nerve and that of its peripheral ramuscules is sufficiently manifest to permit the division of its varieties into two groups. In the group representing the trunk or chief branches of the nerve, we may place herpes facialis, herpes cervicalis, herpes humeralis, herpes intercostalis or zoster, herpes lumbalis, and herpes cruralis; while the peripheral or ramuscular group has for its members herpes labialis, nasalis, palpebralis, auricularis, and progenitalis.

Dothienic *or furuncular affections* are more deeply seated in their position than those of the ekzematous, the erythematous, and the phlyktænous groups, and are characterised by an inflammation and condensation of the skin giving rise to a hard tubercle of greater or less size, and terminating in suppuration ulceration and gangrene of a portion of the derma. To this form of disease it would seem that the word *dothien* was assigned by the Greeks, and dothien we therefore assume as the title of the present group. The Latin synonym of dothien —namely "furunculus," is more common and familiar, but its meaning is obscure, and, since I have adopted the Greek terminology heretofore as being the language of the fathers of Medicine—of those men to whom we are indebted for the greater number of our dermatological terms, I shall endeavour to adhere to it as far as may be practicable and convenient throughout my present synopsis of cutaneous diseases.

The members of the dothienic group are ekthyma, pustula, maligna, furunculus, krithe or hordeolum, anthrax, and pustula aleppensis.

Ekthyma is the true pustule of the skin, and its leading characteristics are — *A large pimple of a deep red colour, hard to the touch, evidently sinking into the fibrous structure of the corium, surrounded by a halo of inflammation of greater or less extent, and terminating in a pustule; sometimes in an ulcer covered by a thick crust, and sometimes in a gangrenous ulcer.*

Ekthymatous pustules or ekthymata, are especially characteristic of debility, and are associated with some form or other of cachexia. They are scattered more or less sparsely or abundantly over the surface of the body, and are met with in association with want and misery; sometimes they originate in septic irritants, sometimes in tissue debility simply, and sometimes in the cachexia of scrofula or syphilis. Although the disease is essentially chronic we recognise certain varieties which are more acute in the degree of inflammation than others, and, therefore, establish an acute and a chronic group.

Of the former, the varities are ekthyma vulgare and ekthyma gangrænosum; and of the latter, ekthyma infantile and ekthyma kakhecticum, or luridum.

Pustula maligna or pustula gangrænosa, is a gangrenous ekthyma taking its origin in septic irritation, and occurring on regions of the body exposed to the contact of putrid animal substances; such regions being the face and neck, hands and arms, feet and legs. It begins as an inflamed spot, in the centre of which a sanguinolent vesicle shortly appears, the skin around the vesicle is red and swollen, and beneath the vesicle a small gangrenous disk is developed, which ripens into a black eschar. In more severe cases phlegmonous erysipelas is set up, and involves the neighbouring tissues. While in the most serious cases of all the local mischief is less marked, but the septic process sinks into the organism and produces internal gangrene and pyæmia.

Furunculus, the dothien of the Greeks, is *a prominent inflammatory tubercle deeply implanted in the corium, indolent in its progress, often excessively painful, suppurating slowly at the summit, and displaying a cylinder of gangrenous cellular tissue termed the core* (cœur), *the walls of the cavity or ventricle of the boil gradually separate from the core; the core becomes isolated, eventually disconnected, and then expelled through the opening, which more or less speedily heals and leaves behind it a cicatrix.*

A boil varies in size from that of the hemisphere of a pea to that of a walnut; it varies in colour, being sometimes red and sometimes purple or livid; it varies in the size of its core, and has in general but one external opening; when it presents several openings, it approaches in character to an anthrax, and has thence been named *furunculus anthrakoides*. I have already mentioned the indolence of the boil, and when it fails to show an external opening and recedes without expelling its core; it is termed a "blind boil." The boil is sometimes idiopathic, sometimes results from irritation of tissue, as is shown by its frequent association with ekzema; and is sometimes epidemic, when it probably takes its origin in some kind of septic influence. It is no uncommon thing to find boils interspersed with ekthymata.

Krithe or hordeolum is the small inflamed boil which is met with on the edge of the eyelids; it is generally solitary, and has received its cognomen from a comparison in size with a grain of barley; and in popular language is termed "stye."

Anthrax or carbuncle is the largest kind of boil, ranging in size from two to six or eight inches in diameter. It is deeply seated in the skin, circumscribed, very hard, not very prominent, and of a deep red colour, darkening to livid and even black. In the latter state it vesicates over the surface, the vesicle being filled with a sanguineous serum; and a number of openings are formed through which pus and gangrenous cellular tissue make their way to the surface. The perforations are generally so numerous as to suggest a comparison with a colander; and sometimes it sloughs very extensively.

There are other forms of boil which belong to the dothienic group, but which are the natives of other countries than our own, for example:—the Delhi boil; the Scinde boil; and the Aleppo pustule or boil.

ORIGINAL COMMUNICATIONS.

GANGRENE OF THE LUNG.

By OCTAVIUS STURGES, M.D.,
Assistant-Physician to the Westminster Hospital.

Charlotte S., a spare anæmic girl, aged 14, was admitted into the North London Consumption Hospital complaining of dyspnœa and short dry cough together with pain after food and wasting. These symptoms had lasted two months. On examination of the chest the sounds appeared to be those of health. There was no family history of consumption. The case seemed to be one of simple anæmia; it was so treated—viz., with iron, liberal diet, and directions to take daily exercise. The girl continued in much the same state for about three weeks, getting out of doors most days, but complaining of feeling cold and eating little. The most marked symptom of disturbance was the habitual frequency of the pulse.

On November 29 she was suddenly seized with headache and sickness, and was put to bed. When seen the following morning the skin was hot and dry, she was restless and anxious, and the pulse was 120. Over both sides of the chest large bubbling rhonchus was now audible. There was no space of dulness nor any part of the lung impervious to air. The expectoration was white and frothy. The symptoms in fact were those of simple acute bronchitis of some severity. The treatment was by ammoniated salines and squills. On the fourth day of the attack the pulse was 150, the sputa still of the same character, the bubbling sounds being now heard universally through the chest. She had had a distinct rigor on the previous day. There was now much restlessness, complaint of severe pain in the lumbar spine, and occasional tendency to syncope; small quantities of brandy were given in addition to the drugs. By the seventh day the girl was in all respects worse, the pulse very indistinct and frequent, dyspnœa urgent with ineffectual cough, hardly anything being spat up although the rattling of mucus in the tubes was as loud and general as before. Still, therefore, the case presented all the features of simple acute bronchitis, and its unfavourable progress had the characters proper to that disease in its severer form. No evidence of pneumonia could be traced either in the physical signs or the expectoration, which, though scanty, still retained its white, frothy appearance. The temperature was never very high. Suddenly, however, on the eleventh day during the visit, it was reported to me that the patient had that moment become suddenly worse. I found her leaning forwards, with an altered, terrified aspect, the face pinched and the whole surface covered with a clammy sweat. A fœtid odour exhaled with the breath, which it was impossible to mistake. The girl was for ever shifting her position, gasping and blue and pulseless, apparently in the immediate presence of death. The violence of this paroxysm passed off after a while, and life was preserved for some days longer. And now, for the first time, the base of the left lung became dull to percussion, and some indistinct gurgling was to be made out at that spot, but the breathing was nowhere tubular, either at this period or later. I need not allude particularly to the treatment or the subsequent history. The inhalation of carbolic acid was diligently practised, and the same drug was taken internally, with the saline draught, chlorate of potash, etc.; strong beef-tea and brandy were also given at frequent intervals. The girl's general condition varied much, and at one time almost gave promise of recovery. The expectoration was now stringy and tenacious, and had to be removed from the patient's mouth; it was never in any quantity, and, like the breath, was not always fœtid. The pulse was small, and nearly 200. It became stronger and less frequent two days after the fit of dyspnœa just described. The physical signs underwent no change, except that the gurgling became more distinct. Tubular breathing was never heard, though it was daily sought for. The mental faculties were very little disturbed by night wandering. The child was quite conscious and aware of her state, when she finally sank, eighteen days after the attack of bronchitis, and seven from the sudden occurrence of symptoms of gangrene.

Post-mortem examination of the thoracic organs was alone permitted. It was made by Mr. Vaughan.(a) The heart was of natural size, and all its valves were healthy; its right cavities contained a quantity of decolorised coagulum, which in the right ventricle was firmly adherent. A similar clot, continuous with this, extended into the pulmonary artery for some distance beyond its valves. The lungs were free from tubercle. The left exhibited the usual signs of bronchitis, but was otherwise healthy. The lowest lobe of the right lung was in a state of hepatisation, grey in colour, yet firm to the finger, and exuding but little fluid upon section or pressure. In the midst of this solid mass was an irregular, ragged, sloughing cavity, containing a small quantity of fœtid, muco-purulent stuff. It was difficult, from the irregular shape of this cavity, to estimate its capacity; perhaps it could have held a quarter of a pint. The pulmonary artery was traced for some distance at the examination, but no fibrin was discovered. It was impossible to complete the search, as the lung was afterwards lost.

Such is a short and very imperfect sketch of the leading features of a case presenting several points of interest. It was clear from the physical signs that the gangrene was not a consequence of pneumonia. The hepatisation was subsequent to the developed symptoms of mortification, and seemed, indeed, rather to bound and limit the area of the gangrene than to be itself about to undergo the same change. Neither was there anything in the patient's general state to warrant the supposition that this was an instance of "gangræmia," while to speak of

(a) I have to describe the examination chiefly from memory, as the greater part of the affected lung, by an unfortunate accident, was not preserved. My friend and late colleague Dr. Johnston, who had seen the case with me during life, was good enough to be present. Dr. Dickinson also had the kindness to assist us on the occasion. I have confidence that the account given above is correct so far as it goes.

spontaneous or idiopathic gangrene seems hardly admissible in any case. A single portion of lung, we may be sure, can never mortify and slough away without cause. There remain several other conditions alleged by systematic writers(b) to be capable of producing gangrene of the lung, as tubercle, cancer, hæmorrhage, the stings of insects, insanity, all of which may here be laid out of the case. It is remarkable, however, that along with these—yet interrogatively as a possible but by no means ascertained cause of pulmonary gangrene—is mentioned "acute endocarditis of the right heart." There can be little doubt at present that the state of the heart's cavities which this expression was used to denote arises from ante-mortem coagulation of the blood, and that such an occurrence may give rise to gangrene of the lung. The present case must have had such an origin. The connexion of gangrenous lung with fibrinous deposits in the pulmonary artery was clearly shown by Mr. Callender in a case reported in the ninth volume of the Pathological Transactions. Precisely the same thing was figured by Carswell many years ago(c), who describes it as "a form of mortification, occasioned by obliteration of the arteries and veins, in consequence of chronic induration of the pulmonary tissue." Other examples of a similar kind are not wanting where gangrene of the lung, though ascribed to pneumonia, had been found associated with coagulation of the blood in the pulmonary vessels.(d)

Now it is to be borne in mind that the ante-mortem clot which is found in the right heart in cases of embolism or of thrombosis is seen also sometimes in pneumonia. "A peculiar tendency to the formation of solid resistent coagula" is not only proper to that disease, but, according to M. Bouillard, an invariable attendant on hepatisation. Such a condition, therefore, apart from the evidence afforded by occluded vessels, far from excluding the supposition of antecedent pneumonia, is not opposed to the common view that gangrene occurs as a direct result of such inflammation. It seems probable that coagulum in the pulmonary artery, whether carried there from the heart or deposited by the blood at the place where it is found, may give rise in some instances to pneumonia, and in others to gangrene, or even that a pneumonia might thus be set up which should eventually terminate in gangrene. The two conditions will then succeed one another, not in the relation of cause and effect, but both depending upon one common cause—viz., upon a coagulum at first exciting inflammation, and later, by its continued presence, causing gangrene, just as we know a foreign body may do in the same situation. It has been objected, indeed, upon theoretical grounds, that, since the lung is not nourished by the pulmonary artery, the plugging of that vessel would be little likely to occasion gangrene. Since it is quite certain that it does do so, the difficulty thus raised must be disposed of by physiologists, but it may be well conceived that these clots, excepting their direct effect in interfering with the oxygenation of the blood, might produce the same result outside the vessel as within it.

It is far more common for gangrene to give rise to pneumonia—or, at least, to hepatisation—than for pneumonia to end in gangrene. I think I shall not be contradicted in stating that true pneumonia unconnected with embolism never terminates in that way. Of course, all pulmonary gangrene whatever must be preceded by some physical change in the lung, and it is easy to assume, from the presence of dull percussion-sound, crepitation, and the like, that inflammation is the preliminary step in every case. That pathology which describes gangrene as arising from "the death of the exudation" necessarily assumes that inflammation always precedes it. If a theory of that kind has to be satisfied, our notions of what is necessary to constitute pneumonia are sufficiently elastic to lend it support so far as clinical evidence is concerned, whilst for the rest the circumstance that the gangrenous cavity is found after death surrounded by hepatisation may be adduced as a proof that the gangrene arose upon the pneumonia.

It is true, nevertheless, that the only connexion which can be proved to exist between the two conditions is that the same cause may excite the one or the other,(e) according to the circumstances of the individual, and that in the present state of our knowledge it is only by reference to embolism or thrombosis that we can at all account for what has been provisionally called spontaneous gangrene of the lung.

(b) See Walshe on "Diseases of the Heart and Lungs," p. 453.
(c) Carswell's Plates—"Mortification," plate 3, fig. 4.
(d) Pathological Transactions, Vol. i. p. 198.
(e) There is a specimen in the St. George's Hospital Museum (Series VII. No. 10) where hepatisation of the lung is found in company with extensive deposit of fibrine in the pulmonary artery. In a paper in the second volume of the Hospital Reports I have recorded some instances of hepatisation brought about in this way.

The case is widely different, of course, where gangrene is exhibited in several places at once, and that disposition is manifested to which not inaptly the name "gangræmia" has been given. When that condition prevails with children, it is often, as is well known, associated with sloughing of the gums and pharynx. It has been supposed by M. Bondet (whose article upon pulmonary gangrene in the *Archives générales de Médecine*, Sept., 1843, is the most valuable monograph upon the subject) that there is a special connexion between gangrene and the poison of measles. It would even seem that it is from this circumstance that gangrene of the lung is more common with children than with adults. Now, the common sequel of measles in weakly children is said to be lobular pneumonia, and closely corresponding with it is a form of gangrene called by M. Boudet *la forme en noyaux*—small isolated masses, that is, converted in their centres into a putrid detritus. This at first sight would appear to contradict the view that gangrene is altogether independent of pneumonia. But it is now known that this so-called lobular pneumonia is often not pneumonia at all, but an appearance due to pulmonary collapse, and the form of gangrene which bears so obvious an analogy to it is still nearer related to the bronchial abscess described long ago by Dr. Gairdner in connexion with collapsed lobules. We have indeed evidence enough elsewhere that unequivocal pneumonia does not lead to gangrene; there is no such evidence in regard to pulmonary collapse.

However this may be it will appear that in most cases of gangræmia the general condition is sufficiently manifested by external signs before the state of the lung is such as to excite attention. Gangrene of the gums and mouth precede the chest symptoms, whilst so soon as these appear their significance is at once made evident by the characteristic odour of the breath. The single case of gangrene quoted by Dr. West would seem to be an exception, but even here we have no further proof of antecedent pneumonia than is furnished by a lung which was dull and impervious to air some days before it became obviously fœtid, and Dr. West himself alludes(f) to the absence, in this instance, of those general symptoms which commonly accompany inflammation of the lungs in children.

It is the same when adults are concerned. The cases which are obnoxious to gangrene are precisely those which are least liable to true pneumonia — are those it might almost be said where the state of the blood renders such an occurrence impossible. Here again it might be open to question whether the term secondary pneumonia is always applied with a definite signification, but, whether or no, we have the testimony of authors that in blood diseases the liability to gangrene varies inversely with the liability to pneumonia. This is conspicuously the case with the continued fevers.(g) Gangrene of the lung is more rare in enteric fever than in typhus. Pneumonia is more rare with typhus than with enteric fever. If systematic authors be consulted upon this point it will be found that by most of them gangrene of the lung is very shortly disposed of, and that successive writers are content to repeat the accounts of it which they receive from one another. Dr. Stokes, who is little prone to accept doctrines on the mere authority of others, insists upon the close connexion between gangrene and what he elsewhere describes as typhoid pneumonia. He adds that in all the cases he has himself seen, the subjects of the gangrene had been long addicted to the use of spirits. Of the four cases whose history he relates, two had received injuries to the chest; the third, who recovered sufficiently to be discharged, was admitted with the symptoms of gangrene fully developed, hæmoptysis having preceded it, and the fourth, a labourer who had fallen drunk into a canal, exhibited in the course of the third day after that accident "dulness over the right side without any preceding crepitus." The day following the breath and expectoration had all the characters of gangrenous lung. Excluding, then, the cases of injury, what evidence have we here in favour of antecedent pneumonia? The typhoid pneumonia of Dr. Stokes differs indeed in many repects, as he himself is forward to point out, from simple pneumonia; its connexion with gangrene, if it can be made out, will only serve to bring that difference into still stronger relief.

There are cases tending to show what *à priori* would appear not improbable—that extravasation of blood into the lung may terminate in a gangrenous cavity, the access of air to a clot determining its putrefaction, and eventually that of the surrounding tissue. Hæmoptysis, we know, is often a very prominent symptom of gangrene both in children and adults.

(f) West on Diseases of Children, p. 339, fourth edition.
(g) Murchison, p. 503.

The only case of gangrene recorded by Rilliet and Barthez seems to require such an explanation. There is another by Dr. Bristowe in the eighth volume of the *Pathological Transactions*, p. 57, which might bear the same interpretation. In this instance, where gangrene is ascribed by the author (on wholly insufficient grounds, as I venture to think), to pneumonia, "extreme hæmoptysis" had occurred, and constituted, in fact, the chief symptom.

Finally, there are certain conditions of neighbouring parts capable of producing pulmonary gangrene—such as cancer, the vicinity of carious vertebræ, the pressure of an aneurismal tumour; examples of the two last may be found in the first and eleventh volumes of the *Pathological Transactions*. With these, we well nigh exhaust the ascertained causes of this rare form of mortification.

I am unable to find upon what evidence gangrene of the lung is associated with tubercle or with insanity. Its connexion with cerebral disease arises, we may suppose, from the dependence of both sometimes upon embolic deposits.

SCIATICA: ITS IMMEDIATE RELIEF AND RAPID CURE BY HYPODERMIC INJECTION OF MORPHIA.(a)

By HENRY LAWSON, M.D.,
Assistant-Physician to St. Mary's Hospital.

(*Continued from page* 228.)

Ammonia is a remedy of service, although its effects are but temporary. The action of ammonia as a therapeutic agent in these, and, indeed, in most cases, is still unexplained,(b) but there can be no doubt, I think, that even when administered in the mild form of spirit. ammon. aromat. it is of benefit in sciatica. Whether it is that it gives unusual nervous force generally, or in whatever way it operates, there can be no question of its importance, more particularly in those cases of chronic sciatica where there are considerable mental depression and restlessness. As muriate, I have known one instance in which it seemed during the first few days of its administration to diminish the pain. But though the dose was increased from gr. xxx. t. d. to ʒj. t. d., its further influence did not exhibit itself to me.

One would have thought, perhaps, that in an affection like this, where pain is so essential a symptom, the preparations of opium would furnish us with at least an approach to a reliable remedy. It is singular, however, that, so far from this, opium administered internally, no matter in what form, is a drug which is certainly to be avoided in sciatica. I have tried it largely and continuously in my own case and in that of others, in the shape of morphia, laudanum, and solid opium, and not only without producing any alleviation of the pain, but with the most injurious results to the general health. While under the influence of opium taken by the mouth, the patient is perhaps less heedful of his pain, but unless the dose be pushed to an unwise extent, he gets no real rest or sleep. When the effects of the medicine have passed off he suffers dreadful depression, weak pulse, intense nervousness almost amounting to hysteria, a feeling of nausea, a loathing for food, and constipation. Altogether he is infinitely worse than if he had not taken the opium at all. I have seen so much of this, and, indeed, have felt so much of it, that I unhesitatingly urge my brethren in the Profession to avoid above all things the mouth-administration of opium in cases of true sciatica.

From what I have learnt of the effects of opium when smoked, I incline to the belief that, with the exception of the hypodermic and endermic methods, the pipe is one of the best modes of introducing opium into the system in sciatica. It would seem that when so given the effects of the opium are very much like those which follow its introduction by the skin.(c)

Cannabis indica has been much extolled by writers on neuralgia, but I believe that it has been found more useful in cases of tic than in those of what is objectionably styled neuralgia of the extremities. Be that as it may, I can only say of it that I have not tried it extensively, and that my experience of it leads me to think that it is of trivial value in cases where hypodermic injection can be borne. It might perhaps be of service as a *dernier ressort* in those instances in which, from some unknown reason, the patient cannot tolerate opium, no matter how it be given. When its influence is exerted fully, the patient, as I know from personal experience, being reduced to a very uncomfortable condition of semi-catalepsy, is, as regards the "Ego," removed beyond his pain, as he is beyond everything else. But as this influence very rapidly passes off, and as it could not possibly be maintained for weeks, Indian hemp is really an impracticable remedy in this disease. It might be useful in face-ache, but in sciatica it is simply a toy drug, if I may so express it. Furthermore, and this is worth notice, its preparations are most annoyingly irregular in strength. I believe you might go to half a dozen different chemists and purchase samples of the extract of Indian hemp which had as many seriously different activities.(d)

Henbane has shown itself utterly powerless against the pain of sciatica.

Belladonna, for obvious reasons, is also a drug which cannot be employed with advantage as an internal(e) remedy.

Tea and coffee can perhaps hardly be considered as therapeutic agents. Yet there are some who hold that in the ordinary neuralgia the latter has a very decided beneficial effect. My experience leads me to the conclusion that in sciatica cases they are both best avoided. Indeed, I almost invariably, where it is possible, put my patients through a course of cocoa or some allied preparation, as I am quite certain that tea-drinking is most injurious in this disease. As to the use of coffee it is less easy to decide, its effects appearing to vary much with the individual. Thus I know of some whom *café noir* so quickly purges that they invariably employ it when requiring a mild laxative, and I have met with not a few on whom it has precisely the opposite effects; and it is most probably in such constitutions as these latter that coffee produces its least injurious results. As a rule, however, I have found it advisable to discontinue the use of tea and coffee in the treatment of sciatica.

Purgatives in sciatica I must most distinctly protest against, except in cases where the degree of constipation is such that their administration is imperatively demanded. I am aware that some eminent authorities countenance the use of purgatives upon the belief, or rather supposition, that a loaded colon is a frequent cause of sciatica. But, besides my objection to this kind of practice, on the ground that the principle on which it is based is a false one, I go on the more reliable, though empirical, fact that I have never seen purgatives do anything but mischief in sciatica. They may perhaps diminish the pain to a trifling extent and for a few hours after their first operation; but they are invariably followed by intensification of the suffering and by a degree of debility which far more than counterbalances the little benefit they effect. Where there is undue costiveness, the employment of belladonna or the administration of a pill containing three or four grains of pil. col. co., combined with an eighth to a quarter of a grain of resin. podophyll., will generally secure a comfortable daily motion; or, in other cases, the very simplest and gentlest form of enema may be advantageously used; but anything in the shape of systematic purgation, my experience convinces me, is a most mistaken and injurious form of practice.

Of the use of sedatives I have not much to say. The only ones of which I have any experience worth recording are tobacco and bromide of potassium; and of these, even, I have no very high opinion. Concerning tobacco, it may be said at

(a) It may be as well to state that in advocating the method of treatment described in the following article I lay no claim whatever to originality. I merely give the results of my experience of a remedy which is as simple as it is effective. The application of the syringe to the hypodermic method we owe, I suppose, to Hunter and Wood. The hypodermic administration of morphia in sciatica was urged by Dr. Blakiston in these pages nearly fifteen years ago. It is too much the custom now-a-days to father upon a writer the discovery of a remedy or plan which he has merely taken secondhand from another, but which he may have been more successful than his predecessor in popularising; and writers themselves too frequently encourage the mistaken inference. This has happened so often of late that one almost despairs of that moral regeneration in Medical writers which leads to the discrimination between reticence and candour.

(b) Ammonia being the starting-point of such a myriad of organic bodies, one may well conceive that its influence on the blood may be both manifold and complex. Empirically, I think it must be admitted to be a drug having a wonderful number of applications and an immense usefulness.

(c) In one case in which the opium was given in suppository the results were such as to lead me to regard this as by no means a bad kind of administration. Since then, of course, the syringe has carried off the palm.

(d) So far as ext. cann. ind. can be held to be poisonous, I have experienced its effects. The sensation was different from, and far from being so pleasant as, those described in books. I had been using large doses of extract for a couple of days without any effect. I then increased the dose slightly, and having accidentally procured the extract from a new source, I was most painfully placed under the influence of the drug.

(e) I employ the word "internal" merely in the ordinary acceptation of "administered by the mouth." I shall speak of its hypodermic administration as atropia hereafter.

once that in those who are unaccustomed to smoking it would be worse than useless to attempt to use it.(f) Then, of those who are smokers, there will be found two classes—one in which the pipe or cigar is stimulating, like very small doses of morphia (given hypodermically); and another in which its effects are simply stupefying. In the former it will not be necessary to suppress the pipe in dealing with sciatica; indeed, rather the other way. In the latter, it is essential that the habit of smoking shall either be discontinued absolutely or considerably diminished. This is, it must be confessed, a rude generalisation, formed on a limited number of cases, but I throw it out suggestively, and with the hope that some of my readers may examine the question for themselves and publish the result. The problem is at least of interest.

(To be continued.)

DR. BEAUPERTHUY'S TREATMENT OF LEPROSY.

By R. H. BAKEWELL, M.D.,
Medical Officer of Health for the Colony of Trinidad, etc.

As numerous inquiries have been made of me about Dr. Beauperthuy's treatment of leprosy, I should feel obliged if you would insert for the information of the Profession in the Colonies and India, the following copy of an official letter of mine to the Colonial Secretary of Trinidad. It should be stated in explanation, that I was authorised by the Secretary of State to go to Cumana, in Venezuela, where Dr. Beauperthuy resides, and endeavour to obtain from him the secret of his method of treatment, which he had before declined to communicate, on the condition that it should be kept a secret until it had been tried for six months. This condition having been complied with, and the six months having expired on March 24 last, I immediately published the method. I am preparing a complete report on the whole subject, which I hope to be able to lay before the Profession shortly. Meanwhile, you would confer a great favour by publishing the method.

16, Redcliffe-road, West Brompton.

To the Hon. the Colonial Secretary, Trinidad.

Sir,—In redemption of the promise made to the public, and in accordance with the convention between Dr. Brassac, Dr. Beauperthuy, and myself, I now proceed to publish the treatment employed by Dr. Beauperthuy for the cure of leprosy.

My state of health prevents me from drawing up any report at present of the cases in which I have tried the treatment, but I may state the results are so far perfectly satisfactory, that the tubercules are entirely removed, the sensibility and power of movement in paralysed limbs are restored, and the general health improves. I have had four cases under treatment. The method of Dr. Beauperthuy consists of:

First. A nourishing and abundant diet; salt-fish or meat, and pork are prohibited entirely; so are spirits; light wine (Bordeaux) is allowed in moderation to those accustomed to it. Fresh meat should be given every day.

Second. The patients should live in as healthy a locality as possible, and not in the neighbourhood of marshes, etc. They are required to sleep under mosquito nets so as to prevent the sting of insects, which irritate and inflame the skin, and perhaps propagate the disease. Not more than two persons are to occupy the same room; and it is better if each has a separate room.

Third. Internal remedies varying according to the condition of the patient are given. The principal one is bichloride of mercury or corrosive sublimate in doses of one-fifteenth of a grain twice a day. Dr. Beauperthuy has also lately been trying the effect of alkalies. He is still engaged in investigations on this part of the treatment, and this is the chief reason for his not having made it public before. Quinine is given where fever occurs, and other remedies as occasion may require.

Fourth. To remove the tubercules and promote exudation, the oil of cashew-nut (huile d'acajou) obtained by the spontaneous evaporation of an alcoholic tincture of the nut, which must be well pounded in a stone or wooden mortar before being exposed to the action of the alcohol. This is a most valuable application, acting slowly, but very powerfully.

Fifth. A strong solution of nitrate of silver and copper, made by dissolving silver coin in strong nitric acid, and mixing the nitrate thus obtained with an equal bulk of distilled water.(a)

Sixth. Frictions night and morning over the whole of the body with cocoanut oil.

Seventh. A bath with soap and water, taken before the frictions.

The above are employed in all cases. Where the feet are much affected, as the more caustic applications are inconvenient, Dr. Beauperthuy has employed with great benefit, baths of hot cocoanut oil, heated to 100° Fahr. These must only be employed under the direct supervision of an intelligent assistant with the thermometer in his hand, as of course the patient's sensations cannot be trusted to.

The above are the main points in Dr. Beauperthuy's treatment. I have only to add that it is advisable to try the caustic applications over but a small surface at first, as their effect will naturally vary somewhat, according to the constitution of the patient; and that it requires great firmness to resist the entreaties of the patients, after they have seen the effect of the first application, to have them made more frequently, and over a larger surface than is prudent.

I am, Sir,
Your obedient servant,
R. H. Bakewell, M.D.

Trinidad, March 24, 1870.

(f) I merely mention this because I have recently found that in spasmodic asthma smoking *ad nauseam*, by men unused to the weed, produces very excellent results, *quoad* the asthma.

(a) This I have only employed to rouse the action of the skin where there had been anæsthesia for four or five years. The oil of cashew-nut is what I have principally used. The nitrate of silver is never applied to the face.—R. H. B., May 11, 1870.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

HOSPITAL FOR CONSUMPTION ETC. BROMPTON.

PHTHISIS—DEATH FROM INTERNAL HÆMORRHAGE.

(Under the care of Dr. E. SYMES THOMPSON.)

[Communicated by William Robert Smith, Resident Clinical Assistant.]

The following is the brief history of a case of pulmonary consumption in which death resulted from internal hæmorrhage without any hæmoptysis, a very rare occurrence, inasmuch as no other case can be found on record at this Hospital. The second case was probably one of rupture of an aneurism of the pulmonary artery, with recovery for six months, death eventually arising from a recurrence of a similar accident.

C. S., aged 29, a goldsmith, was admitted into the Hospital October 4, 1869, complaining of severe cough, much muco-purulent expectoration, anorexia with nausea after coughing, dyspnœa, dragging pains, and flutterings at the left side. The chest was long and flat, the left shoulder depressed, movement of the left side deficient, and the heart was felt beating at the second interspace.

Percussion.—Right side resonant, the left dull and woodeny.

Auscultation.—Right: puerile respiration. Left: dry, blowing cavernous respiration, with amphoric voice, at the base respiration deficient.

Diagnosis.—Phthisis, third stage, left.

December 7.—Very much improved; appetite good; no nausea; cough occasionally troublesome at night, but no pain at the chest. The physical signs underwent but little variation.

22nd.—Patient applied for a pass for three hours, and, being in good general health, it was granted him. At 5.30 p.m. he returned, was missed from tea, and found in the lavatory in a state of collapse. He was removed to bed. The patient was covered with a cold clammy sweat, the extremities quite cold, no pulse at the wrists, slight pulsation in the carotids, with much gurgling over the whole of the left side. The patient died in ten minutes. He did not spit up any blood, nor had he expressed himself as feeling unwell.

Autopsy Eighteen Hours after Death.—Right pleura slightly adherent and the lung studded throughout with miliary tubercle, apparently of very recent origin. Left pleura universally adherent; on section, the lung was found to be converted into several large cavities filled with liquid arterial blood; small masses of tubercular matter occupied the walls of the cavities; the other organs examined were all normal.

PHTHISIS — DEATH FROM RUPTURE OF AN ANEURISM OF THE PULMONARY ARTERY.

F. L., aged 14 years, nursemaid, was admitted into the Hospital August 3, 1869. Last Christmas she complained of cough and pain at the chest; during the months of January and February she had profuse hæmoptysis, varying in quantity from a half-pint to a pint. Her father and mother both died of phthisis. Has lost much flesh. She complains of cough, much muco-purulent expectoration, anorexia, nausea, dragging pains at the right side, with sensations of fluttering at the left side. Upon examining the chest, it was found to be narrow and long. The right side was resonant, and the left side tympanitic on percussion.

Auscultation.—Right: humid crepitation to the fourth rib; below, the respiration was normal, but somewhat puerile. Left: at the apex, cavernous sounds with gurgling, below this, humid crepitation to base.

Diagnosis.—Phthisis, second stage right; third stage left.

This patient did not improve under treatment, but became gradually weaker and lost flesh.

In September, cavernous sounds were detected on the right side.

November 14.—Patient appeared much as usual, having no special symptom to complain of. But at 5 p.m. she was seized with hæmoptysis (to the extent of twenty-four ounces) whilst in the kitchen, where she was found in such a state of collapse that it was not deemed prudent to remove her. Under careful treatment she so far recovered that at Christmas she expressed herself as feeling much better, and wished to leave.

February 9.—At 6 p.m. this morning she was again seized with hæmoptysis to the amount of a pint and a half, and died in ten minutes.

Autopsy Twenty-four Hours after Death.—Right pleura adherent. Several cavities were found in the lung, with pneumonic consolidation at the base. Left pleura universally adherent, especially posteriorly and to the diaphragm. On section, the lung was found converted into several large cavities, which were filled with liquid grumous blood. Upon the walls of one of these cavities an aneurism of the pulmonary artery was detected, which had ruptured, and given rise to the profuse and fatal hæmorrhage. Heart was small, and several clots existed in both sides. The other organs were all normal.

DRIFFIELD COTTAGE HOSPITAL.

EXTIRPATION OF CLAVICLE.

(Under the care of Dr. BRITTON.)

Samuel S., labourer, aged 35 years, has had pain in the left shoulder for some years, which he ascribed to rheumatism. He noticed a small swelling on the left clavicle in the summer of 1868, which remained in much the same state until October, 1869, since which time it has rapidly increased in size, and quite prevented him from working.

March 9, 1870.—He came into the Driffield Cottage Hospital when there was found a hard swelling about the size of a large orange, but oval in shape, on the left clavicle. It is as hard as bone, and the surrounding structures seem connected with it, as it is almost immovable. The pulsation of vessels going into it can be felt if hard pressed on the lower side. He has no pain in the tumour, but complains of pain and numbness in the shoulder, scapula, and arm. The hand and arm are slightly swollen, and turn quite blue on hanging down. The sternal end of clavicle seems loose, and feels as if it grated on movement. There is a sharp grating sound heard all over the chest on auscultation, which is loudest over the sternal articulation of clavicle. He says he feels as if he was choking, and his breathing is much impeded. It does not interfere with deglutition; it hurts him much when he coughs, the cough being of a spasmodic character. He says he always feels as if he had something in his throat which he could not get behind by coughing. His general health is bad, in consequence of being badly fed from inability to work. Family history good.

April 16.—His general health having much improved and the tumour also being much larger, I decided to remove it. Chloroform was administered by Mr. Higgens, late House-Surgeon of Guy's Hospital, and I was also assisted by Drs. Nelson and Allison, of Bridlington. I made an incision through the skin the whole length of the clavicle, dissected down at the acromial end until I was able to get the handle of a scalpel underneath the bone, when I sawed through the bone upon it at about an inch from the end. I then dissected downwards and forwards towards the sternal end. There was very great difficulty in doing this, as the surrounding structures were in a semi-cartilaginous state, and I could not raise the bone from its connections with the chest. The subclavian artery could be seen beating under the fascia, but it was not exposed. There were many large vessels running into the tumour, which caused a somewhat large flow of blood. I used torsion for all the vessels, no ligatures. I put silk sutures in the incision through the skin, plasters between, and a wet compress over all.

17th (eighteen hours after the operation).—Has had a good night; no pain; pulse 100; tongue clean; skin rather hot and feverish; is very thirsty; he can breathe much more easily, and without that rasping sound.

18th (forty hours after operation).—Had a good night; no pain; pulse 88; tongue clean; the feverishness is gone. Wound dressed; no discharge whatever, as it has all healed by the first intention except the cicatrix between each suture. I removed sutures, and dressed with plaster only. To have a dose of castor oil.

27th.—Healed; no pain.

30th.—Has been out of doors; can swing his arm without pain. It only feels rather bound down at the shoulder, or, as he says, it feels stiff.

On examining a portion of tumour under the microscope, we came to the conclusion that it was cancerous. The remarkable success in the healing process I ascribe to the torsion of the vessels and the pure air of the Hospital. I kept him in a room at a temperature of 65° for a few days, as I was afraid of lung complications.

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Medical Times and Gazette.

SATURDAY, MAY 21, 1870.

THE BILL AS AMENDED.

We offer no apology for returning week after week to the consideration of the Government Medical Act (1858) Amendment Bill, now before the House of Lords, for we are persuaded that, on the possibility of amending that measure and rendering it acceptable to the moderate and reflecting section of Medical reformers, and, if it be so amended, on its ultimate success rests all hope for the present of silencing the discord and obliterating the scandal of competing Medical corporations and Universities, and of reducing Medicine to the same order and uniformity which prevails in every other profession that is worthy of the name. Last week we expressed our dissatisfaction at certain of the so-called amendments that have been introduced in the Bill by Earl De Grey, and we frankly confess that a further study of these amendments by no means removes, but rather intensifies, our objection to them. The principle of the original Bill, at least, was that there should be one grand entrance to the Profession, although the entrance was furnished with three doors—one for each division of the kingdom. The omission of clause 18 in the Bill as amended leaves all the existing nineteen doors open and simply creates three new ones.

The erasure of that clause permits any corporation or University to grant diplomas in Medicine and Surgery, so long as they are not called licences, to any person, whether or no he be examined by the examining board for the division of the kingdom in which he lives and be registered under the Act. It is simply futile to say that such persons will not be allowed to practise. Who will prevent them? What law can prevent a Fellow of the Royal College of Surgeons or a Fellow of the Royal College of Physicians giving his opinion when asked on a case and receiving an honorarium, which, of course, if withheld, he would never dream of trying to recover? To talk, therefore, of the Bill as amended being a Bill for erecting one, or even three, portals to the Medical Profession is utterly to misrepresent it, and to attribute to it powers to which it makes no pretension. The grand principle in the Bill has been abandoned, and, unless it be restored, what is left is comparatively worthless.

We are perfectly aware of the pressure that has been put on the Government by the universities, that they may retain the right of granting diplomas in Medicine, conferring no right to practise, on persons who have not been examined by the proposed examining boards. It may be that Government were not in a position to resist these bodies, headed as they were by the University of London. But if it were absolutely necessary so far to depart from the principle of the Bill in order to propitiate the universities, there can be no such plea for allowing the corporations to retain unfettered the right of granting diplomas. For the universities at least it might be said that they will claim but little share in the formation of the conjoint boards. These boards, on the other hand, are to be almost if not entirely formed by the corporations, and it is now proposed that the corporations shall in addition exercise their right of selling or granting or examining for diplomas as they may please—diplomas which will assuredly be cheaper articles than the licence in Medicine and Surgery of the legal board — but which will be flourished by their possessors before the eyes of the public as higher qualifications than the mere Government licence. We have no hesitation in saying that unless clause 18 be reinserted, the Bill as a measure for producing uniformity and order and for abolishing the trade in diplomas will be worth no more to the Profession than the paper on which it is printed.

Another strong objection we have to the Bill in its present state is, as we stated last week, the clause, which, if it mean anything, is intended to admit all sorts of heresies into the examinations of the Profession. We have been told that the new clause is only a repetition in different phraseology of the 23rd clause of the Act of 1858, but to this we answer it is not the same thing even in words, and that practically it is an utterly different one. The 23rd clause of the Act of 1858 was intended to prevent any licensing body imposing upon any candidate offering himself for examination an obligation to adopt or refrain from adopting the practice of any particular theory of Medicine or Surgery as a test or condition of admitting him to examination or of granting him a certificate. In other words, if a man who avowed himself as a mesmerist or homœopath, or a herbalist, presented himself as a candidate before the Royal College of Physicians for its licence, that College could not refuse on that ground to admit him to examination; nor if he passed the examination satisfactorily, could it refuse to grant him its diploma. But it is evident that the clause leaves the character of the examination practically untouched. And this was the safeguard of the Profession. If, for instance, a candidate should state that he would treat acute peritonitis with an infinitesimal quantity of a grain of aconite, or mesmerise for the cure of ovarian dropsy, the examiner could always reject him as not displaying sufficient acquaintance with practical therapeutics. But under the new clause even this power is taken away, and if it be not a dead letter it would be impossible for any examiner to reject a man who avowed his intention of treating a dangerous disease by means which every orthodox Medical Practitioner believes to be mere playing with human life. The clause in the Amended Bill prevents any examining board from making the adoption or abstention from adopting the practice of any particular theory of Medicine or Surgery a condition of admission to or of *passing any examination or otherwise*. This we maintain cuts away the only safeguard which the Profession possessed against the admission of all sorts of quackery into its ranks, and we repeat that it is a very heavy price to pay for the Bill—far more than the measure in its altered state is worth.

There is yet one other point to which we would draw attention, and it is an important one. The penal clauses of the Bill can only be enforced against any person who "*for gain*, either practises Medicine or Surgery, or any branch of Medicine or Surgery, or is engaged in the cure or treatment of diseases or injuries." The difficulty of proving that Medicine is practised *for gain* would be, in some cases, very great, and, in some cases, it would be simply impossible. Suppose, for instance, an unregistered Physician—for there will be plenty of them—refuses fees, but sends his patients to get their medicine dispensed by a particular druggist with whom he has an understanding, and who pays him a share of the money paid for the medicine, it would be utterly impossible to convict such a Practitioner under the Bill, supposing it becomes law. Moreover, the Bill offers the temptation of perfect immunity to all foreign and colonial Practitioners, as long as they can produce some kind of diploma, to come over to this country, and extract a harvest from the pockets of the gullible English public. These persons must not be British subjects, and must not be ordinarily resident in the United Kingdom—in other words, we invite foreigners of every nation, as long as they can show some doubtful bit of parchment granted by a body "entitled to grant the same" (but by whom entitled the clause does not specify), to come over to London for the season and fill their pockets; that, when town becomes empty, they may return to spend their gains at the foreign watering-places, where they will have the pleasure of renewing their acquaintance with the patients they have only partially relieved—in a double sense—in England.

These are all great faults in the measure. But it is possible that they may be all amended. Let the Government reintroduce clause 18 or, at least, confine the power of granting honorary Medical diplomas to the universities; let it amend the clause which permits all sorts of quackery to be offered as knowledge in Medical examinations; let it alter considerably the penal clauses of the Act in the direction of stringency; let it amend clause 30, the majority clause, to the injustice of which we have more than once called attention; and, lastly, let it place the General Medical Council on a broader foundation by giving the Profession representation through their universities and corporations, and we shall welcome the success of the Bill as a boon to the Profession and to the general public. But in its present amended state we believe that it would only increase the confusion in which the Profession is already plunged, and that it would eventually disappoint none more than its present supporters.

MEDICAL DEGREES AND UNIVERSITY RESTRICTIONS.

We have already briefly called attention to a report of the Committee of Convocation of the University of London on the subject of the removal of the existing restrictions which are imposed upon candidates for its Medical degrees. We are glad to have an opportunity of returning to this subject. It is very well known that the London University has removed every restriction as to the place, mode, and time of education in the case of candidates for its degrees in arts, relying exclusively upon examinational tests, and in doing this it has

vindicated fully its claim to be considered *par excellence* a *liberal* university.

It is equally well known, on the other hand, that it has jealously guarded the approach to its Medical degrees with regulations as to place, manner, and time of education of the most stringent and unyielding character, and these restrictive regulations have never, to our knowledge, been in the least degree relaxed in order to meet the needs of particular cases. There is certainly, on the surface, an appearance of inconsistency on the part of the University in permitting such entire liberty on the one hand, while it enforces compliance with most rigorous and unbending regulations on the other.

But we agree in the main with the Committee of Convocation in regarding the degrees in Medicine and Surgery as possessing a significance of a very different kind to that which pertains to degrees in arts or science. The report of the committee points out most correctly that degrees in arts simply imply the possession of a certain amount of information, which information may be obtained by studying books, and these degrees are generally accepted by the public as implying this much and no more. The case is very different with regard to Medical degrees. The possession of such a degree not only infers a certain amount of book knowledge in the possessor, but it confers a legal right to practise the profession of Medicine; it is a pledge in short, that the holder of the degree has not only a theoretical, but a *practical* knowledge of the art and science of Medicine or Surgery, as the case may be. Moreover, to obtain a degree in Medicine is to obtain *admission to a profession*. A degree in arts confers no such privilege. The two things, then, are entirely different, and there is no necessary inconsistency in putting them under entirely different conditions.

But while we admit the justice of the distinctions which the Committee of Convocation thus draw between degrees in Art and degrees in Medicine, and while we also strongly support the views which they express with regard to the necessity of certain restrictive regulations in the case of intending graduates in Medicine, we are by no means so sure that those restrictions should take precisely the form, or have precisely the force, which belong to them at present; and we are quite certain that the rigidity with which these laws are now administered, the strict observance of the letter rather than the spirit, or what should be their spirit, is productive of a considerable amount of injury and inconvenience.

We do not desire to see the curriculum of studies shortened by one day, nor the provisions for ensuring a thorough clinical training in the smallest degree relaxed; but there are certain vexatious regulations as to the precise order and time in which the various courses of instruction are to be followed, which press very heavily on some of the candidates for Medical degrees, and which are little in keeping with the character of a free and liberal university.

We should therefore be glad to see a little more freedom introduced into the regulations for Medical degrees at the London University, although we cannot sympathise with those who would trust entirely to examinations, and do away altogether with an enforced curriculum of studies.

The report of the committee alludes to the difficulty, which must have been repeatedly felt by every one who has been engaged in the examination of candidates for Medical diplomas, in carrying out satisfactorily a practical clinical examination. "Your committee," they observe, "are led to believe, however, that it is by no means easy to carry out an examination of this kind with great strictness. Large allowances must necessarily be made for nervousness and excitement on the part of the candidate, and for stupidity on the part of the patients, who often, unintentionally, mislead. Only a limited class of diseases is available for the purpose; almost all acute maladies have to be excluded. Even as such examinations are now conducted, the endurance of patients is often severely taxed by the proceedings of the candidates."

These are a few of the considerations which make it difficult to rely solely on examinations as tests of the practical qualification of candidates. We are not, however, disposed to underrate the value of examinational tests; a carefully planned scheme of examination, skilfully carried out, is, beyond all doubt, the very best test of a man's capacity and knowledge; but a well-ordered course of study is an additional safeguard, and one which, in the case of our highest degrees, we cannot afford to dispense with.

The Committee of Convocation appears to have entertained the apprehension that if all restrictions with regard to Medical degrees were abolished, students in Medicine would place themselves in the hands of private Practitioners to be educated, or attempt, by private study, to educate themselves. We cannot believe that there would be the smallest probability of any such attempts being made.

No sensible man could hope to pass any searching Medical examination with such preparation only. All apprehensions on this score may be safely dismissed as groundless. An increase, then, of freedom in the particulars of place, time, and mode of education, without any substantial alterations in the actual work, or in the nature or extent of the curriculum, would, we think, have a most beneficial influence on this University. We should then hope to see more decided marks of individuality about its graduates. It has been said that the effect of the present system is to turn out a number of men of exactly the same pattern. This is easily accounted for when we find that out of the 500 Medical graduates of the London University, more than one-half have proceeded from *two* Medical schools alone, those of University and King's Colleges.

There is a desire on the part of the Medical Profession generally that the London University should become, in a greater degree than it has been hitherto, the Medical University of England; not by a degradation of its examinations, but by a judicious relaxation of its restrictions, and perhaps a modification of the purely scientific part of its examinations to meet the exigencies of particular cases. There is yet another point of view not unworthy of a moment's consideration. It appears that the Medical graduate of the London University is a most expensive article. Each one costs the State about £45! This is not altogether just. We can see no reason whatever why this tax should be levied on the State for the production of graduates in Medicine.

The Committee of Convocation may, we believe, employ themselves most advantageously in devising some modifications of the existing regulations with regard to degrees in Medicine, so that while the general efficiency and scope of the present curriculum is maintained, certain exclusive restrictions which have no influence on the real knowledge, practical or theoretical, of the candidates may be altered or abolished, and thus, by increasing the number of possible candidates, they will be helping to relieve the State of a burthen which is at present most unjustly imposed upon it.

THE WEEK.

TOPICS OF THE DAY.

The large gathering of the British Medical Association which took place at Willis's Rooms on Wednesday last, wasted a great opportunity. Of all the meetings which the present crisis in Medical politics has assembled, this was in many respects the most influential and the most fitted by organisation and its eclectic character to make an impression on the Government and on Parliament. The first and chief act of the meeting, however, was to pass a resolution which is known by all who have temperately considered the matter to be impracticable, to be one which the majority of the Medical authorities will never be induced to accept—a proposition which has been debated by the Government and deliberately rejected, and one which it would

tax even the power of Mr. Gladstone's Government to carry in opposition to the General Medical Council and the Medical authorities. It was that there shall be one board of examiners for the three kingdoms, in other words, as was advocated by the chief speakers who carried the amendment to the first resolution, that there should be maintained a set of peripatetic examiners, who shall spend their time and the money of the Profession and the nation, for the Profession could never meet the expense alone, in travelling from town to town for the purpose of examining students *vivâ voce*, and testing them at the bed-side, and in the laboratory and dissecting room. The impracticability of this resolution will be at once apparent if we consider the number of candidates—not far short of a thousand—in the three kingdoms who are likely annually to present themselves—the length of time which the practical *vivâ voce* and written examinations of each of these candidates must take—the expenditure in money which would be required to pay the large staff of examiners that would be required—and the fact that the examiners could not be taken from men in active practice, for such could not possibly leave their patients to conduct examinations which must last several weeks, or even a month or two, at a time, in different parts of the three kingdoms. The examiners would, therefore, have to be selected from men in whom the public have refused to place confidence, or from the class of mere theoretical professors. The meeting, led by the almost irresistible eloquence of Professor Haughton, adopted this mistaken conclusion, and, we think, have so far damaged their claim to the consideration of the Government as a practical body of men. With regard to the second resolution they passed, we can only repeat that any benefits to be obtained by direct representation in the General Medical Council will, in our opinion, be far outweighed by the actual harm which frequent elections will bring on the Profession.' With regard to the third resolution, which would deprive the Privy Council of the right of veto and confirmation, we would remind the speakers that the power of veto and arbitration must be placed somewhere, and that Parliament has a right, when granting a monopoly, to interpose safeguards between the monopolists and the public for the protection of the latter. Parliament can only effect this through the Government, which is responsible to itself. We would be the last to place our Profession under the heel of any department of Government, but we do not think that the limited powers which the amended Bill gives the Privy Council would have this effect. Moreover, we are by no means certain that a court of final appeal would not be a valuable institution, even although we possess a governing body of such admirable sagacity and undisturbed unanimity as the General Medical Council.

The meeting of the Pathological Society which took place on Tuesday last closed a session which, in attractiveness and interest, was inferior to none of its predecessors. Perhaps the most important point which has been discussed during the past session is that of the relations of cancer to other forms of malignant disease, and the connexion which appears to subsist between the malignant class of neo-plasms and those which have not hitherto been considered malignant tumours, such as lymphoma and recurrent fibroid disease. Drs. Murchison and Dickinson, at the last meeting of the Society, produced specimens taken from patients who had died from lymphoid tumours of the glands and other organs, including the lungs. It is the universality of the lymphoid tissue, the proliferation of a tissue which in the lymphatic glands would be deemed normal, and the shadowy microscopic differences of the intervening forms which separate cancer from tubercle—into which lymphoid tissue is, according to Sanderson and other observers, convertible—which invest these cases with their great pathological interest. The session's work promises the members an admirable volume of transactions, and we congratulate the president, Dr. Quain, and the secretaries, Dr. Dickinson and Mr. Hulke, on the success which has attended their efforts in the Society's behalf. In closing the meeting the President urged the importance of members sending in their papers early to the secretaries for publishing purposes. A special meeting of the Society is to take place on June 7, when the scheme for amalgamating the Medical societies will be discussed.

We hear the names of several candidates mentioned for the Professorship of Midwifery in the University of Edinburgh, vacant by the lamented death of Sir James Simpson. Dr. Matthews Duncan was early in the field, and has published a pamphlet containing a list of the books, memoirs, and papers he has written, with a series of critical notices from leading Medical magazines and journals. No better collection of testimonials could any man offer, and we think that the enormous and valuable amount of work which Dr. Duncan can show ought to weigh heavily in his favour with the curators of the patronage of the Edinburgh University. We have only to remind our readers of the merits of Dr. Duncan's work "On Perimetritis and Parametritis" to substantiate the claims which Dr. Duncan has for advancement in the special department of the Profession which he has cultivated. Dr. Alexander Simpson, now of Glasgow, comes forward as a candidate in consequence of the expressed wish of his late uncle. He was for many years his uncle's assistant, and occasionally occupied his chair in the class-room. He is not unknown to the Medical world as an author, and ran his opponent closely at the last election to the chair of Midwifery in the University of Glasgow. Dr. Keiller, who has long occupied a prominent position in Edinburgh as an extra-academical lecturer on Midwifery and an examiner in the College of Surgeons, is a third candidate. Dr. M'Clintock, of Dublin, is also spoken of, and would undoubtedly be a formidable opponent. Other men of less note have been heard of as probably offering themselves, but we believe that the four we have mentioned are those who are most likely to solicit the votes of the curators.

At the last meeting of the Clinical Society, it was unanimously resolved to accept the scheme of amalgamation resolved on by the Medico-Chirurgical Society at its special meeting. This is the first outside support that the Amalgamation Scheme of the Medico-Chirurgical Society has obtained.

We learn with great satisfaction that the Admiralty have determined on opposing the Bill of the South Eastern Railway Company to authorise a line of railway through Greenwich-park. The Astronomer-Royal has represented, in strong language, the injury which would be done to the Observatory, the utility of which establishment, he says rightly, is not national, but universal. For ourselves, we should have the strongest objection to cutting off the smallest portion of one of the few open spaces which are left in the environs of London. The pecuniary interests of a railway company certainly should not be allowed to outweigh the scientific interests which are at stake in the Royal Observatory, and the claims which the people have on every square foot of Greenwich-park.

Dr. Brewer's recent attempt in the House of Commons to lay the onus of taking care of vagrants on the police instead of imposing it on the parochial authorities was one with the principle of which we think most will agree. Although unsuccessful it at least excited discussion, and drew attention to a possible mode of separating the really deserving poor from the hosts of beggars and worse who live on the charity and credulity of the producing classes.

We are glad to hear that there is a proposition on foot for placing a bust or other monument of Sir James Y. Simpson in Westminster Abbey. If ever a man has earned a place amongst the departed great of the nation it is he whose loss the Medical Profession is still deploring. There can be no doubt that a warm response to an appeal for the necessary funds will be made as soon as the proposal is fully announced.

THE LADIES' SANITARY ASSOCIATION.

Who is Mr. James John Garth Wilkinson? and what is his connexion with the Ladies' Sanitary Association? We ask these questions because a pamphlet, entitled "A Free State and Free Medicine," by the above-named gentleman, has come into our hands as having been enclosed to a member of our Profession with the last report of the Association, in an envelope bearing the address of the Association, and so apparently with the sanction of its Committee. The pamphlet itself is an attack upon the Medical corporations, upon the Compulsory Vaccination Act and all who uphold it, upon the Contagious Diseases Act, and upon the promoters of the new Medical Bill. It advocates universal suffrage irrespective of sex, and freedom of practice for women, quacks, and homœopaths, it speaks of Medical art as an "instinct" or "spiritual thing," and finishes by proclaiming that Mr. James John Garth Wilkinson cures small-pox and certain formidable diseases by simple external application. Here are a few samples of the author's style and teaching. Speaking of the Compulsory Vaccination Act, he says, "A large and increasing number of the population hates the name and thought of vaccination. Numerous cases are extant in every considerable town of deterioration of health, injury, and death from it, inflicted upon little children, and coroners' inquests return verdicts of 'died from the consequences of vaccination,' and yet Parliament arms the Medical man with a right of virus against the babies next born to those who have thus been slaughtered." "Parliament has sanctioned this perpetual felony and occasional murder." "I am prepared to argue unreservedly against vaccination." "I know that it is a delusion and an evil, and I have done with it." Speaking of the Contagious Diseases Act he designates the heads of our Medical corporations "pampered and easily incensed mandarins," and the Medical gentlemen engaged to carry out the Act "a vermin of pensioned venereal doctors," and "troopers fed by Government on the carcases of the sex," and then wandering away to the case of the Welsh fasting-girl arraigns "the mental sanity of chartered Medicine" when it "undertakes to immure the people of these islands in its own narrow materialism." Another elegant extract and our readers will have had enough of Mr. James John Garth Wilkinson. "They (the Medical colleges) are now moving Sir John Gray and Mr. Graves to pass a Bill to 'establish one uniform and practical test of efficiency for all Medical Practitioners in the United Kingdom' in order that patients may be enabled readily to distinguish between qualified and unqualified Practitioners! Uniform and practical! The Pope's triple hat and Garibaldi's red shirt worn by one sentence; high priests, and Pharisees, and Lord Christ at one table."

Now, our readers may be well assured that we should not have thought it worth while to bestow a line of comment on this nonsense, were it not apparently promulgated by an Association which has, in its time, done good service to the community, and which is supported by some of the leading members of our Profession, whose names are paraded in the list of honorary members prefixed to its Twelfth Annual Report. We will not mention the names of these gentlemen, for we are certain that they would be annoyed, and justly annoyed, at being supposed to be at all implicated in this outrage upon their order and most cherished convictions. We must make one exception, and that is, Mr. James John Garth Wilkinson himself, whose name stands last on the list. But what we want to know is, and that authoritatively, whether the pamphlet referred to above is deliberately issued by the managers of the Association as embodying their own views and opinions, or whether it has been smuggled into the envelope with their report by some injudicious hand, or issued therewith by the direction of some over-influential member of the Committee? We think we have a good reason for asking this question, inasmuch as it appears from the report that the Association is taking up a position adverse to the Vaccination Act, and is asking for permission to bring before the Sanitary Commission evidence on the vaccination question. We do not wish to bring prominently forward the name of any particular lady, but it is notorious that one member of the committee is thoroughly opposed to vaccination, and that when two years ago she offered a prize for an essay on the subject, the essay to which the prize was adjudged by the Medical referees was repudiated by the Association, and another more in accordance with her preconceived opinion was adopted and issued at a cheap rate under its auspices. We do not imagine that either the author of the prize essay or anybody else is troubled about this; but it is right that the Profession should be informed, and especially those who are enrolled as its honorary members, how it stands in respect to the Ladies' Sanitary Association. Again, therefore, we ask by whose authority Mr. Wilkinson's pamphlet was issued under the cover of the Association? and whether the Association desires that it shall be implied that the views of this gentleman and his outrageous language are concurred in by its managers? And we expect an answer.

CARBONIC ACID.

At his last lecture, Dr. Richardson took for his subject some new and curious points relating to the physiological action of carbonic acid. After briefly describing the chief physiological facts ascertained since the discovery of carbonic acid as a product of the respiratory process by the illustrious Black, the lecturer proceeded to illustrate the effect of carbonic acid on animal and vegetable fluids. He said that his friend, the eminent chemist, Dr. F. Versmann, in studying the manufacture of some medicinal waters, had found, much to his annoyance, that when carbonic acid, with a little soda, was brought into contact under pressure with some vegetable infusions, the gas was fixed to a large extent, and the infusion was quickly transformed into a thick glairy fluid. Some infusion of orange and gentian treated in this manner was shown: the liquid was beautifully transparent, but glairy and thick, and, when transferred from one vessel to another, it turned out in a mass like albumen. This observation suggested to Dr. Richardson the importance of experimental inquiry as to the influence of carbonic acid on animal fluids, on the mucous secretion of the air-passages, on albumen, on serum, on solution of muscle, on fibrine, on blood, on blood-corpuscles, on bile, milk, and other animal secretions. He now showed some of his results, especially those relating to the precipitation of colloids. Albumen was shown as precipitated from serum, fibrine from a solution of muscular fibrine, and fibrine from solution in blood. Next it was demonstrated that the blood-corpuscles by exerting a condensing effect on the acid prevented it by their presence from precipitating the colloids; and lastly, it was demonstrated that freshly-drawn defibrinated blood, subjected to carbonic acid under pressure, while it was rendered very dark by the process, on being exposed to the air at 60° Fahr. gave up the acid and seized oxygen in place of it with such avidity that a surface of blood a foot square was changed almost instantaneously from deep-black into bright-red arterial blood. Thus, the lecturer reasoned, carbonic acid on the blood side of the pulmonary vesicular surface is as important a necessity for respiration as is oxygen on the air side. Such are a few of the simple but interesting points of this lecture, of which we need say no more now, since in due course it will appear in our columns in full.

ILLNESS OF DR. LOCKHART CLARKE.

Dr. Lockhart Clarke has been dangerously ill from an attack of pleuro-pneumonia. We are, however, happy to be able to announce that he is recovering, and is now out of danger. Our readers will agree with us in the hope that anatomical science is destined yet to gain by many years of his valuable labours.

BONUS SCHEME OF RETIREMENT FOR THE ARMY MEDICAL SERVICE.

We have before us a bonus scheme for accelerating promotion in the Army Medical Department, originating, we believe, with Dr. Menzies, Deputy Inspector-General of Hospitals, Lucknow. The proposal is to raise an annual sum of £18,000 by contributions from all Medical officers, varying from £60 from Inspectors-General to £1 10s. annually from Assistant-Surgeons of less than five years' service, the amount to be appropriated annually in the payment of five bonuses of £3500 for two years in succession from the seniors downwards, and triennially from the juniors of twenty years' service upwards. A Medical officer serving thirty years would have to pay £790, for which, on retirement, he would receive £3500. The scheme is open to many objections, the most powerful to our mind being that a Medical officer would, in case of death before retirement, lose to his family all the sums which he had paid towards the fund. The same amount of prudence and self-denial would obtain for him a very considerable insurance on his life, in which there would be no such risk. A very large proportion of Medical officers would decline, for this or less worthy reasons, to subscribe, and many would fail in their contributions. We have frequently expressed our opinion as to the only true remedy for the present stagnation of promotion in the Army Medical Department—namely, compulsory retirement from the inspectorial ranks after a certain length of service in them, the retiring pension to be the same whether that period has been passed as Inspector or Deputy Inspector-General of Hospitals. Until this be done, the stagnation in the upper ranks will continue to excite disappointment and discontent in the lower.

PROMOTION FOR DISTINGUISHED SERVICE.

The War Office *Gazette* of the 17th inst. contains a General Order by his Royal Highness the Field-Marshal Commanding-in-Chief announcing that her Majesty has been pleased to approve the promotion of Assistant-Surgeon James Jameson, M.D., 47th Regiment, to be a Staff Surgeon, in consideration of his highly meritorious service during the recent epidemic of yellow fever in Trinidad. While congratulating Dr. Jameson on his well-earned advancement, we cannot refrain from condoling with him, but more especially with those whom he has left behind, when we observe that, having entered the army on November 9, 1857, he has now, after twelve and a half years' service, only obtained, as a mark of special favour, a step for which, in the present sluggish state of ordinary promotion in the Army Medical Department, many of the sixty Medical officers senior to himself, and over whom he has stepped, will have to wait two or three years before being promoted. In a few years, in fact, the rank of Surgeon will be extinct, and we shall see only Surgeons-Major and Assistant-Surgeons under *twenty years' service* in the Army Medical Department.

PROFESSOR HALFORD'S TESTIMONIAL.

Notwithstanding the opposition of a small section of the Profession, the public in general and a large majority of his brethren are decidedly in favour of Professor Halford. As is the lot of discoverers, a busy section of the community have been endeavouring to underrate the value and importance of Dr. Halford's discovery for curing snake-bite. But they have failed, and no one who knows anything of the subject can for a moment doubt that the proposal for introducing ammonia directly into the circulation is due to Dr. Halford and to Dr. Halford alone. We rejoice to see the spirit in which the cause has been taken up in Melbourne, and that the sum already subscribed is a very handsome one. As a meeting of the subscribers has been held to consider the particular form the proposed testimonial shall take, Dr. Halford can bear to look with indifference on the statements and misrepresentations of his assailants.

THE THURSTON SPEECH AT CAIUS COLLEGE.

The Thurston Speech on the Progress of Medicine was delivered at Cambridge in the Chapel of Caius College, on Wednesday, May 11, by Dr. Clifford Allbutt, of Leeds. After some introductory remarks the speaker proceeded to point out that theory enters far more into the practice of all Medical men than is generally supposed. The common distinction between theory and practice is illusory, and all good practice must directly or indirectly depend upon right reason. The speaker then sketched the history of the theories of therapeutics, and pointed out the direction of modern thought and the changes in practice to which it is leading.

VISITATION OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The visitation of the King and Queen's College, the object of which we fully explained in our number for January 15 (page 66), was resumed, after an interval of rather more than four months, on Monday, the 16th inst. On this occasion, however, the investigation was held not in the hall of the College, but in the Court of Chancery. The arguments were reopened, on the part of the College, by Mr. Gerald Fitzgibbon in a speech of great ability, which called forth the marked commendation of the Lord Chancellor and of the Lord Chief Baron; and they were ably continued, on the side of the appellant, Dr. M'Swiney, on the following day by Mr. Butt, Q.C. At the close of the proceedings the Lord Chancellor announced that the visitors would give judgment in about a week, the Lord Chief Justice of the Common Pleas adding, that the case was one requiring great consideration.

HOW SCARLET FEVER IS SPREAD.

A writer in the *John Bull* refers to a mode in which he thinks scarlet fever is occasionally propagated. He says:—

"I refer to the practice amongst servants of sending their clothes to be washed by poor women who do it cheap, but whose means and surroundings are not such as to enable them to wash and dry clothes in the nicest manner. It sometimes happens that the members of a poor family of this description are 'down with the fever,' the germs of which are very likely to be conveyed into a healthy household by means of the clean (?) linen which has just been dried and ironed in the sick room, and carried to the squire's mansion for the housemaid or the butler."

He suggests that the remedy for this state of things is for employers to make it a condition in giving "washing money" to their domestics, that their clothes should be sent to the laundress employed by the family.

ANTHROPOLOGICAL SOCIETY.

Dr. Beddoe, the president, in his annual address to the Anthropological Society, just published, has given a history of the two societies existing in London for the study of Man, as well as a nicely arranged obituary of the late Dr. Hunt, whose almost sudden death arising out of the Exeter meeting of the British Association is deplored by a wide circle of sorrowing friends. A long list of honorary memberships and other distinctions, conferred on him by foreign scientific bodies, testifies to the position he held among foreign savans, a position rarely attained at so early an age. In 1855, he had become a Doctor of philosophy in the University of Giessen, and in 1867, received the degree of Doctor of Medicine, *honoris causâ*. He was a member of the Leopoldine Academy, Dresden; of the Medical Association of Darmstadt; of the Upper Hesse Natural History Society; of the Société Parisienne d'Archæologie et d'Histoire; of the Congrès International d'Anthropologie et d'Archæologie Prehistorique; of the Anthropological Society of Paris; of the Sociedad Antropológica Española; of the Société des Amis de la Nature de Moscou, etc. As a man of science, however, his chief and real monument is the

Anthropological Society, which he founded in 1863. The inauguration of the Study of Man as a science, however, in Europe, originated with Dr. King, the Arctic traveller, in the foundation of the Society to which he gave the name of Ethnological Society of London. It had had, in a certain sense, a predecessor in the Aborigines Protection Society, a body with mixed scientific and philanthropic objects, which had been constituted as far back as 1837, Dr. King being also a founder of that Society. Dr. Beddoe remarks :—

"In 1842, Dr. King, perceiving that the scientific element of the society was altogether overshadowed by the philanthropic, add that a promising and rich harvest of science was being neglected, conceived the happy idea of founding an Ethnological Society, for the study of the distinguishing characteristics, physical and moral, of the varieties of mankind, and the causes of such characteristics. Towards the close of 1843 such a society was constituted."

France, Russia, and America, almost immediately adopted Dr. King's inauguration of this science. Hence we have the Ethnological Society of Paris, the Ethnological Society of New York, the Ethnological Section of the Geographical Society of St. Petersburgh, the Congrès International d'Anthropologie et d'Archæologie Prehistorique, of the Anthropological Society of Paris, of the Sociedad Antropológica Española, of the Société des Amis de la Nature de Moscou, etc.

THE PHARMACEUTICAL SOCIETY'S CONVERSAZIONE.

On the evening of Wednesday, the 18th inst., the President and Council of the Pharmaceutical Society gave a great *conversazione* in the South Kensington Museum. In every way the affair was a success. The rooms, which look so well lighted up, were filled, but not uncomfortably crowded. The objects of interest were quite sufficient to satisfy any one, and the mere presence of such a crowd of well-dressed people bent on amusing themselves, and with the means about them of gratifying this laudable desire, was in itself a pleasant sight. The admirable band of the Grenadier Guards was in attendance under the leadership of Mr. Dan Godfrey, and performed some excellent operatic selections. In the theatre the Orpheus Glee Union from time to time gave specimens of our earlier and later glees and madrigals, which were exceedingly well received. Altogether the authorities are to be congratulated on their success in affording a pleasant evening to their guests—a satisfaction which cannot fail to give pleasure to themselves.

THE WARNEFORD HOSPITAL, LEAMINGTON, AND DR. SLACK.

The Governors of the Warneford Hospital have received a severe check in their silent hostility to the Medical staff. It appears that in the exercise of his judgment Dr. Slack admitted to the benefits and advantages of the institution a Leamington tradesman who was in distress, but had previously been one of the most active governors of the charity. Old party spite and animosities all forgotten, Dr. Slack admitted Mr. John Williams to the Hospital wards, and there he died. The committee, forgetful no doubt for the moment of the paramount superiority of charity and benevolence to red-tapism and the rules of the Hospital, made some strong expressions disapproving of Dr. Slack's proceedings, whereupon Dr. Slack resigned his appointment. On Friday last, however, the Governors at large re-elected Dr. Slack by a large majority, thus showing they approved of his conduct and condemned that of the committee. The committee have carried matters with a somewhat high hand as regards the Medical staff. "They were told to report their attendances, and wait upon the patients of the Institution, in whose management they were not permitted to take a part." The *Leamington Spa Courier*, in an able article on the subject, says—

"We know, and the governors doubtless know, that Dr. Warneford, perhaps not wisely, expressed a wish that no Medical man should be on the Managing Committee. It may some day be worth while to consider if that wish may not be departed from. The Committee yesterday must have felt themselves in a position as untenable as difficult. They naturally desired that the strong charges contained in Dr. Slack's letter should be withdrawn, but when it was pointed out that this was impossible, a month's delay was asked for on purely technical grounds. This was refused. The governors, by a large majority, carried the re-election of Dr. Slack. With a courage worthy of a better cause, some members of the Committee defended their joint acts; yet the Committee, with one exception, formed the minority. They have now, we hear, resigned; we hope this is not so, and that the Warneford Hospital will pursue its career of usefulness and of mercy with renewed vigour, and that the Committee will forget this little unpleasantness altogether; or, if it is remembered, let it be so only as an affirmation that the mission of the Hospital is still that of mercy."

TESTIMONIAL TO DR. M'CUAIG, OF MIDDLESBOROUGH.

On Tuesday night last a party of friends met at the Corporation Hotel to bid Dr. M'Cuaig farewell on his departure from Middlesborough for Croydon, and also to present him with a silver salver and fifty guineas. The salver has the following inscription on it :—

"Presented to D. M'Cuaig, Esq., M.D., together with fifty guineas, by a few friends, on his leaving Middlesborough, for his uniform kindness and attention to those whom he had under his care, and for his Professional skill and services as honorary Physician to the North Riding Infirmary. Middlesborough, May 10, 1870."

The testimonial was presented by Mr. Potter, the chairman, in a very eloquent and graceful speech, and acknowledged by Dr M'Cuaig in suitable terms.

GOOD SERVICE PENSION.

We are glad to announce that Her Majesty has bestowed the good service pension, vacant by the death of the late Dr. Fergusson, on retired Deputy Inspector-General Bradford, late of the 23rd regiment, Honorary Surgeon to her Majesty. Mr. Bradford is the Chairman of the Court of Examiners of the Society of Apothecaries.

FURTHER NOTES ON THE LIFE OF SIR JAMES SIMPSON.

(*From a Correspondent.*)

When a man of genius has gone from among us, the memorials of his life have to be collected in such a short space of time that many most interesting traits which tell of the character of the man have necessarily to be omitted. Of course I do not refer to such instances as those of Brougham and Campbell, or of their rival lives, each lying in the other's desk, but of such men as Sir James Simpson, whose life was passed in doing good to his fellows—good which lives after man, and is his best memorial. I read your obituary notice with much interest; but with your leave, I should like to add, not what I can call some finishing touches, but a few bits of colour which may tend to give tone to the distinct outline of Simpson you have already drawn.

I shall not allude to his early life nor to his collegiate studies, although the imperfect character of the latter undoubtedly led to imperfections in Sir James as a man of science: witness his first attacks on our system of "Hospitalism." I shall begin with his candidature for the Chair of Midwifery in Edinburgh. At that time Sir James was only 29, although that was four years over the age of the last of the great lights of Edinburgh—Professor Christison, when he attained the Professoriate, still Simpson was young to have made the mark he had. Professor Hamilton was no more, and in those days the election rested with the Town Council, a body on a par with the Common Council of the City of London at the same date.

His great opponent was Dr. Evory Kennedy, who had already made his name famous, and who now survives his former competitor. With the tradesmen who mostly composed the elective body, it was a question of who would bring most grist to the mill. Simpson they argued was altogether unknown out of Edinburgh, but Kennedy had a wide reputation; should they appoint the less known of the two the hotels would suffer. There would be no more patients coming from a distance to consult their Professor. How shortsighted this idea was, time showed. Still, it worked at the time, and Simpson had much to do to fight against it. Yet he persevered, and he was strongly supported by men who have since become famous in Edinburgh. Sir James was at this time unmarried, and one of the men who were strongest in his favour plainly told him he considered this an objection to one who aspired to such a chair as that of midwifery. "Will you support my claim if I get married before the day of election?" said Simpson. "Certainly," replied the other, and without more ado Simpson was off to Liverpool, saw the lady to whom he had already been paying his addresses, proposed, was accepted, and finally married before the day of election. When that day came 17 voted for Simpson, 16 for Kennedy; the turning vote was secured by Simpson's promptitude. This illustrates one side of his character.

The next anecdote I shall relate exhibits Simpson in a light well known to those associated with him, but hardly credible to most men. Though short and stout, Simpson's energy was marvellous, his capacity for work prodigious. Were we to select the paper which displays most power and originality of all those which Simpson has contributed to the literature of his day, we should say that on Hermaphroditism was the best. But men are often inclined to rank their works in accordance with the difficulty they had in producing them, and Simpson has said he considered his article on Retroversion of the Uterus the best he had ever written. Its origin was in this wise: the paper had long been promised, and he was called upon to fulfil his promise suddenly and urgently. He had been hard at work all day when he sat down to the composition of this paper; and what Simpson's daily work was, not many people can conceive. But when it was finished he sat down to the composition of his essay. He worked all night. In the morning he dressed himself anew, and set about his ordinary avocations; and when midnight came round again it found him hard at work on his labour of love—pen in hand again. A second night found him at the same work as the former, and the second day he did his duty as before. Nor was it till the third night had well-nigh gone that the task was ended, and Simpson sought his couch for that repose which few men could have so long dispensed with. But such was his life; latterly, more especially, his only rest was frequently snatched during long journeys by rail.

Of Simpson's work this is hardly the place to speak, but his great discovery of chloroform so far outshadows everything else in his life that the value and importance of his contributions to uterine pathology are utterly dwarfed by it. Yet if any one will take the pains to estimate the place that department of Medical science occupied as compared with others when Simpson began and when he closed his labours, the value of his work will be more apparent. He it was who gave the great impulse to the study of uterine disease, which, being communicated to others, stimulated them to surpass their master, yet the original source of inspiration was Simpson. In the active search for new remedies Simpson was ever among the foremost, and few substances have of recent years been brought under our notice which had not already been tried by him. And this leads me to speak briefly of what one brought into contact with him could scarcely fail to notice. He was a man of very varied information, and this stood him in good stead; it always enabled him to draw out a stranger on his strongest points, what he had been specially working at, and this in turn Simpson stored up, perhaps to serve a similar purpose in future. His memory was enormous and exact. If a subject was under discussion he would say, "Ah! there is something on that subject in such and such a book or magazine, at such and such a place," and the reference was always correct. It was to these two faculties Simpson owed most of his vast stores of knowledge, for latterly he had but scant time for reading, and had to take his mental nourishment in a concentrated form.

Of his class, of his practice, of his Hospital work, of the wonderful collection of men to be seen in his house, many things might be said, but they are beside our theme, which is the man himself. Of none could it be more fitly said, "He rests from his labours, and his works do follow him."

AUTOBIOGRAPHICAL RECOLLECTIONS OF THE PROFESSION.

By J. F. CLARKE, M.R.C.S.,
For nearly forty years on the Editorial Staff of the "Lancet."

William Cobbett, William Lawrence, Thomas Wakley (continued)—Gale Jones.

When I commenced writing these papers I was scarcely prepared for the general interest they have excited. I am constantly receiving communications, written or otherwise, not only from members of the Profession, but from the general public. The somewhat novel character of these contributions to the literature of Medicine may account for this. It is the subject, and not the writer or his style, which gives its charm to the reader. Biography is a favourite subject with the majority of persons, particularly when it assumes the gossiping style. Boswell's "Johnson," though inferior in many respects to some other works of the kind, owes its popularity to its discursiveness, its non-pretension to literary excellence, and to its bringing us, as it were, into actual contact with a number of persons celebrated in their time, and with whom we desire to become better acquainted—indeed, to see them as they were. Medical biographical works are, to say the least of them, meagre and unsatisfactory, and as to autobiography I know of none, except that of Brodie, and this is deficient in some of the most essential elements of that description of writing. It is too cynical and too one-sided, and leaves untouched the description of many prominent persons and circumstances with whom and with which he must have been more or less intimately associated. It is, however, a most interesting production. Would that we had more of them. I have been led into these reflections from a note I received a few days since from an esteemed and veteran member of the Profession, one of the oldest amongst us. I shall transcribe the note here, because it may be the means of obtaining the information the writer requires. It will, moreover, show how meagre is the information which we possess respecting a man who had lived within the last half-century—a man, too, who occupied an important position in the Profession, and whose name is honoured and revered. Here is the note in question:—

"Dear Sir,—I have been much interested in reading your 'Medical Recollections' in the *Medical Times and Gazette*, and wish to ask you if you know of any memorials or recollections of Mr. Cline, the elder, who, I believe, died in 1827. When did he become a member of the old corporate body of Surgeons? He was of a generation before Mr. Abernethy, Sir A. Cooper, and men of their day. He was, no doubt, a man of considerable ability. He was a thorough democrat, being imbued with the doctrines of the revolution of 1789, and an associate of Horne Tooke, Hardy, Thelwall, Gale Jones, etc., and of Sir F. Burdett in his early days. I fear the day for knowing anything precise about him has gone by. Forty years ago much could have been learned from Mr. Abernethy, Sir A. Cooper, Sir B. Brodie, Mr. Hodgson, Messrs. G. Young, and others. Excuse me for troubling you, and believe me, yours faithfully,

"A. B."

It does, indeed, seem remarkable that so little is known of the great Surgeon of the Borough Hospitals. I wrote to my correspondent that Cline was before my time, that I knew he gave important evidence in favour of Horne Tooke on his trial, and that a bust of him, with his fine manly face, was placed in the library of the Royal Medical and Chirurgical Society; and this is all I could say!

Let it be remembered to Cline's honour that giving evidence against the Government in the troubled times of Tooke and Hardy required no little courage and self-abnegation. Such a witness was a marked man by the powers that were, and the offence would be remembered to his detriment. But Cline was above all such considerations, and he stood forward in defence of his friend as bravely and as coolly as he would have amputated an arm in the operating theatre of St. Thomas's Hospital. One of the advantages of the publication of papers like these is the information which is forwarded to the writer from private sources, and the contributions to biography which it brings

birth. Witness, for instance, the sketch of the late Robert Keate, written *apropos* of a few anecdotes I related of that eccentric but able Surgeon. Nothing could excel that sketch in its graphic truthfulness and vigour. What would we not give for such a delineation, for instance, of Percival Pott or Henry Cline? Singularly enough, one of the few remaining personal friends of Cobbett has sent me, within the last few days, some account of that remarkable person. He had been interested in my account of his old friend in my last article, and therefore communicated with me. He is a gentleman of high social position and literary acquirements, and I offer no apology for giving in the pages of a Medical journal the contribution in question. I place the article on record more readily in consequence of the early association of Cobbett with the *Lancet*, of the anecdote which it contains of Cline, and from its intrinsic merits. Cobbett, however, wrote an article on Surgery. His description of hernia and of trusses was contained in the *Register* of many years since, and can still be seen in the window of Coles, the truss-maker, at Charing-cross. If all anatomical and Surgical descriptions were as clear and as simple, it would be a great advantage to the student and Practitioner. My informant says:—

"I was a visitor to him for two or three days in 1830, and was favoured with a seat in an open carriage with him in some of his rural rides, when he combined with them his lecturing tours in 1828, 1829, and 1830. These lectures, by the bye, had more influence than all the 'broad sheets' of the press put together in preparing the way for the Reform Bill of 1831, because the spoken *Registers* (for such they were) of the inimitable lecturer carried information and sympathising conviction into the minds of thousands of persons in all classes of society, whom it was impossible to move or even to reach on vital political matters, in any other way. Multitudes who had never read a line of Cobbett, and to whom his name was a household word associated with all sorts of disparaging impressions derived from the accumulated prejudices and calumnies of a couple of generations, flocked to his lectures out of mere curiosity to see and hear him. They were first agreeably disabused of a number of indescribable preconceptions by the mere sight of the man. They saw a tall, portly, yeoman-like figure, with a healthy, fresh-coloured face, which at first gave the idea of a north-country farmer; but on closer inspection no one could help being struck with the shrewd and sagacious expression of the countenance. His hearers were soon attracted and won by his hearty and simple and pleasant manner, which carried them along with him; so that if he was not eloquent after the fashion of professed and studied orators, yet there was something so easy and natural in his clear and ready-flowing language as not only to enchain the attention of his hearers, but also to engage their thorough confidence. It was almost impossible to resist his honest ardour, whether he were hurling indignation against some abuse or delighting his audience by his merry humour, when the laugh was irresistible and universal. We heard him lecture for three successive nights in a theatre of first-rate magnitude in a large provincial town, and on each occasion boxes, pit, galleries, stage, were crammed to overflowing, and it frequently happened that in the midst or towards the close of some powerful invective or argument which fairly carried away the audience, they were suddenly brought up and thrown into convulsions of laughter by some unexpected humorous illustration, in which perhaps the twinkling eye and the spontaneous dramatic action of the speaker performed the principal part, but which did its work with electric effect, and rendered any further illustration unnecessary. Liston himself never achieved greater triumphs by his humour than Cobbett did; but in Cobbett the humour was always subservient to the argument. Not a lecture fell dead-born from his lips; the driest subjects were made entertaining; many ladies listened to him on politics with as much delight as they have listened to Carlyle on literature, from the mere charm of manner; and those who have heard, or even read, both, cannot but be struck with the similarity between Carlyle and Cobbett, not only in manner and style of lecturing, but in many of their mental and moral characteristics. The same hatred of shams and impostures in both; the same contempt for the opinions of those who worship them; the same plainness of speech in expressing that contempt; the same love of work and industry; the same quiet humour and power of picturesque satirical description; the same cordiality, frankness, and generous sympathy in the inner soul.

"Cobbett was always calm and quiet in his habits. In carrying on his ceaseless and multifarious labours he never seemed in a hurry, the real secret of which was that he 'took time by the forelock' if ever any man did, and was through life an early riser, except after he got into Parliament. He had many irons in the fire, but he took them up successively, and moved on with his work without confusion. His own phrase to me once was, when speaking on this subject, 'I always keep moving on.' During his rural rides or his lecturing tours I had an opportunity of seeing that he noticed minutely, but with an instantaneous glance, every natural feature of the country through which he passed, as well as the nature and quality of the farming and the appearance of the labourers and their cottages, and that the whole was afterwards transferred to paper in the *Register* with an accuracy so unerring and so true to the life that a Morland or a Bewick could not have excelled it, and by a few strokes of the pen which were as simple and graphic as those of their pencils.

"Whilst staying in the towns where he lectured, Cobbett's room was of course thronged by visits from deputations or private persons, to all of whom he was invariably accessible, communicative, and courteous. He dined when he could at an early hour, and after his meal used to retire for half an hour to his couch, during which time he was generally attended by his daughters, and occasionally by a privileged friend, whom he would ask to read to him the newspaper of the day whilst he was taking his rest. On one of these occasions I read to him, amongst other items of the news of the day, the death of George IV.; this drew from him an instant exclamation, which showed that he saw in a vista the vital political changes which must immediately follow. In the afternoon he would be occupied with writing for the *Register* or for his 'advice to young men,' the manuscript to be dispatched to his publisher in London; and in the evening he would go to the theatre or the warehouse, or the barn appropriated for his 'lecture,' and instruct and delight the public by his animated 'talk' (he never called it by any other name) for a couple of hours at a spell, apparently without any preparation as well as without any subsequent fatigue. He himself told me that he had formed a habit in these lectures of not speaking above the natural pitch of his voice.

"It was delightful to see Cobbett among his own family. Mrs. Cobbett we had not any opportunity of knowing, but when with his daughters there was a playfulness in his tone that some persons hardly looked for in the author of the *Register*. But Cobbett was never hardened, as some men have been, by politics; the energy of his mind was combined with manliness and humanity, and with domestic and social tendencies, which made him the life and soul of his own home, where his heart always lay, as well as of his large circle of friends. As an enemy said of him, 'The child of three years old and the old woman of eighty were alike attracted and charmed by him.'

"Cobbett was troubled in the latter part of his life with a wen upon his head, which became, somewhere about 1825 or 1826, as large as a good-sized hen's egg, and he then decided on having it cut off. For this purpose he called in Mr. Cline, who performed the operation with great skill and complete success, to the entire satisfaction of his patient. Cobbett at once presented to Mr. Cline a purse containing twenty guineas, which the latter immediately refused to take, placing his hand, at the same time, on Cobbett's head, and saying, 'No, no; I owe too much to that head.' This anecdote was of course told, as it deserved to be, to the readers of the *Political Register* at the time, and it was equally honourable to both parties. It was from this wen, of which an ingenious and graphic description was given by Cobbett on that occasion, that he took the nickname by which from that time forward he generally described this City of London, which Cobbett always regarded as an overgrown excrescence in our body politic, absorbing an undue proportion of the wealth and vital strength of the country, to the impoverishment of the rest of it."

I believe this to be the most complete and just description of the great master of the English language ever written, and, though long, I hope it will be acceptable to the reader.

William Lawrence was above the common height, well formed, with a great breadth of chest and shoulders. His face fine and expressive; a broad high forehead, a classic nose; large blue eyes, somewhat cold in expression; and a mouth, albeit somewhat too large, denoting a strong will and a power of sarcasm rarely surpassed. In manner he was cool; gentle with his patients, and remarkably self-reliant, even to the last. When bordering upon 80, Dr. Snow had given chloroform to a patient on whom Lawrence had operated. The wound made by the operation required a suture, and, seeing Lawrence attempting to thread a needle, Snow proffered his assistance. "Thank you, Dr. Snow," said the veteran, "I will do it myself; you

see it requires a steady hand and a sharp eye," and the silk was passed through the eye of the needle, the tough old gentleman giving Snow one of those expressive smiles of triumph for which he was remarkable. I have before spoken of Lawrence as an orator. As a lecturer he was clear and eloquent, both in his style and his delivery, and his discourses were most impressive and instructive. As a writer he was in the foremost rank; as an operator, cool, fearless, and if not rapid like Cooper or Liston, he was sufficiently quick and was safe. In conversation he was lively, witty, and sarcastic; he was not equal to his friend and sometime colleague Wardrop in the extent and variety of his wit; but he never condescended as did Wardrop to retail broad and indecent anecdotes, which, while they could not fail to evoke laughter, did not tend to heighten our respect for the narrator. There was, however, I think, in Lawrence more bitterness and less humour than in Wardrop. He had the power of saying most offensive things in a manner which it was difficult to resent, but which were often most mortifying. On one occasion when an able and estimable member of the Profession was a candidate for the office of Physician accoucheur to St. Bartholomew's Hospital, amongst other operations with which his name was honourably and favourably associated, were two cases of cæsarian section. Every one admitted that the cases were proper ones for operative procedure, that the operations were well performed, and that success was nearly attained. On appearing before the senior Surgeon of St. Bartholomew's, the gentleman in question mentioned these cases amongst others. "Indeed," said Mr. Lawrence, with a bland smile and a pleasant sneer, "I hope the mothers and children are all doing well."

In all the relations of private life, however, he was a most estimable and amiable man.

I have spoken of the powers of Thomas Wakley as an orator; these were undeniable. As a politician it is difficult to say whether he had any decided convictions, or any "principle" upon which he acted. At one time he supported Radical measures, at other times Conservative ones. Sometimes he was with the Liberal Ministry, sometimes in opposition. It is notorious that he became so fulsome an adulator of Sir Robert Peel, that the *Examiner* compared him to "the insect which picked the crocodile's teeth." My own impression is that Wakley acted in Parliament and in political matters often from impulse and the love of approbation; but that he was really like Sir Francis Burdett, a Tory at heart. One great service he rendered to his Professional brethren when in the House of Commons; this was the passing of the Medical Witnesses Act. Before that time the annoyance and trouble to which Medical Practitioners were subjected would scarcely be credited. If a man cut his throat or poisoned himself, and half a dozen Medical Practitioners were called in, they were every one, as a rule, summoned to the inquest, had to wait in a common pothouse to suit the convenience of the coroner and the jury, and were not paid a shilling. The Medical Witnesses Act is an honour to his memory. He had some personal encounters in the House—once with Lord John Russell, who sneeringly applied to him the epithet of the "English Cato," but the retort was severe. The "model 'English Cato' was before him." Again, the present Lord Chelmsford, when Sir F. Thesiger, taunted him with changing his opinions for some "substantial" reasons; but the Attorney-General had ratted from the Liberal to the Tory side in politics, and Wakley covered him with ridicule by a facetious allusion to the rat and its fondness for meal and other "substantial" food. As coroner for Middlesex, and the gallant fight he made on two occasions against the lawyer candidates, I shall have to speak hereafter. But I may say here he did much to improve the position of the coroner, to make his court respected, and to modify and, indeed, abolish the absurd verdicts long in vogue. I shall in the course of these papers have constantly to refer to Mr. Wakley, and his character will be developed in due course. Mr. Wakley was about five feet ten inches high, strongly and firmly built, with an expansive chest and broad shoulders. He was possessed of great physical strength, and in early life was a good boxer. His head was large and well formed, his forehead broad and capacious, with a somewhat overhanging brow, and deep-set rather small blue eyes. These gave him, at first sight, the appearance of his having more cunning than power. But this idea was dispelled the moment you heard him speak. Johnson said of Burke that you could not be in his company under shelter during a shower of rain without finding out that he was no ordinary man. So it was with Wakley; no one could be in his presence for five minutes without being struck with his originality and suggestiveness. His nose was aquiline and finely chiselled, his mouth large, his chin decided, his complexion ruddy fair. He had a profusion of long, almost silvery, hair, which flowed over to his shoulders, and gave him, when speaking particularly, a striking appearance. His manner was genial, kind, and attractive. But he was a good hater, and could, and did, say and write some of the most savage things ever uttered. He was thought to be a man of business; but this was a mistake. It is true that he performed an amount of work almost incredible, but he had no "method," no "system." In this respect he bore a striking contrast to Cobbett. He would combine, as it were, the work of the legislator, the coroner, and the editor together, and would be often eighteen hours consecutively hardly employed. He would eat his spare dinner in his carriage, and prepare leading articles while travelling from one inquest-room to another. In the more stirring times of the *Lancet*, he wrote much; but of late years he seldom contributed to his journal. He died of consumption at Madeira, his powerful frame succumbing to anxiety and overwork. He had many faults, but he had many excellent qualities. He was more gallant than discreet; far more brave than cautious. His judgment was often wrong; his instincts seldom. It was said of him, and I believe with truth, that "half his life was spent in getting into difficulties, the other half in surmounting them." He rendered great service to the Profession. How he achieved this, and by whom he was aided, will appear in due time. Much that he did was open to severe criticism, much to great admiration.

One of the earliest contributers to the *Lancet* was Gale Jones, a Surgeon then in practice in Calthorpe-street, Gray's-inn-road. He was one of the most popular men of his time as a speaker and lecturer. He was in the habit of lecturing on a Sunday evening at the Rotunda in the Blackfriars-road. His discourses were attended by crowded audiences. The late Mr. Procter, of Salisbury-square, said that Jones was "the most eloquent speaker he ever heard." He was associated with Major Cartwright in the public advocacy of "trial by jury." He spent his substance in the public cause, and his reward was poverty. He was buried by the charity of friends.

MEETING OF

THE BRITISH MEDICAL ASSOCIATION

FOR THE

CONSIDERATION OF THE MEDICAL ACTS AMENDMENT BILL.

A SPECIAL general meeting of the British Medical Association was held on Wednesday afternoon at Willis's-rooms, St. James's, to consider the Medical Acts (1858) Amendment Bill introduced by the Government and now before the House of Lords. A large number of gentlemen from all parts of the Kingdom attended.

After some preliminary business had been transacted, Dr. Chadwick, of Leeds, was called to the chair, Mr. T. Watkin Williams, F.R.C.S., of Birmingham, officiating as secretary.

The CHAIRMAN, in opening the proceedings, said—By your presence in these goodly numbers you have endorsed the action of your executive in calling you together, and by the sacrifice which you must all have made in coming to this meeting, you have given in your adhesion to those principles which have long actuated our Association in reference to Medical reform. (Hear, hear.) It cannot be said now of you as it has recently been said of another meeting called for a similar purpose, either that you had failed to take an interest in the question or that you had no confidence in the parties who are managing your affairs. (Hear, hear.) You have evidenced and you have given the seal of your approval of the action of your executive by coming here to-day. You are assembled for the purpose of considering the new Medical Bill. I apprehend that it will become you as intelligent and thoughtful men to take a fair estimate of the title which this Bill has to your approval—to applaud and give that approval in no mistaken terms where it is deserved; and as strongly and as decidedly to express your disapproval where you find that the measure errs, either by something which it proposes to enact, or by something which it ventures to omit. (Cheers.) It appears to me, gentlemen, that this Bill has one great merit, one great fault, and one great omission; and you will have resolutions

submitted to you in the course of this meeting, which will, I hope, express your approval of the one, and your thorough condemnation and disapproval of the other. You will be asked to approve that which this association has for thirty years been working to attain, and which is now for the first time presented by her Majesty's Government for the approval of the Profession. (Hear, hear.) You are asked to adopt a plan for one portal to the Profession; and by that we mean nothing more nor less than that a minimum qualification shall be adopted that shall secure the approbation, the respect, and the confidence of the public in those who exercise this sacred calling which we follow. (Cheers.) Whether this is to be carried out by the adoption of one board or three, is another question which you may have to consider; and it is one of great difficulty, because I am satisfied that the Government, even if they felt as I feel, and as many of my colleagues feel, that there should be but one board, yet amid contending influences and conflicting interests, it will be difficult, I apprehend, for the Government to secure in this particular all that we can wish. (Hear, hear.) Principle unquestionably would point to one board for the three divisions of the kingdom, and I do trust that Lord De Grey, anxious as I know he is in many points to meet the wishes of the Profession, may be enabled to secure a modification of the present idea of three boards, and thus secure the advantages which I am satisfied would flow from one board. (Hear, hear.) I foresee in the adoption of three boards — I may be mistaken, for I am only giving my individual opinion—I foresee in the adoption of three boards, one for each division of the kingdom — a subversion of the very thing we are striving to accomplish. (Hear, hear.) We are aiming at uniformity of practice and principle, uniformity of fee, and an equal standard of educational merit, which can only be secured by the same men looking at the different candidates—whether in the same locality or in different localities I care not. The fault of commission to which I have referred, is the monstrous power claimed by the Privy Council in the Bill. (Hear, hear.) If the Privy Council is to exercise a veto upon that which the Council does, I hold—and I apprehend it will be a strongly-held principle in this meeting — that they should not appear by representation at the board itself. I do not object to their appearing at the board itself; but if they should continue, and I would prefer that they should continue, to be represented at the board, the influence which they should exert on the action of the board should be reduced to the veriest minimum. (Cheers.) It would be a very rare case, indeed, where a veto would have to be put upon anything they did. If we succeed in getting a board constituted as it ought to be, that board ought to be able to manage the affairs of our Profession without interference from Government or anybody else. (Hear, hear.) And this it is that brings me to the great blot of the bill. The fault of omission is distinct from that which I have just adverted to—the fault of commission; and that is that a Liberal Government should have left out of consideration altogether the long cherished wishes of our intelligent and respectable Profession to be represented directly upon the Council. (Cheers.) Various as our notions may be as to the exact number, or the exact proportion which we should hold in that Council, I apprehend we shall be unanimous in saying that there should be direct representation, and that our nominees should sit on that Council, and sit with authority, and that no indirect representation can give and gain thereby the support, the love, and veneration of that Council which has regulated those affairs—which alone can give success to their operations. (Hear, hear.) Now I will not conceal from you—I would prefer that it went abroad—the disappointment which your executive has experienced, when after an interesting interview with the noble author of this Bill and his most able coadjutor, we found that by a Liberal Government those desires which we have so long cherished were altogether ignored. (Hear, hear.) These different points to which I have referred will be brought by separate resolutions under your consideration. But there are other matters which invite your attention. The Council have simply taken out these three points of which I have spoken, not having had time, or ventured, to do all that was necessary. Those other matters, though of minor importance, are still matters which concern the vital interests of our Profession, which must be considered before this great measure becomes law. I will refer to one or two, not that I hold a strong opinion on them myself, but, in this instance, I am what I desire to be—a representative man. I desire to be a representative of this great association, and to enunciate only that which it believes. (Hear, hear.) It has been attempted by a side wind to get rid of a measure of opposition to the Bill by a provision to overrule the exercise of the judgment, which the examiners should exercise in giving degrees. They are told that any particular principle of practice, or any particular line of practice, shall not disqualify or prevent the examiners giving the degree to the individual who ventures before them to propound that which they must necessarily believe to be thoroughly and completely heterodox. I will not descend to particulars. Now, if the Bill is to be perfect, such a provision must be expunged. (Hear, hear.) I hope gentlemen will not hesitate to bring these points in any number of resolutions before the meeting. Further, if I rightly understand the Bill, any one getting a title out of England in any of our colonies to practise may come here and practise under the Bill without these examinations. They would thereby escape the portal through which we all desire they should come. This would open a door to immense abuse—an abuse which for years we have been complaining of. (Hear, hear.) There is another point of view which it is my duty to bring under your notice, and to desire that from that standpoint you will contemplate this measure and this action which you have taken. You will have resolutions asking you to say that it is a good Bill, and that it is a bad Bill, and that it has things in it which must be rejected, and that it is without provisions, which must be inserted. Then I shall have to ask you whether, seeing that the Bill contains one good thing and many bad things, we are to admit the serious principle of accepting a Bill in an imperfect condition, when we know that either by present action or by delay we can make the measure more perfect. (Hear, hear.) This, I take it, is one of the most serious matters on which you will have to deliberate. I have no difficulty in coming to a conclusion on that point. I would rather wait a year or two and have a perfect Bill, than sanction imperfect legislation. (Hear, hear.) I have, I fear, detained you from your duties too long; but, before sitting down, I would remind you that, in reference to this question, you have great power in your hands, and that you are capable of exercising that power in a manner little dreamt of. I deliberately call upon you to use that power, so that if the Bill should pass through the House of Lords with its imperfections your influence will lead to its being properly amended in the House of Commons. Few professions have such an aggregate amount of power as you have. You know how to use it, each in his own locality and circle. I ask you to use it for that which is reasonable and good, and you will attain your object. (Cheers.) You know, gentlemen,

Who would be free, themselves must strike the blow.

Your power is great. You have only to give direction to the stream, and I am satisfied it will flow on to the river which shall eventually conduce to the harmony and the good of our Profession and the benefit of the whole kingdom. (Cheers.)

Mr. Williams, the Secretary, then read a long list of names of gentlemen resident in various parts of the country, who had communicated their cordial approval of the objects of the meeting to be held that day.

Mr. Husband, the President of the Council of the Association, rose to propose the first resolution as follows:—"That the members of the British Medical Association have viewed with satisfaction the adoption in the proposed Medical Bill of one portal to the Profession which has been so long advocated by this Association, and tender their thanks to her Majesty's Government for their recognition of so important a step for raising the standard of the Profession." He fully endorsed the observations of the Chairman when he said that the sins of commission in the Bill, as well as those of omission, were far greater than any good, with the exception proposed, that a microscopical eye could discern. As an old member of the Association, however, he was exceedingly glad to find that a principle for which they had fought for so many years—a principle enunciated by their founder, the late Sir Charles Hastings, and other veterans of the same good stamp—had been recognised by the Government, and somewhat reluctantly, after some tergiversation, by the gentlemen of the Medical Council themselves. It might be that they would not have hereafter seventeen or eighteen Medical examining boards contending, not which should raise the standard of Medical education and qualification, but, in too many instances, contending or striving which should gain most fees by the examinations. That he considered to be a disgrace to any liberal profession, and it was a stigma which he trusted soon to see removed. He apprehended that whether they had one door or three by which students could enter the Profession, it mattered little, provided there was uniformity in the education required, and of fees. (Applause.) If they had the Profession properly represented

in the Council, they would have men who would not hesitate to break up any examining board which would not carry out firmly and strongly a resolution of the kind. The indignant voice of the Profession must be carried out by their representatives at the Council, so as to disperse any tendency, whether in London, Dublin, Edinburgh, or elsewhere, to prostitute the great powers intrusted to an examining Board of lowering the standard merely that students might be attracted and fees secured. Whether there was one board or not, they had a right to demand that a principle of uniformity should be carried out, and his colleagues must have viewed with satisfaction the determination of the Government to see such a principle introduced in the Bill. It was necessary there should be an efficient representation on the Council, and there would then be a guarantee that every man who sought to practise within the three kingdoms should have a fair practical and useful knowledge of the Profession to which he aspired to belong, and that he was not bolstered up by some grinder who tried to make up for the deficiency of an idle and a worthless fellow. Every man would be tested by the bedside of the patient and in the wards of an Hospital, for that alone could make him a fit subject to alleviate the misery he saw around him. He was desirous that the Government should see that the Profession were ready to support them in every way; at the same time they were determined to stand firm, and would resort to every expedient rather than that a Bill should pass which did not provide amongst other things for a proper and due representation at the Council. He begged to move the resolution he had read. (Cheers.)

Mr. H. Lee seconded the resolution.

Dr. Southam, of Manchester, proposed as an amendment that the following rider should be added to the resolution:—"That this meeting is of opinion there should be a single examining board for the entire kingdom instead of different boards for the three parts of the kingdom."

Dr. Haughton, of Trinity College, Dublin, seconded the amendment. Amongst the nineteen corporations that had been accused of having lowered the standard of their Profession, no breath of slander, he ventured to say, had ever been cast upon the noble institution he had the honour to represent. She had stood side by side with Oxford for 300 years, and had always insisted upon the principle that no man should receive a degree in Medicine at either Oxford or Dublin unless he had received a degree in Arts. (Cheers) That principle had not degraded the Profession, but had elevated it on a level with other learned professions around them. The finger of scorn, however, had been pointed at the Medical Profession. It had been said there were nineteen doors through which a student might enter it, and it had been said, too, that they had a body of corporations which were not universal. He was aware that eleven or twelve of those corporations had never consented to lower their standard; but when they spoke of the entire nineteen as having done so, they perpetrated an injustice. In fact, there were not more than six or seven who were competing downwards in that way. If they had three examining boards as they proposed, he believed they would compete in the same direction also, because they would be so independent of the central board as that the supervision over them would not be *bonâ fide*. Those students who were quick-sighted would readily distinguish between the boards, and would prefer the English, or the more wealthy, to either the Irish or the Scotch; whilst those who were not so well educated would take the board through which they were the most likely to pass. And what security was there that the three examining boards would not compete? He should entirely advise all students to come to London for a licence. He argued that the same principle should be carried out in Dublin as in London; and he believed the same advantages might be given in Manchester or Birmingham, or where there was any considerable number of students, if there was a travelling board of examiners whose duty it should be to go from bedside to bedside of the Hospital in each town, and there examine those students who were seeking to qualify themselves as Medical men. The examiners should be taken to the students, and not the students brought to the examiners. It was a great hardship to young men to be compelled to go to London to study, and to spend their money in an examination which might be equally well conducted at their own doors. Such a system had been adopted by two important boards in Ireland and had been found to be successful. Professor Haughton spoke against the resolution, and expressed an opinion that if it was carried it would not increase their chance of success with the Government. The great point after all which the Profession wished to secure was that there should be a direct representation upon the Medical Council, He did not believe in any timid policy which said they must not ask for too many things. He would advise them to ask for what they wanted, and he doubted not they would get it. He believed that Government would approve of one examining board being appointed for the three Kingdoms. He then referred to the Bill brought into the House of Commons by Mr. Graves, the member for Liverpool, and by Sir John Gray, and said it would most likely act as a lever against the Government, who would be forced, as it were, to do something for the Medical Profession. That Bill was also introduced to divert the kind attentions of Parliament from Ireland. No doubt there had been much good intention of late bestowed upon Ireland—indeed there had been so much kindness displayed towards the sister country by Mr. Gladstone and the House of Commons that he and his friends were exceedingly anxious to see that attention devoted to some other subject. (Laughter.) They took the disestablishment and disendowment of the Irish Church good-humouredly; at the same time they were not like eels, used to skinning.

Dr. Sibson opposed the amendment in an eloquent speech, in which he urged the impracticability of the travelling examining board scheme, and the difficulty of conducting clinical and other practical examinations by metropolitan examiners in provincial towns.

After some lengthened discussion, in which Dr. Gibbon, Dr. Ramsey, Dr. Clarke, Dublin, Mr. Clayton, Dr. Mackintosh, Dr. Stewart, Dr. Webster, Dr. Hextall Smith, and other gentlemen took part,

The Chairman asked the meeting whether they would adopt the resolution in its entirety, or the resolution and the rider combined.

The meeting divided on the question, and by a large majority the Chairman declared the resolution with its rider to be carried.

Dr. Waters, of Chester, then rose to move the second resolution. He said he was glad to find there was a divided opinion with respect to the first motion, because it showed that gentlemen had not attended the meeting with any preconceived views or settled notions upon the various points involved in the Bill introduced by the Government into the House of Lords. The resolution he had to move commended itself in every way to the members of the Association; in fact, it was a part and parcel of the Association. It was brought forward in Dublin at the most influential gathering of the Association ever held, when gentlemen from all parts of Great Britain were assembled together, and it was passed almost, if not quite, unanimously. There were only two gentlemen who held up their hands against it, and one of them had since fallen in with the views of the majority. At Oxford a resolution similar in its bearing had been passed unanimously, and the same thing had been repeated at Leeds. It was a resolution, he might say, involving the great prayer of the Association, without which no measure of Medical reform could or would be admitted to be satisfactory by the Profession—it was that educated men should have the power of electing their representatives to the General Council. On the first occasion of his entering into this question he felt some doubt in his mind as to whether it was really necessary to alter the position of the Council, but since then he had changed his opinion, and he had great pleasure then in moving, in order that a larger interest might be taken in the working of the Council by the Profession generally, "That this meeting views with regret and disappointment the entire absence of the claim of the Profession to direct representation on the Medical Council, and pledges itself to exercise every constitutional means to secure this vital and all-important principle in any measure of Medical reform that may become law." If ever there was a point on which strength of opinion was required, it was with reference to this subject. They knew that qualified men had brought their intelligence to bear on this matter, they knew that nearly 10,000 members of the Profession had signed a memorial in favour of the principle, but there were members who did not join in that memorial on account of its containing other matters, but who, with that exception, were wholly and entirely with the majority. He had great pleasure in moving the resolution.

Dr. Stewart seconded the motion. He never doubted, he said, of the great merit of the principle involved, for it embodied simple justice to an enlightened and self-sacrificing Profession. (Hear, hear.) He thought it was monstrous that at any time the members of the Medical Profession should be excluded from having a direct and potential voice in the management of their affairs. For some time he had doubts as to the mode of carrying it out, but now he was satisfied that the plan they proposed was the best one. It was a principle to carry

out which their entire energies ought to be directed, because it was one that was founded on jnstice and propriety, and would, he believed, be followed by the most beneficial results. It would promote confidence amongst the whole body of the Profession; in the first place, in the composition and constitution, and the next, in the proceedings of the Medical Council, giving besides an immense aid to their deliberations and decisions. He was fully prepared to give his complete adhesion to the principles proposed in the report of the committee. He was sure that the Profession were deeply indebted to Dr. Waters for the steps he had taken in the matter for several years past. He had thrown his whole heart and soul into the matter, and it must be exceedingly pleasing to him to see there was so large a response to his proposition throughout the country. (Applause.)

Dr. Seaton, of Sunbury, said it was with considerable diffidence he rose to propose an amendment to the resolution just proposed. It related to the mode in which the principle involved should be carried out, and merely improved, as it were, the wording of the resolution. In the present form the Council would have to be either disfranchised or enlarged if a number of new members was to be introduced into it. It had been said that the change in the Corporations would involve the granting of new charters, a bugbear that had terrified a large number of members. Now no new charter was wanted at all in reference to the College of Physicians and other colleges, and he could not see why it should be required in this instance. He moved an amendment to the wording of section 4 of the 21st and 22nd Vict., cap. 90, to the effect that the General Council should consist of one person chosen from time to time by the graduates or members of each of the several bodies.

Dr. Ramsey seconded the amendment, but as it was thought to be injurious to the interests of the Profession at the present moment, it was by consent withdrawn.

Motiou carried.

Mr. Harrison moved the next resolution, and in so doing said that the sin of commission in the new Bill was that it left everything in the hands of the Privy Council. He thought, therefore, the motion which had been put into his hands would meet with more unanimity than any other. He thought they did not want the intervention of any Government to put them in the way of conducting their own affairs, or in the mode of imparting education, preliminary or subsequent. He moved—"That this meeting of the British Medical Association offers its determined opposition to any Bill which gives to the Privy Council more extended or other control over the Medical Profession than is given to it by the Medical Act of 1858."

Dr. Hall, of Sheffield, as an old member of the General Council of the Association, had great pleasure in seconding the resolution, because he did not think it desirable, in the interests of the Profession, that extended powers should be given to the Privy Council, there being too much of taxation and too little of representatiou already.

Carried unanimously.

Dr. Davey, of Bristol, then moved as follows:—"That this meeting regrets the omission from the proposed Medical Acts Amendment Bill of any plan whereby the Fellows, Members, and Licentiates of the universities and other Medical bodies or corporations in the United Kingdom are empowered to vote in the election of president or other officers to or in such Medical bodies respectively, and would suggest the addition to the proposed Medical Acts Bill of a clause giving direct representation to the Members and Licentiates aforesaid in such several Medical bodies or corporations."

After some discussion the motion was postponed.

A vote of thanks to the chairman for his courtesy in presiding closed the proceedings.

NEW BOOKS, WITH SHORT CRITIQUES.

The Safe and Speedy Treatment of Urethral Stricture by Means of Laminaria digitata. By Henry Albert Reeves, Assistant Surgeon to the Loudon Hospital. London: Renshaw. Pamphlet.

*** Any remedy for that distressing complaint—stricture of the urethra—deserves a fair trial, and Mr. Reeves's application of the well-known properties of tangle is a happy one. In his hands the treatment has been most successful, transforming an almost impassable stricture in the course of an hour to a passage capable of admitting a No. 12 catheter. We may add that Mayer and Meltzer, of Great Portland-street, are the manufacturers of the instrument used by Mr. Reeves.

A Practical Guide to the Study of the Diseases of the Eye; their Medical and Surgical Treatment. By H. W. Williams, A.M., M.D., Ophthalmic Surgeon to the City Hospital, Boston, University Lecturer on Ophthalmic Surgery, Harvard University, etc., etc. Third Edition. Boston: Field, Osgood, and Son. Pp. 422.

*** This unpreteuding volnme seems admirably fitted for its purpose—that of giving to students a clear and condensed account of ophthalmic diseases. It does not aim at depth, it aims at practical value; many details are avoided to secure condensation, and the volume is illustrated by some very good diagrams. In get-up the book presents a very great improvement on what used to be characteristic of American products—an improvement which has for some time been noticeable as far as all the more important publishers are concerned. The printing of the test-types is admirable.

A Guide to the Examination of the Urine; intended chiefly for Clinical Clerks and Students. By J. Wickham Legg, M.D. Lond., M.R.C.P., Physician to the St. George's Dispensary. Second Edition. London: H. K. Lewis. Pp. 88.

*** Dr. Legg's little manual has met with remarkable success, and the speedy exhanstion of the first edition has enabled the author to make certain emendations which have added greatly to its value. We can now confidently commend it to the student as a safe and reliable guide to such examinations of urine as he may be called on to make. The appearance of the book is considerably improved.

Half-yearly Compendium of Medical Science. Part V., January, 1870. Edited by S. W. Butler, M.D., D. G. Brinton, M.D., and G. H. Napheys, M.D. Philadelphia: S. W. Butler.

*** We have before this time directed the attention of our readers to this meritorious compilation. It gives a very fair account of the six months' work done in Medicine and Surgery. The greater portion is taken from our own periodicals, but much is American, and will afford its readers a fair notion of American advance.

The Canadian Naturalist (Montreal: Dawson Brothers),

*** is a most creditable quarterly journal of science. It contains a vast deal of interesting matter relating to botany, zoology, and geology.

GENERAL CORRESPONDENCE.

EARLY OPENING OF THE NEW BATHS OF BORMIO.

Letter from Dr. C. J. B. Williams, F.R.S.

[To the Editor of the Medical Times and Gazette.]

Sir,—In my "Notes on Alpine Summer Quarters for Invalids," which appeared in the *British Medical Journal* last autumn, I called attention to the remarkable eligibility of Bormio, as combining many advantages not to be found in the Engadine and other high districts in Switzerland.

At a height of 4600 feet, it is nevertheless sheltered from the colder winds from the north and east by the lofty Stelvio mountains immediately behind it; and although it has high mountains on all sides, yet those to the south are at a greater distance, and do not shut out the warming and vivifying influence of the sun's rays. Consequently, during the winter and spring months, Bormio preserves a temperature much higher than any place in Switzerland of equal height, whilst the dryness of the soil and smaller amount of rainfall precludes all damp in summer, and any great accumulation of snow in winter and spring. From a letter just received from M. Caflisch, the intelligent manager of the Bagni Nuovi of Bormio, I find that during the last month there has been no snow, but uninterrupted fine weather, and although the high mountains are still covered, these are not near enough to give to the air the damp and chilly feel, with fog and clouds, so prevalent in Switzerland at this season.

These observations, therefore, confirm the recommendation which I gave of this place for the trial of the alpine cure, for suitable patients who have passed the winter on the Riviera or in other warm places of the south. I quite participate with my friend Dr. Hermann Weber in the belief that the high alpine climate is likely to be beneficial in certain cases of phthisis and scrofula, but I think that the trial will be more safely and agreeably made, if, in selecting the high stations, a preference be given to those which are most sheltered from the coldest winds, and most free from the chill and dampness arising from the propinquity of melting snowfields and icy lakes.

I have just been informed by M. de Planta, chief proprietor of the Bagni Nuovi, that the establishment was opened for the reception of visitors on April 22, in compliance with a suggestion which I made in my "Notes;" therefore any that are recommended to try the fine air of this favoured locality may be comfortably accommodated.

At present, the only way of access is up the Valtelline by road from Como and other parts of Italy, but in another week it is expected that the Stelvio pass will be open from the Tyrol and other parts of Germany.

I also recommended Le Prese, in the Poschiavo valley of the Valtelline, at a height of 3000 feet, as an early summer residence. There is a very comfortable hotel, also with a bathing establishment, but I have not heard whether it is yet open for travellers.

I am, &c.

C. J. B. Williams.

49, Upper Brook-street, May 7.

ON THE CORRELATION OF FORCES IN HEREDITARY DISEASE.

Letter from Dr. J. M. Winn.

[To the Editor of the Medical Times and Gazette.]

Sir,—Observations made during a long period, both in a lunatic asylum and in private practice, led me to the conclusion that many hereditary complaints were mutually convertible—in other words, were the result of a correlation of forces. More than a twelvemonth since I published an essay "On the Nature and Treatment of Hereditary Disease," in which I gave numerous examples to prove this correlation. Since that time extended observation, and the gratifying testimony which I have received from many scientific friends, both in and out of the Profession, have confirmed my belief in the truth of the views which I then advanced, and convinced me that they are founded on sound principles, and supported by undeniable facts. The cases which I adduced to prove a correlation of forces had reference to mania, epilepsy, scrofula, phthisis, and cutaneous affections. I suggested that gout and cancer might probably belong to the same group, but could not at that time speak confidently on that point. I have now no hesitation in including these diseases, as well as hereditary rheumatism, in the same generalisation. I will proceed to refer, very briefly, to a few striking examples, to show how the force which produces hereditary disease manifests itself in different forms in numbers of the same family, and even vicariously in the same individual. Some of these have already appeared, the others have come under my notice during the past year. 1. Mrs. ——, aged 40, had been troubled with psoriasis for many years. The rash disappeared, and she became acutely insane. On the subsidence of the maniacal attack the psoriasis reappeared. 2. Three children in one family were afflicted with hereditary disease; one was a victim of epilepsy, another of phthisis, and the third of insanity. Their aunt and two cousins died of phthisis. 3. Mr. ——, aged 24, was sent to a warm climate on account of decided symptoms of phthisis. Whilst abroad the disease was arrested, but was followed by an attack of acute mania. 4. Miss ——, aged 19. This was a case of religious mania, succeeded by phthisis. 5. Miss ——, aged 25. Scrofula, followed by suicidal mania. 6. Miss ——, aged 27. Chronic monomania of suspicion. Her uncle died of phthisis. 7. Count ——. Became insane late in life, and died in an asylum. His daughter suffered severely from scrofula, and subsequently died of phthisis. 8. Mr. ——, aged 25. Profound melancholia. One of his sisters died of phthisis. Two sisters died insane. Two brothers died of phthisis, and one sister is exceedingly eccentric. The mother died of pulmonary consumption. 9. Mrs. ——, aged 33. A decided epileptic. Her father and mother are dipsomaniacs. 10. Miss ——, aged 14. Epileptic. Her uncle died of phthisis. 11. Mr. ——, aged 18. Psoriasis of head and face. Father died of phthisis. 12. Miss ——, aged 12. Severe eczema of the scalp and neck. Mother died of cancer. 13. Master ——, aged 7. Dry eczema of the face, etc., of two years' duration. His mother has been subject to melancholia for upwards of four years, and his grandfather was a martyr to gout. 14. Miss ——, aged 18. Melancholia of many weeks' duration. Several of her family have suffered from scrofula. 15. Miss ——, aged 20. Religious melancholia. Father is a very gouty subject. 16. Miss ——, aged 24. In this case, maniacal excitement and rheumatic fever occurred alternately. 17. Mr. ——, aged 40. Incoherent mania of more than ten years' duration. His sister died of cancer of the œsophagus. Similar cases to these are familiar to most Medical men, and might be multiplied to almost any extent, but these are sufficient to prove the truth of my induction—that the doctrine of a correlation of forces can be applied to the phenomena of disease as well as to those of life.

With respect to the nature of this mysterious force, it can be no more explained than that of any other force, but its effects are evident. The present state of our knowledge will not admit of its being considered identical or correlate with physical force. As it is destructive of life, and therefore opposed to vital force, I have provisionally termed it morbific force. Force is inseparable from matter; and if we assume that a deleterious energy is capable of lying dormant in the molecules of the nervous system until developed by some exciting cause, we can understand how it may be frequently transmitted from grandparents to grandchildren without any manifestation of its existence in the intermediate generation. That a morbific force, inherent in an infinitesimal quantity of matter, is sufficient to inoculate the body with the most virulent disease is shown by the manner in which zymotic diseases are communicated. But whatever may be the nature of this disease-producing force, or wherever it may reside, the generalisation remains the same—that hereditary diseases, whatever their form, arise from one cause; and if this induction be granted, its practical application is of the utmost importance. If there be but one cause, it follows that there must be but one general plan of prophylactic treatment. This would comprise the questions of selection in marriage and hygiene, with a view to maintaining health and suppressing disease in those who are disposed to hereditary ailments. These are subjects of the deepest interest to every one, but my present object is only to establish a theory, not to enlarge on its application.

I am, &c. J. M. Winn, M.D.

Harley-street, Cavendish-square, May 14.

CASE OF POISONING WITH BELLADONNA AND OPIUM.

Letter from Dr. S. K. Cotter.

[To the Editor of the Medical Times and Gazette.]

Sir,—Not being aware whether the following facts have ever been brought before the Profession, I venture to forward them to you as bearing on the question of the efficiency of belladonna as an antidote to opium, and *vice versâ*. The case happened in 1866, and did not come under my own observation, but was described to me simultaneously by the lady herself and by two other members of her family, who are remarkably accurate and observant, and on whom the facts are the more deeply impressed owing to the extreme anxiety it caused them at the time. The following notes were taken in July, 1868:—

On Monday morning, at about 9 a.m., Miss ——, who was suffering from facial neuralgia, took by mistake half a wineglassful of the following liniment:—Extract belladon. gr. 120, tinct. opii ʒij., glycerine ʒiij., water ʒij., misce. The quantity of this liniment taken appears to have been about a fluid ounce and a half. Immediately after swallowing it she felt and exhibited a sudden exhilaration of spirits and a rush of blood to her head; her face flushed, and her eyes "sparkled and danced in her head." Her spirits became perfectly effervescent, and she felt, as she described it, "as if she was swimming in the air." Soon after this she found herself unable to swallow, and towards 11 o'clock was seized with an irrepressible drowsiness. She made several attempts to read and to play on the piano, but "the letters blended into lines," and she could not tell the notes apart. Her tongue was apparently swollen, and it and the lips became covered with a thick brown coating. The cheeks were puffed out and flaming hot. The pupils were from the very first contracted to a minute speck. At about 11.30 she was able to gulp down in small quantities, and by great voluntary efforts, a cupful of very strong tea. During all this time she had her senses perfectly, and made the strongest efforts to fight against the sensations and impulses which she experienced. And (though unaware at this time of having taken poison) to her vigorous co-operation much of her recovery seems due. She tasked herself to run up and down stairs; but she was unable to keep from chattering incessantly, and she seemed at this time like a person noisily drunk. At about 12 noon she was seen by a Physician, and, seeing by his face that there was cause to fear, she became instantly insensible. Immediately emetics of all sorts were given, but none of them were found to operate. She was walked up and down between two persons constantly. This she did staggeringly, talk-

ing thick and slowly like one helplessly drunk; her face was perfectly livid. Walking was maintained from 1 p.m. till 9 p.m., and then from drowsiness she lapsed into fierce excitement and effervescence of spirits, but without tendency to injure herself or others. She became more sensible, and endeavoured to play at cards, but could not distinguish the cards apart, and called everything by a wrong name, and used one or two words or names to signify everything. The excitement calmed down in about two hours, and she got into a sound sleep, which lasted till about 7 next morning. On waking, she seemed weighed down with irrepressible languor. Her face resumed its congested appearance, her nose bled profusely, and hysterical sobbing came on. Recovery progressed steadily till the following Saturday, when the skin desquamated. She was able to go out on that day, but was very weak and unsteady, and the eyes were preternaturally bright and wild-looking. The contraction of the pupils continued for fully a fortnight. During that first week, and even for months after, she saw rashes and specks on everyone's face, and their eyes, nose, and mouth looked double. She narrates that for weeks afterwards she was awakened each night by spasmodic grasping of the hands, with rigidity of the lower jaw, and a violent impulse to scream. For months after it was remarked (herself being conscious) that she used words incorrectly, and forgot many, as well as the names of persons and things. She was remarked also to forget the whole tenor of conversation in the middle of a sentence. She lost flesh rapidly, and her health from that time forward became much deteriorated for a year. When I first saw her in the middle of the year 1868, she seemed completely recovered, but her friends say that she has never been so well since that occurrence.

These are about all the facts which I have been able to ascertain, and of their accuracy I have not the slightest doubt. On the supposition that she took ʒiss. of the liniment, she would be taking somewhere about 25 grains of the extract of belladonna and about 12 grains of opium, either of which, if taken by itself, would have produced a fatal result in all probability, and the preservation of her life is difficult to be accounted for, except on the supposition of mutual counteraction.

I am, &c. S. K. Cotter, M.B., M.Ch.

St. Helena, February 12.

PROVINCIAL HOSPITAL REPORTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—There were some editorial remarks in your journal of last week which had reference to the forthcoming "Manchester Medical and Surgical Reports," in which it was affirmed that there was no need of such a publication, as all that was likely to be of value would be better published in one of the periodicals, while there was the direct evil in such reports of burying matter in a way that would render it difficult of future reference. Permit us, Sir, to remark on these statements, which are calculated to injure an undertaking already sufficiently arduous.

In regard to the first statement, we have only to say that it would be quite impossible to publish the papers which will constitute the *pièces de resistance* of our Reports in any weekly periodical, impossible not only from their length, but also from the fact that they will contain photographs, large woodcuts, and coloured drawings. In regard to the second point of objection, we beg to remark that, if good, there is no fear of their being buried out of sight, any more than are the Hospital reports of your own city, some of which are amongst our most valuable publications. The days of provincialism are past, and if the "Manchester and Surgical Reports" are well done, there is assuredly no reason why they should not be published, read, and referred to, as well as your own or any other periodical.

We are, &c.

The Editors of the "Manchester Medical and Suroical Reports."

Manchester.

The Epidemic of Small-pox in Paris. — The number of the cases of small-pox during the week ending May 14 has again increased to 179, in a total mortality of 1210.

Mercurial Suppositories in Constitutional Syphilis.—Professor Lebert states that he has of late had such success in the employment of these that he is desirous of calling attention to their value. They are formed by mixing mercurial ointment with butter of cocoa and white wax so as to obtain a convenient consistence.—*Berlin. klin. Wochenschrift*, April 4.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, April 5, 1870.

Richard Quain, M.D., President, in the Chair.

Dr. Dick exhibited a child with spots on the skin similar in site and appearance to post-mortem sugillations. The mother had cleaned out a room after an inquest while pregnant with the child. It was suggested they might be due to maternal impressions.

Mr. Balmanno Squire exhibited a living specimen of Sebaceous Ichthyosis, and another of the ordinary or epidermal kind to contrast with the former, which was almost congenital. Also a specimen of Lupus on the calf of the leg, a situation in which he had not before seen it. A fourth specimen consisted of the Prurigo of Hebra, which differed from the ordinary form as seen in this country, and was limited to the legs and thighs.

Dr. Tilbury Fox said sebaceous ichthyosis consisted of simple plugging of the glands. The disease called lupus was strumous inflammation of the leg. He was glad to hear that Mr. Squire had given up the theory that prurigo was in all instances caused by lice.

Dr. Hilton Fagge was willing to admit that scales do not prove the non-sebaceous origin of ichthyosis, but it was quite different when they were laid down layer after layer on each other.

Mr. Holmes showed a Tumour of the Upper Jaw, on which he said he would court opinion. It grew in eleven weeks, and occurred in a woman aged 35. It was first supposed to be an abscess of the antrum, and a tooth was drawn and the bone incised. No pus followed, but the growth increased rapidly, although the woman was in good health. It was neither vascular nor sensitive, but it implicated most of the jaw. It was removed by a single incision along the nose, and the patient was now nearly well. He thought it looked like a myxoma.—Referred to Committee.

Mr. Holmes also showed a specimen of Diffuse Periostitis of the Tibia occurring in a boy aged 8, and following on a slight injury. When seen the right leg was much swollen, and there was much matter below the periosteum. This was allowed to escape, when the tibia was found exposed. The ankle-joint was unaffected. He tried to avoid amputation, but the boy got worse; pyæmia set in, and he died a month after the onset of the disease. The specimen showed that although the disease was most extensive, even to separating the epiphysis, the medulla might be quite healthy.

Mr. Croft said a case had been under Mr. Simon of acute necrosis of the tibia. Amputation was proposed, but he preferred turning out the diaphysis of the bone. The central parts were sound.

Dr. Payne and Mr. De Morgan reported on Dr. Moxon's specimen of perforated œsophagus. They considered the opening *not* to be due to violence.

Mr. Croft, for Mr. Wagstaffe, showed a specimen of horn which had been growing from the leg of a woman for forty years. It originated on the inside of the leg, six inches below the knee. The woman, who was 75 or 80 years old, had several smaller ones on her thighs. The height of the spiral coil constituted by the horn was three inches, its total length fourteen. Its structure was epithelial, with some oily matter.

Dr. Wiltshire had seen one on the face of an old lady. Others were recorded.

Mr. Croft also showed for Mr. Wagstaffe a specimen of complete Dislocation of the Spine. The patient was paralysed by a blow on the loins. There was no pain at the seat of injury. The patient died three months and a half after the injury, when there was found dislocation of the first and fracture of the second lumbar vertebræ. The cord must have been displaced and compressed.

Dr. Tuckwell, of Oxford, showed a specimen of Obstructed Gall-ducts from the hepatic duct upwards. The obstruction seemed to be formed of a number of concretions welded together. A large abscess in the right lobe containing calculi opened into the pleura. The cystic and common ducts were dilated, as if from previous calculi. Stones also existed in the much gall-bladder. The patient was a woman aged 60, who, up to four days before her death, had no jaundice.

Dr. Tuckwell also showed some solid Bronchial Casts brought up by a boy suffering from advanced bronchitis. Each expul-

sion was preceded by coughing and dyspnœa, but no hæmorrhage. He had five or six weeks of relief between each attack.

Mr. Squire asked if there was any history of diphtheria.

Dr. Tuckwell said no.

Mr. Squire showed what appeared to be a Fibrous Polypus of the Nose, which consisted merely of fibrine from blood. Each contained some cotton wool in the centre. It had been introduced to arrest bleeding.

Dr. Morell Mackenzie exhibited a large sarcomatous growth removed from the under surface of the epiglottis. The growth weighed fifty grains, and measured one inch by three-quarters of an inch. The peculiarity of the case was, that when the patient, a retired Indian officer, aged 51, left London, November 6 last year, for Cannes, there was no sign of any tumour. He returned January 8, 1870, with the very large neoplasm now exhibited. Tracheotomy had been performed as a preliminary step, January 14, and the growth removed by a guarded wire écraseur, March 6. There was now no trace of disease in the epiglottis.

Dr. Morell Mackenzie also showed a large tumour removed from the posterior surface of the cricoid cartilage. The patient was a single lady, aged 37, who had noticed an impediment in deglutition for three years and a half. She was of a highly nervous temperament, and as the obstruction was by no means constant, it was thought to be a case of functional dysphagia. The laryngoscope, however, revealed a very large growth, situated rather below the arytenoid cartilages, and covering the entire mouth of the œsophagus, except a small portion on the left side. After consultations with Sir William Jenner and Sir William Fergusson, it was decided to attempt removal of the growth. This was successfully done, March 27. On the next day no trace of the tumour was seen. The mass removed was of a highly divided and lobulated appearance. It weighed seventy-five grains, and measured an inch and a half by three-quarters of an inch. Neither growth had been examined microscopically, in order that they might be presented intact to the Society. They were referred to the Morbid Growths Committee. Referred.

Mr. T. Smith asked how the mass was removed.

Dr. Mackenzie said by a guarded écraseur specially made.

Mr. Cowper described the case of a child with Congenital Absence of the Anus. It was 40 days old when he operated. He divided the skin near the coccyx, and opened into a canal, which, however, was not the gut, as that ended near the promontory of the sacrum. He had reached the upper portion of the vagina, which seemed like a pouch filling the whole pelvis. The uterus was malformed.

Dr. Beigel exhibited the pubis of one of the Russian sect called Skoptze. The genital organs were completely shorn away. They exercise great secresy in the rites of their religion, and this individual had only been discovered owing to his sudden death on the road.

Mr. Hulke said the eunuchs in the East were disfigured in the same mode.

Mr. Fairlie Clarke exhibited patients having symmetrical opacity of the cornea. There had been no acute symptoms. They occurred in men 40 to 50. They had been coming on for fifteen years. Cases of the same kind were recorded by Bowman and Dixon. In Bowman's case the deposit was calcareous.

Mr. Spencer Watson had seen the patients, and generally confirmed Mr. Clarke.

Mr. William Adams exhibited specimens showing tendons operated on for club-foot—in one case six years ago. Reparation was complete. In another it was not quite so. It had been asserted that the tendon of the tibialis porticus does not unite—the specimen proved they did. The other patient, a girl, died some weeks after the last operation; here repair was imperfect.

Mr. Barwell asked if there were any adhesions.

Mr. Adams said in one, not in the other. As a rule, he extended for a time before operating.

Mr. Sydney Jones exhibited a specimen of Constricted Intestine. He had been called to see the case as the patient had been suffering from vomiting and the bowels had not been opened. The patient died. Near the lower end of the ilium were old adhesions, and calcareous deposits in the glands. A fibrous band, apparently omental, was here constricting the gut, but in the large intestines were the same contractions. Could these give rise to symptoms of strangulation? He thought certain cases would favour that view.

Dr. Wilberforce Smith exhibited specimens of Cancer from the ribs, hip, and crura cerebri of the same patient, who was consequently hemiplegic. The paralysed side was œdematous.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, April 16, 1870.

Dr. Aldis in the Chair.

At this meeting a most important paper was read by Dr. Angus Smith "On the Composition of London Air." Having shown in his report on the Alkali Act, for 1868, the advantages to be derived from systematic examination of rain, and in its absence from the systematic examination of air washed with distilled water, Dr. Angus Smith has in the interim been pursuing his investigations. His paper read before the Medical officers gives a number of results of the highest importance obtained by him, in anticipation of his fuller annual report now in the press.

In his analysis of rain, Dr. Smith took the result obtained at Row, Dumbartonshire, as his unit of reference. The following was the result of his experiments in respect of hydrochloric acid, taking free and combined together.

Row, Dumbartonshire	100·00	1
Darmstadt	138·70	1 1/3
London	177·59	1 3/4
German specimens	191·24	2
Birkenhead	461·87	4 1/2
Near an alkali works	495·83	5
Whiston	512·24	5
England, inland country places	734·21	7 1/3
Manchester, three stations	838·70	8 1/3
,, All Saint's, 1869	906·91	9
,, ,, 1868	1438·00	14 1/3
Scotland, sea-coast and inland country places	1133·20	11 1/3
Newcastle-on-Tyne	1158·77	11 1/3
St. Helen's	1358·45	13 1/3
Liverpool	1684·30	16 1/3
Runcorn	3670·47	36 3/4
Waterloo	5214·30	52

There is an increase of chlorides near towns, greater where most coal is burnt, still more where chlorides are decomposed, and most at the sea during wind. The proportion of sulphur acid in rain was found to be—

Scotland: Sea-coast and inland country places	60·99	1/2
England: Inland country places	83·05	2/3
Row, Dumbartonshire	100·00	1
Waterloo	229·34	2 1/4
Birkenhead	264·47	2 1/3
German specimens	377·51	3 3/4
Whiston	398·28	4
London	478·64	4 3/4
Runcorn	551·79	5 1/2
Darmstadt	681·25	6 3/4
Liverpool	706·02	7
St. Helen's	775·17	7 3/4
Newcastle-on-Tyne	891·43	9
Manchester	973·07	9 3/4
,, All Saints, 1869	1192·39	12
,, ,, 1868	973·00	9 3/4
Near an alkali works out of order	1470·00	14 3/4

An increase is observed in the sulphates where there is much vegetable, animal, or manufacturing activity. In a summary of comparative results the total acid is given as follows:—

Row, Dumbartonshire	100·00	1
England: Inland country places	174·71	1 3/4
Scotland: Sea-side and inland country places	211·93	2
German specimens	351·71	3 3/4
London	436·27	4 1/3
Whiston	470·67	4 3/4
Birkenhead	528·29	5 1/4
Darmstadt	604·87	6
St. Helen's	857·21	8 1/3
Liverpool	938·21	9 1/3
Waterloo	961·98	9 1/2
Runcorn	990·79	10
Manchester	954·16	9 1/3
,, All Saints, 1869	1153·92	11 1/3
,, ,, 1868	1175·54	11 3/4
Newcastle-on-Tyne	1054·73	10 1/3
Near an alkali works out of order	1539·27	15 1/3

Row or Gareloch, in Dumbartonshire, was taken by accident

as the basis of calculation. A calm day at sea would be better; a calm day on a mountain-top best of all. The gradation from pure to impure obtained in the results is so much in accordance with what one would naturally expect in the places examined as to justify the belief that the mode of inquiry pursued is one to be thoroughly relied on as a guide to the condition of town or artificial atmospheres. It is the quantitative examination of the air. In the same report Dr. Smith said, "when there is no rain the same proportional results may be obtained by washing large volumes of air." This method has been tried in several places with the same proportional results, as follows:—

Air—Hydrochloric Acid.

Blackpool being taken as the basis.

Blackpool	100
Buxton	247
Didsbury	277
London	320
Manchester	369
St. Helens	516
Underground Railway	974

Air—Sulphuric Acid.

Blackpool	100
Didsbury	320
Buxton	345
London	361
St. Helen's	468
Manchester	549
Underground Railway	1554

Summing up the comparative results:—

Air—Total Hydrochloric and Sulphuric Acids.

Blackpool	100
London	289
Didsbury	315
Buxton	333
St. Helen's	474
Manchester	527
Underground Railway	1483

Inellan was taken as the basis in calculating the ammonia in the air.

Air—Free Ammonia.

Inellan	100
London	117
Underground Railway	138
Glasgow	159
A bedroom	194
Inside and outside office	235
A midden	644

Air—Albuminoid Ammonia.

Inellan	100
London	116
A bedroom	173
Inside and outside office	194
Glasgow	221
Underground Railway	271
A midden	302

Air—Total Ammonia.

Inellan	100
London	117
A bedroom	179
Glasgow	202
Inside and outside office	205
Underground Railway	235
A midden	396

It was purely by accident that Inellan was taken as the standard, and there was an unfavourable wind at the time. A better result will be procured on another occasion.

In the forthcoming report fuller details will doubtless be given; but we already see in these results what a firm step has been made towards the examination of the air by chemical means. Dr. Smith said he was much surprised to find, after accumulating many figures, that the numbers came in such an order as to lead him to believe that they were according to the healthiness of the place. These experiments did not, he said, affect the germ theory; although they proved albuminoid matter in the air, that matter was not necessarily a germ of disease. It was decomposed by Wanklyn's process.

Diseases arising from germs will not be wholly prevented by abundance of air. Dr. Smith was brief on this point; although believing the theory, he considered that the final proof demanded by science was wanting. Many organic substances were found in air, but we could not be certain that any known one could begin a disease.

In respect of the oxygen in the air, it was shown to vary considerably, the quantity being greatest on the heaths in Scotland, and least at the backs of houses in towns. The proportion of carbonic acid in air varies from 336 in open to 25,000 per million in close places in mines, but carbonic acid in small amounts is far less injurious to breathe than organic matter. The latter is also soonest detected. The elimination of the organic matter is consequently the more important. In conclusion Dr. Angus Smith considered the quantity of ammonia present in the air to be probably the best test of its impurity. By means of it a certain reliable standard could be arrived at below which houses and courts could be authoritatively condemned, opinion giving way to positive certainty, other substances, however, not to be neglected, the acids being most important where chemical works were concerned.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 17th inst.:—

Alabone, Edwin William, Hackney, of Guy's Hospital.
Benson, Thomas, Newcastle-on-Tyne, of the Newcastle School.
Colborne, John George, Tachbrook-street, Pimlico, of the Middlesex Hospital.
Crompton, Harold, Bury, Lancashire, of the Manchester School.
Fasken, William Andrew Durnford, Portsmouth, of Guy's Hospital.
Galpin, Richard, L.S.A., Dorchester, of Guy's Hospital.
Henley, Anthony Alfred, L.R.C.P. Edin., Clifton, Bristol, of St. Bartholomew's Hospital.
Hepworth, William Henry, M.D., Victoria College, Toronto, Yorkville, Toronto, of the Toronto School.
Jalland, William Hamerton, Nottingham, of Guy's Hospital.
Jones, Thomas, Durlwyn, near Carmarthen, of Guy's Hospital.
Ling, Edward Clayton, L.S.A., Saxmundham, of the Middlesex Hospital.
Lucas, St. John Welles, L.K. and Q.C.P. Ire., Manchester, of the Manchester School.
Madeley, Edward, Kensington, of King's College.
May, Walter, Ballickmoyler, Queen's County, Ireland, of the Dublin School.
Newstead, James, L.S.A., Bubwith, Yorkshire, of St. Bartholomew's Hospital.
Parsons, Arthur Daniell, Wimbledon, of St. Mary's Hospital.
Pinder, George Holtby, Whitby, Yorkshire, of the Manchester School.
Robinson, Tom, L.S.A., Saxby, Lincolnshire, of the London Hospital.
Westcott, William Wynn, L.S.A., Martock, Somerset, of University College.
Wilkinson, Robert, Newcastle-on-Tyne, of the Newcastle School.
Wolverson, Thomas, Cannock, Staffordshire, of the Birmingham School.

Three candidates passed their examinations in Surgery, and when qualified in Medicine will be admitted Members of the College, and four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their Hospital studies for six months.

The following gentlemen passed on the 18th inst.:—

Norton, Herbert, L.S.A., Westbourne-grove, of St. Mary's Hospital.
Yates, Walter Peel, L.S.A., Nottingham, of Guy's Hospital.

Five candidates passed their examinations in Surgery, and when qualified in Medicine will be admitted Members of the College, and nine candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their Hospital studies for six months.

New Fellows.—At the last meeting of the Council of the Royal College of Surgeons, the following Members of the College were elected Fellows:—

Simpson, Frederick Hamilton, of Fore-street, Cripplegate, diploma of Membership dated March 10, 1842.
Tilley, Samuel, of Union-road, Rotherhithe, November 4, 1836.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, May 12, 1870:—

Bryant, John Henry, Sussex-square, W.
Hunt, Thomas Henry, Hulme, Manchester.
Morris, John Edward, Gosberton, Lincolnshire.
Toyne, Henry William, Bradford, Manchester.

The following gentlemen also on the same day passed their First Professional Examination:—

Drew, William Thomas, St. Mary's Hospital.
Gaston, William, St. Thomas's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Harrison, Reginald, F.R.C.S.—Lecturer on the Principles and Practice of Surgery at the Liverpool Royal Infirmary School of Medicine.

MILITARY APPOINTMENTS.

BREVET.—Staff Surgeon Major John Thomas Watson Bacot, who retires upon half-pay, to have the honorary rank of Deputy Inspector-General of Hospitals; May 18.

WAR OFFICE.—17th Lancers: Staff Assistant-Surgeon Edmond Hoile, M.D., to be Assistant-Surgeon, *vice* Joseph Edward O'Loughlin, deceased; April 27. 18th Foot: Assistant-Surgeon Edmund Maurice Downing Fitzgerald, M.D., from the 56th Foot, to be Assistant-Surgeon, *vice* William Isaac Spencer, who resigns; May 18. 56th Foot: Staff Assistant-Surgeon Gough Ashton, M.B., to be Assistant-Surgeon, *vice* Edmund Maurice Downing Fitzgerald, M.D., appointed to 18th Foot; May 18. 82nd Foot: Staff Assistant-Surgeon Alexander Turner, M.D., to be Assistant-Surgeon, *vice* John Mangin Waters, who exchanges; April 25. Rifle Brigade: Staff Surgeon George Allan Hutton, to be Surgeon, *vice* Surgeon Major Henry Martyn Fraser, M.D., appointed to the Staff; April 21.

BIRTHS.

DOVE.—On May 12, the wife of J. R. B. Dove, M.B., of Pinner, of a daughter.

FENNINGS.—On May 3, at 26, Clarendon-road, Notting-hill, the wife of Dr. Allen Fennings, of a son.

HOGGAN.—On May 17, at Thornhill, Dumfriesshire, the wife of Edward Hoggan, M.D., L.R.C.S.E., of a son.

HOOPER.—On May 9, at Park-gate-street, Dublin, the wife of Surgeon Alfred Hooper, 30th Cambridgeshire Regiment, of a daughter.

JACKSON.—On May 11, at Dublin, the wife of P. Nevill Jackson, Surgeon Royal Scots Greys, of a son.

LIVINGSTON.—On May 11, at Lismore House, New Barnet, N., the wife of John Livingston, M.D., of a son.

RANGER.—On May 16, at Peckham, the wife of W. G. Ranger, M.R.C.S. Eng., of a son.

THOMSON.—On May 13, at Dunedin, Bournemouth, the wife of J. Roberts Thomson, M.D., of a son.

WAUGH.—On May 11, at Midsomer Norton, the wife of Alexander Waugh, L.R.C.P.L., of a daughter.

MARRIAGES.

WIMBUSH—NICHOLSON.—On May 12, at St. Mary's Parish Church, Hull, Charles, youngest son of Samuel Wimbush, Esq., Finchley, to Edith Mary, second daughter of John Lee Nicholson, M.R.C.S., of Hull.

DEATHS.

DASENT, BURY IRWIN, M.R.C.S., Surgeon, Inspector-General, and late Member of the Legislative Council of Trinidad, at his residence, Enmore, Trinidad, on March 26.

DOWNES, HARRIET ELIZA, the wife of Ezra Thomas Downes, Esq., Surgeon-Major Retired List, Bengal Medical Establishment, and late Assay Master, Calcutta Mint, at 21, Redcliffe-road, Brompton, after months of severe suffering, on May 8, aged 60.

HEYSHAM, JAMES, Esq., fifth son of the late John Heysham, M.D., of Carlisle, at Borrens Hill, Cumberland, on May 10, aged 70.

JEPHSON, WM. H., M.D., Deputy Inspector-General of Hospitals, at Mean Meer, Bengal, of debility from continued intermittent fever, on April 7, aged 49.

KEMPTHORNE, HENRY LAW, M.D. Lond., M.R.C.P., Assistant Medical Officer, Bethlem Royal Hospital, on May 16, aged 29.

MARTIN, ADAM, M.D., at Rochester, on May 10, in his 77th year.

MEYER, JOHN, M.D., Superintendent of Broadmoor Asylum, suddenly, at Exeter, on May 9, aged 55.

MICHELL, GILBERT STEWART, M.R.C.S.L., only brother of Mrs. R. H. Weldon, Spalding, on board the *Hydaspes*, on his return from Christchurch, New Zealand, on February 5.

NASMYTH, ROBERT, Fellow of the Royal College of Surgeons, Edinburgh, at 5, Charlotte-square, Edinburgh, on May 12, in his 79th year.

RENWICK, ADELINE, wife of Thomas Renwick, M.D., of Nelson, New Zealand, at 10, Rochester-square, on May 11, aged 51.

THOMAS, ALFRED, M.B., of Blackburn, Lancashire, on board the steamship *Cassini*, while in quarantine at Monte Video, of yellow fever, on April 3, aged 23.

WILKINSON, WILLIAM CRADOCK, F.R.C.S., at Spalding, Lincolnshire, on May 13, aged 69.

YARROW, GEORGE EUGENE, the beloved child of George Eugene Yarrow, M.D., at 87, Old-street, on May 14, aged 10 months.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in successive.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK.—Assistant-Physician. Applications and testimonials to the Secretary, 24, Finsbury-circus, E.C., on or before May 26.

DROITWICH POOR-LAW UNION.—Medical Officer to the Union House and the Droitwich Medical District of the Union. Candidates must have the qualifications prescribed by the General Orders of the Poor-law Board, and be registered. Applications and testimonials to H. Bearcroft, Clerk to the Guardians, on or before the 24th inst. Election the same day at 11 o'clock, a.m.

LIVERPOOL ROYAL INFIRMARY.—Junior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee, on or before May 28.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Chair of Descriptive and Surgical Anatomy. Applications and testimonials to the Registrar, on or before May 28.

NOTTINGHAM DISPENSARY.—Assistant Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before June 13. Election the same day at 12 o'clock.

RIPON DISPENSARY.—House-Surgeon and Resident Dispenser. Applications and testimonials to the Hon. Secretary.

ST. MARYLEBONE PROVIDENT DISPENSARY.—Medical Officer in ordinary; must be qualified. Applications and testimonials to the Secretary, at the Dispensary, 16A, Duke-street, Portland-place, on or before the 28th inst. Further particulars may be obtained on application.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon; must be F. or M.R.C.S. London, Dublin, or Edinburgh, and L.R.C.P.L. or L.S.A. Applications and testimonials to the Secretary on or before the 28th inst. Election on June 14.

STRATFORD-ON-AVON UNION.—Medical Officer for the Union Workhouse. Candidates must be duly qualified. Applications and testimonials to R. H. Hobbes, Esq., Clerk, Stratford-on-Avon, on or before June 1. Election on the 3rd.

SUNDERLAND INFIRMARY.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

VICTORIA HOSPITAL FOR SICK CHILDREN.—Assistant-Physician; must have a Medical qualification, and not be engaged in the practice of Pharmacy. Applications and testimonials to the Secretary, at Gough-house, Queen's-road, Chelsea, on or before May 31.

VICTORIA HOSPITAL FOR SICK CHILDREN.—Assistant-Surgeon; must be F. or M.R.C.S.E. and be registered, and not practising Midwifery or Pharmacy. Applications and testimonials to the Secretary at Gough-house, Queen's-road, Chelsea, on or before May 31.

WESTON-SUPER-MARE HOSPITAL AND DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before May 31.

WEST RIDING LUNATIC ASYLUM, WAKEFIELD.—Clinical Clerk. Applications and testimonials to Dr. J. C. Browne on or before May 30.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Drayton Union.—Mr. W. E. Clendinnen has resigned the Fourth District; area, 11,625; population, 2419; salary, £21 per annum.

Droitwich Union.—Mr. H. Curtler has resigned the Droitwich District and the Workhouse; salary for District, £85 per annum; for Workhouse, £50 per annum.

APPOINTMENTS.

Aberayron Union.—Thomas Evans, M.D. Edin., L.R.C.S. Edin., to the Llandisilio District.

Bath Union.—Thomas McClure, L.R.C.P. Edin., L.R.C.S. Dub., L.M. Edin., to the Seventh District.

Bideford Union.—Louis R. Cooke, M.R.C.S. Eng., to the Hartland District.

Brentford Union.—Wm. M. Whitmarsh, M.D. St. And., M.R.C.S. Eng., L.S.A., L.M., to the Eighth District.

Chesterton Union.—Dugald Campbell, M.D. Glas., L.R.C.S. Edin., L.M., to the Waterbeach District.

Eton Union.—Fredk. A. H. Robson, F.R.C.S. Lond., M.R.C.S., L.S.A., L.M., to the Iver District.

Hungerford Union.—David Kennard, Jun., M.R.C.S. Eng., L.S.A., to the Lambourne District.

Maidstone Union.—Henry C. Smith, M.R.C.S. Eng., L.S.A., to the First District.

Reading Union.—Oded Lousley, M.R.C.S. Eng., L.S.A., to the St. Giles District.

Sunderland Union.—Jonathan Shaw, M.R.C.S. Eng., L.S.A, to the Ford and North Hylton District.

Wycombe Union.—Joseph J. Littlewood, M.R.C.S. Eng., L.S.A., to the Eighth District.

MM. PAULET, Professeur-agrégé au Val-de-Grace, and J. Saraziu, Médecin-major à l'escadron des Cent-gardes de l'Empereur, having completed their great work Traité d'Anatomie Topographique with a magnificent "Atlas" of coloured plates have received in recognition of their labours a prize of the value of £100 from the Academy of Sciences. The work is in the hands of one of our reviewers.

APOTHECARIES' HALL OF IRELAND.—The examination for the annual prize of five guineas, given by the Council of the above institution to the best answer in physiological or pharmaceutical chemistry, was held at the Hall on the first Monday and Tuesday in May. The subject for the present year was—"The Metals in the British Pharmacopœia: their Chemistry, Pharmacy, and Toxicology." The prize was awarded to Mr. Samuel Crampton, the certificate of second place to Mr. Thomas William Myles.

ROYAL DUBLIN SOCIETY.—In the course of a public lecture on "Atmospheric Dust," delivered in the Society's Theatre on Saturday, May 14, Mr. Tichborne, F.C.S., M.R.I.A., Chemist to the Apothecaries' Hall, stated that in 1866, the year of the cholera visitation, he had published analyses of the street dust of Dublin, and he took the present opportunity of drawing particular attention to the importance of the subject. From analyses recently performed, he found that the street dust of Grafton-street contained about 31 per cent. of stable manure, while that from a cab-stand in Nassau-street yielded 45 per cent. of organic matter. He considers that cab-stands are fruitful sources of atmospheric contamination, and that they require careful supervision, street dust being the pabulum or stock-in-trade of atmospheric dust.

PROCEEDINGS OF THE COLLEGE OF SURGEONS.—The unconfirmed minutes of the Council held on the 12th instant have just appeared, from which we learn that the report from the Court of Examiners in reference to the mode of testing the knowledge of candidates for the membership by the practical examination of patients has been adopted with slight alterations, and will come into force on and after March 31, 1871. The Council proceeded to the consideration of a former resolution respecting the constitution of the Court of Examiners, one half of which should be composed of Fellows who are not and have not been members of the Council; whereupon an amendment was proposed by Mr. James Paget, and seconded by Mr. Humphry, that the consideration should be deferred until after the adoption or rejection of the proposed scheme for the conjoint examination by the Colleges of Physicians and Surgeons. On the proposal to convene a meeting of the Fellows on the day appointed for the election of members of the Council, it was considered inexpedient to do so, as the only place where it could be held—viz., the theatre—is devoted on that and succeeding days to the exhibition of additions to the Museum made since the last election. This is an important exhibition and highly appreciated, not only by the Fellows meeting on that day, but also by the numerous Members and Fellows who visit it during the week it remains open for inspection. It was decided that the annual election should take place on Thursday, July 7. Another illustration of Professor Erasmus Wilson's liberality was brought under the notice of the Council. That gentleman has returned the cheque for £94 10s., the amount of the honorarium for his course of lectures on Dermatology, with a request that the sum might be devoted to the liquidation of the debt incurred by the College in fitting up cases in the Museum for the valuable dermatological collection presented by him. It was resolved that the thanks of the Council be conveyed to Professor Erasmus Wilson for his liberal donation for the purposes specified by him. Mr. Charles Hawkins having brought before the Council the present mode of setting out the accounts in the College Calendar, and having explained his proposed alterations the same were adopted. Mr. Solly gave notice of the following motion at the next meeting of the Council—viz.: "That a certificate of attendance on a course of lectures on Comparative Anatomy and Zoology be required of every candidate for the diploma of member." Mr. Gay gave notice of the following motion at the next Council:—"That in the opinion of this Council provision should be made in the Medical Act (1858) Amendment Bill, now under the consideration of the Legislature, for the direct representation of the Fellows and Members of the Royal College of Surgeons in the General Council of Medical Education and Registration of the United Kingdom, and that a copy of the foregoing resolution be forwarded to the Lords of the Privy Council." And Mr. Charles Hawkins gave notice of the following motion at the next Council:—"That no alteration in the Bye-laws be made until the proposed Medical Bill be passed or rejected by the Legislature."

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.—At the last examination for the diploma of Membership of the Royal College of Surgeons, the following questions on Surgical Anatomy and the Principles and Practice of Surgery were submitted to the candidates at the written portion of the examination on the 13th inst., viz.:—1. What is spina bifida? What are the effects usually produced by it? Give the treatment. 2. Describe the parts seen in exposing the sterno-mastoid muscle, also those which are brought into view when the muscle is removed. 3. State the local distinctions, internally and externally, between oblique and direct and inguinal hernia. State also the diagnostic signs of femoral hernia; and describe the operation for its relief when strangulated. 4. When the femur is broken a little below the lesser trochanter, what is the position of the upper and of the lower fragment? To the action of what muscles is the distortion of each of them owing? 5. Describe the appearances of an ordinary syphilitic sore, and mention the different forms of secondary eruption. 6. Describe the position of the thyroid body in relation to surrounding structures. Describe also its blood-vessels, their origin, course, and termination. On the succeeding day the candidates received the following questions, at the written examination on the Principles and Practice of Medicine, to answer, viz.:—1. Supposing you are called to a patient who has been suddenly taken ill and is entirely unconscious. What are the different conditions upon which his state may depend, and how would you distinguish them? 2. How would you treat such cases respectively? 3. Mention the different preparations of opium, aconite, and nux vomica contained in the British Pharmacopœia. State the effects which those drugs produce, and the purposes for which they are employed, and mention the doses in which the different preparations should be given. There were thirty-five candidates, of which number thirteen were examined in Medicine and Surgery, and two rejected; two were also rejected in Medicine, but passed in Surgery, two having previously passed in Medicine were only examined in Surgery and passed, and two, having passed in Surgery on a former occasion, were only examined in Medicine on the present, and passed. The following qualifications were held by other candidates:—1 "M.D., Victoria College, Toronto." 10 "L.S.A," and two gentlemen were admitted who, having passed in Surgery on a former occasion, subsequently became "L.R.C.P. Ed.," and "L.K. and Q.C.P. Ireland." The total number of rejections out of the thirty-five candidates examined was nine.

THE Derby Board of Guardians have increased the salary of Mr. Copestake, one of their Medical officers, from £80 to £100 per annum.

FUNERAL OF SIR JAMES SIMPSON.—The funeral of Sir James Young Simpson was celebrated on May 13. A large number of Professional and literary bodies, with which the deceased was connected, walked in front of the hearse, this part of the procession being closed by the Senatus Academicus, in their robes. The hearse, which was open, and richly plumed, was followed by the relatives of the deceased on foot, the magistrates and Council of Edinburgh robed, the corporations of Bathgate (the birthplace of the deceased), Leith, and other places. The whole procession numbered upwards of 1700 persons, and 70 carriages followed. A large concourse thronged the streets, and the principal shops were shut during the funeral. The place of interment was Warriston Cemetery. The following was the order of the procession:—The police, the public, the Granton Literary Association, the Philosophical Institution, the Chamber of Commerce, the Merchant Company, the solicitors before the supreme courts, the writers to the Signet, the advocates, the Kirk sessions and deacons of Free St. John's Church, the United Presbyterian Synod, the Free Church Presbytery, the Established Presbytery, the Rectors and Masters of the High School, the Principal and Professors of the Veterinary College, the Edinburgh Geological Society, the Botanical Society, the Society of Arts, the Society of Antiquaries, the Royal Scottish Academy, the Royal Society, the Royal Medical Society, the Pharmaceutical Society, the Medico-Chirurgical Society, the Obstetrical Society, the students, the College of Surgeons, the College of Physicians, the Senatus and the office-bearers of the University, the hearse, the deceased's carriage, the relatives and friends, Lord Provost, magistrates and town council, the office-bearers of High Constables, the town council of Leith, the town council of Portobello, the town council of Bathgate, the general body of High Constables, the directors of the British Medical Assurance Society, carriages.

WESTMINSTER HOSPITAL.—The annual distribution of prizes to the students of the Westminster Hospital took place on May 12 in the Board-room of that institution, Lord Charles J. F. Russell in the chair. Lord Charles Russell addressed the students, and compared their present career to the farmer anxiously waiting for the springing up of the seed after the sowing of it, and instanced the light-heartedness with which he greeted its appearance and the warmth with which he exclaimed "It has come up well," as comparable to the gladness of the student in receiving the reward of his study. He had been often asked to come to the opening of the winter session—the seed time—when the students were just entering on their Professional career. Now, in their spring time, he was glad to find, in the words of the farmer, "they had come up well." Yet this was only the first stage of success. As the seed must be matured, so must the mind be perfected ere it could reap the full reward of its labour. His lordship next briefly dwelt on the competition that existed throughout every profession, trade, and calling, and demonstrated the wholesome tendency of such competition to raise the standard and excellency of those engaged in it. He strongly advocated the combining of general literature with the more strictly Professional reading, saying it was the higher intellectual worth that distinguished the Medical man of the present age from the Barber Surgeon, the artist from the mere mechanic, the architect from the builder. He had observed that the recipient of the largest number of prizes—in fact, the distinguished winner of the Chadwick prize (Mr. Wallis)—had thus judiciously combined his selection, and from this fact he prognosticated his future success in life. His lordship earnestly asked the students, in

conclusion, to consider the noble office of their Profession, to have faith in it, and then they would have confidence in it and endue their patients with the same feeling. He would ask them to consider the analogy between it and the office of our Lord and Saviour, the Physician of Souls. If they followed it with this feeling, humbly and reverently, he trusted they would always remember this day, this 12th of May, with pleasure and with advantage.

Society for Relief of Widows and Orphans of Medical Men.—The annual meeting was held at the rooms, 53, Berners-street, on Wednesday, April 27, at 8 o'clock. The President, Dr. Burrows, took the chair. The attendance of members was as usual very small. It is much to be regretted members cannot be induced to take more interest in the affairs of the Society by attending the general meetings. From a statement read by the Secretary it appeared that the amount annually granted to the widows and orphans had been increasing at the rate of £200 per annum, the income remaining much the same. Eleven widows and 42 children had been added during the year to the number of recipients of grants, making a total on the books of 58 widows and 53 children. The grants during the year amounted to £2705, the expenses to £252 14s. 2d., making a total of £2957 14s. 2d. expended. The interest on capital and subscriptions together made only a sum of £2799 14s. 1d., leaving the directors dependent on donations to be enabled to continue the same amount of grants as now given. The number of members was 439, 15 less than last year, but the falling off was to be accounted for by the unusual number of deaths among the older members. The President and directors gladly seize this opportunity of earnestly asking the members and friends of the Society to exert themselves to increase the income by procuring new members and annual donations, and to prevent by these means the sad inconvenience that would occur to the widows and children should it be found impossible to continue the sums now granted every half-year.

The Siamese Twins.—Some of our readers may like to be made aware that an instructive paper upon these interesting monsters was read by Professor Virchow at the Berlin Medical Society, and is fully reported in the *Berliner klinische Wochenschrift* for March 28 and April 4.

Preventive Treatment of Syphilis.—At a clinical lecture delivered by Prof. Thiry, of Brussels, he warned his pupils against resorting to precipitate treatment of venereal sores under the idea of preventing syphilis. Until the chancre becomes indurated it is not, in fact, syphilitic at all, and, so far from being benefited by mercury, it not infrequently becomes phagedænic. The mercury is not indicated until induration appears. Then it acts as a curative, not a preventive, agent. The treatment of the chancre itself prior to this, whatever its form, extent, seat, or duration, should be local yet energetic; and the bringing this chancre into a state of simple ulcer is the best guarantee we can offer against constitutional syphilis. When, however, in spite of such local treatment, specific induration does appear, syphilis is unmistakeably present, and we must interfere for the prevention of further contamination of the system. Now mercury must be at once and vigorously employed, and we are then often able to cut short the disease at its very commencement; and the mercury promptly used has to be continued for a much less time than when delayed. The disappearance of the specific induration is also at this early period the criterion of the efficacy of the cure.—*Presse Belge*, April 24.

Extirpation of the Kidney.—Professor Simon, of Heidelberg, observes that as somewhat incorrect accounts have been given of this operation by English and French Practitioners who had seen the patient on passing through Heidelberg, he is induced to furnish the correct particulars himself. The patient, 46 years of age, a year and a half prior to her admission into the Heidelberg Clinic, had been operated upon by Dr. Walter, of Offenbach, for cystoid disease of the ovary. After the abdominal section had been made, the adhesions were found to be so considerable that not only the ovary, but the uterus and a portion of the ureter had to be removed. The patient recovered; but, as an urinary fistula discharging the urine above the symphisis remained, to the great discomfort of the patient, many attempts were made by plastic operation to direct the urine into the vagina. These attempts, which several times threatened the patient's life, as well as others to produce artificial closure of the ureter failing, the extirpation of the kidney was determined upon. On August 2, 1869, extra-peritoneal nephrotomy was performed in the presence of a great number of persons; and the patient underwent the operation without any notable mishap, so that at the end of six weeks she was able to leave her bed. The ligature attached to the pedicle did not separate until the end of the sixth month, after which the wound rapidly cicatrised. The patient, whose constitution during the three years that she had undergone these various operations had become much enfeebled, now enjoys the best health, she being employed all day at work, and able to take long walks. This is merely a preliminary sketch of this highly interesting case, as Professor Simon intends in a few months to publish a complete treatise on nephrotomy, in which all its details will be fully given.—*Deutsche Klinik*, April 9.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Hartsen.—The letters from Pau have been received. The translations are in the hands of the printer.

Query.—Sorry we cannot give the information required. You might refer to the reports of the Registrar-General.

Messrs. G. W. Fox and Co.—The subject has not escaped our attention. The preparations are under trial, and a report will appear in due time.

R. W.—The information will be duly appreciated. Most of the facts, however, are within our knowledge.

S.—In the library of the Royal College of Surgeons.

Medicus.—The election is by ballot, on the recommendation of three of the Fellows.

Barnsley.—The anti-vaccination movement has caused quite a ferment in the town, and the usual quantity of nonsense has been talked by the opponents of the beneficent discovery of Jenner. We notice the matter, however, more for the purpose of giving the reasons of Ferdinand Dupre, M.D., New York, for not registering himself in this country. "I never applied to be registered in this country, for the simple reason that I do not intend to submit myself to the rules and regulations of an allopathic Medical trade union." Dr. Dupre is one of the leaders of the anti-vaccination party.

Corrigendum.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I see in your impression of to-day my name spelled Tulford instead of Fulford in the notice of examinations for "first college."

I am, &c. W. E. Fulford.

London Hospital, Whitechapel-road, E., May 14.

Prometheus.

The lamented Sir James Simpson suffered pains like those of angina pectoris.

I.

"Ah me! alas! pain, pain, ever, for ever!"
So groaned upon his rock that Titan good,
Who by his brave and loving hardihood
Was to weak man of priceless boons the giver,
Which e'en the supreme tyrant could not sever
From us, once given—we own him in our food
And in our blazing hearth's beatitude—
Yet still his cry was "pain, ever, for ever!"
Shall we a later, harder doom rehearse?
One came who from our race fierce pangs could wrest;
He stingless left the old Semitic curse,
And mangled, writhing limbs he lulled to rest;
Him, too, for these blest gifts did Zeus amerce,
He, too, had vultures tearing at his breast.

II.

Hush! Pagan plaints, our Titan is unbound;
The gory beaks and talons scared away;
As once upon his mother's lap he lay,
So rests his head august on holy ground;
Spells stronger than his own his pangs have found;
He hears no clamour of polemic fray,
Nor recks he what unthankful men may say,
Nothing can vex him in that peace profound.
And where his loving soul, his genius bold?
In slumber, or already sent abroad
On angels' wings and works, as some men hold?
Or waiting Evolution's laws, unawed?
All is a mystery, as Saint Paul has told,
Saying, "your life is hid with Christ in God."

Clifton, May 13. J. A. S., M.D.

The Medical Directory.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—As the time is approaching when the circulars are sent round to the members of the Profession to be by them filled up with a list of their degrees and titles, allow me to call attention to two most serious defects in the Directory, defects which, while easily remedied and quite unjustifiable, seriously impair the usefulness of the Directory.

In the first place some few members do not give all their Professional titles nor the dates of their first degree. If the Directory is to be of value

as a kind of history, these omissions ought to be rectified. It would be well then for every Medical man to record all his *bonâ fide* honours, titles, degrees, and medals, with dates.

In the second place, and this is *the great defect*, three-fourths of the Practitioners of this country fall into the opposite and absurd fault of returning a long list of honours, contributions, and titles which are perfectly valueless. What great honour is there in being a plain member of the British Medical Association, or of the Midland Society? How ridiculous for a gentleman to enter himself as a Member of the Birmingham Natural History Society, and of the University Graduates Club? But the culmination of this folly is attained when seventh rate Surgeons record as contributions to Medical Literature (!!!) two or three notes of half a dozen lines apiece sent in an idle hour to one of the journals. The compilers of the Directory ought to exercise some discretionary power, and should leave out anything and everything which they know to be worthless.

Birmingham, May 14. I am, &c. A. C.

COMMUNICATIONS have been received from—

Dr. Allbutt; Dr. J. Livingston; Dr. J. W. Langmore; Mr. S. Gamgee; J. A. S.; Mr. J. B. Blackett; A. C.; Dr. J. Matthews Duncan; Mr. W. E. Fulford; Dr. Kemmerick; Queay; Messrs. Fox and Co.; A. W.; Mr. J. Robson; Dr. Compigne; Dr. Hartsen; Mr. W. B. Kesteven; Mr. C. Willman; Mr. F. J. Wilson; Dr. Buzzard; Mr. J. F. Clarke; Dr. J. M. Winn; Dr. T. Spencer Cobbold; Dr. R. H. Bakewell; Dr. E. Symes Thompson; Mr. J. Chatto; Dr. O. Sturges; Dr. Baitton; Dr. George Scott; The Editors of the Manchester Medical and Surgical Reports; Dr. Keiller; Mr. Reginald Harrison; Dr. Crichton Browne; Mr. T. C. White.

BOOKS RECEIVED—

Glasgow Medical Examiner, May—Professor Frankland's Lecture Notes for Chemical Students—Female Suffrage: an Answer to Mrs. H. Fawcett on the Electoral Disabilities of Women—Dr. Wilder (New York) on Intermarriage of Kindred—History of Modern Anæsthetics: a second letter to Dr. Jacob Bigelow, by Sir James Simpson, Bart.—Dr. Lee on the Principal Baths of Rhenish Germany—Third Report on the Operation of the Contagious Diseases Act—Twining's Science for the People—Nottingham United Lunatic Asylum Report—Dr. John G. Macvicar on the Structural Relation between Urea and Uric Acid—Baltimore Medical Journal, May—New York Medical Journal, May—Holthouse on Hernial and other Tumours—Savage on the Female Pelvic Organs.

NEWSPAPERS RECEIVED—

Nature—Australian Medical Gazette—Melbourne Argus—Barnsley Chronicle—Leamington Spa Courier—John Bull—Middlesborough and Stockton Gazette—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

May 21. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Association of Medical Officers of Health, 7½ p.m. Meeting.

Royal Institution, 3 p.m. Prof. Grant, "Comets."

23. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

24. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Royal Institution, 3 p.m. Prof. Seeley, "History."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Stokes, "On Supra-Condyloid Amputation of the Thigh." Dr. Bowles, "On the Pathology and Treatment of Stertor."

25. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

Society of Arts, 8 p.m. Meeting.

26. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

London Institution, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

Royal Institution, 3 p.m. Prof. Tyndall, "Electricity."

27. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

Clinical Society, 8½ p.m. Mr. Paget, "Case of Necrosis of the Femur without external Inflammation." Mr. Barwell, "Reports of Four more Cases in which Concentrated Solution of Strychnia was subcutaneously injected." Report by Mr. Callender and Mr. Kesteven, "On Action of Copper on the System." Report by Drs. Bäumler and Duffin and Mr. Berkeley Hill, "On Oscillations of Temperature in Syphilis."

Quekett Microscopical Club, 8 p.m. Mr. Waller, "On the Conjugation of *Actinophrys sol*."

Royal Institution, 8 p.m. Principal Dawson, "Primitive Vegetation."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 14, 1870.

BIRTHS.

Births of Boys, 1156; Girls, 1023; Total, 2179.
Average of 10 corresponding weeks, 1860-69, 1999·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	731	695	1426
Average of the ten years 1860-69	665·3	636·1	1301·4
Average corrected to increased population	...	...	1431
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	3	8	13	...	12	2	3	1	3
North ...	618210	...	15	22	2	6	1	2	1	5
Central ...	383321	...	9	10	1	2	2	3	1	2
East	571158	1	3	11	...	10	2	...	5	1
South	773175	2	7	20	...	13	...	7	3	3
Total	2803989	6	42	76	3	43	7	15	11	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·691 in.
Mean temperature	49·3
Highest point of thermometer	65·8
Lowest point of thermometer	29·8
Mean dew-point temperature	44·2
General direction of wind	E.S.E.&S.W.
Whole amount of rain in the week	0·37

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 14, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending May 14.	Deaths Registered during the week ending May 14.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2179	1426	65·8	29·8	49·3	9·61	0·37	0·94
Portsmouth ...	122084	12·8	65	25	62·0	32·3	47·4	8·55	1·12	2·84
Norwich	81087	1·09	44	42	65·0	33·5	47·5	8·61	0·35	0·89
Bristol	171382	36·6	95	89	62·7	34·0	48·2	9·00	1·30	3·30
Wolverhampton ...	72990	21·5	65	28	61·4	40·1	48·9	9·39	0·93	2·37
Birmingham ...	369604	47·2	252	133	62·4	37·0	49·3	9·61	0·90	2·29
Leicester	97427	30·4	80	31	65·2	34·0	49·6	9·78	0·49	1·25
Nottingham ...	88888	44·5	45	33	63·3	34·4	49·5	9·72	0·44	1·12
Liverpool	517567	101·3	382	233	61·2	41·0	50·1	10·06	0·65	1·65
Manchester ...	374993	83·6	265	193	67·0	42·0	51·7	10·94	0·63	1·60
Salford	121580	23·5	90	55	68·5	39·6	50·6	10·33	0·65	1·65
Bradford	143197	21·7	134	97	61·1	38·5	49·4	9·66	0·98	2·49
Leeds	259527	12·0	167	113	62·0	39·0	49·9	9·94	0·88	2·23
Sheffield	247378	10·8	203	100	63·0	35·0	49·5	9·72	0·78	1·98
Hull	130869	36·7	100	52	...	...	...	...	...	...
Sunderland ...	94257	30·5	73	28	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	100	52	61·0	40·0	47·6	8·66	0·65	1·65
Edinburgh	178970	40·4	137	84	61·7	36·0	50·4	10·22	0·60	1·52
Glasgow	468189	92·5	417	245	61·8	38·5	49·9	9·94	1·41	3·59
Dublin (City, etc.*)	321540	33·0	136	154	62·9	39·0	50·5	10·28	0·53	1·35
Total of 20 Towns in United Kingd'm	7209603	33·8	5029	3213	68·5	29·8	49·4	9·66	0·77	1·96
Paris—Week ending May 14	1889842	242	...	1210	...	...	...	...	...	...
Vienna—Week ending May 7 ...	605200	167	...	438	...	...	50·5	10·25	...	...
Berlin—Week ending May 12 ...	702437	128	...	...	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·691 in. The highest barometrical reading was 30·17 in. on Sunday, and the lowest was 29·19 in. on Wednesday.

The general direction of the wind was E.S.E. and S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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See "Medical Times and Gazette" of 25th December, 1869.

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All communications to be addressed to the Manager. Prospectuses and Lists sent on application, enclosing stamp.

ORIGINAL LECTURES.

LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

ON DEATH FROM CHLOROFORM.(a)

GENTLEMEN,—At the close of my last lecture I referred to some of the details preliminary to the proper administration of the vapour of chloroform. I proceed with this part of my subject before passing to the cause and mode of death from chloroform.

Condition of surrounding Air.—The condition of the air in respect to moisture and temperature is of great moment. In the first place the air should be dry; if it be surcharged with moisture the introduction of the narcotic vapour into the blood and the condensation of the vapour in the blood is impeded, and the stages or degrees of narcotism are prolonged. In like manner recovery from the narcotism after the vapour is withdrawn is slower in a moist than it is in a dry air. And, lastly, if in an air saturated with moisture there appear during administration any symptoms of failure of the circulation, the danger is much greater than it would be were the air dry, for with failure of the circulation and loss of radiation from the open moist surfaces of the body, there is quick condensation of fluid, and accumulation of fluid upon these surfaces. The cold sweat which settles on the face when a person faints is not the sweat of natural excess of water thrown off by the body, but is the water, which ought to pass off naturally by the skin, condensed on the skin. What the common people commonly call the "death rattle" means the same phenomenon—the phenomenon of accumulation of water in the air passages, from cooling. Under chloroform there is a natural tendency to reduction of animal temperature, and during exhaustion under chloroform this reduction is most pronounced. Hence, unless the air be dry, the accumulation of fluid on surfaces like the bronchial and vesicular surfaces of the lungs is a ready process, and the mischief which may follow, trifling as at first sight it may appear, is in reality serious.

The observation here made has been forced upon me often in experiments for the resuscitation of animals after the cessation of respiration, under chloroform. In setting up artificial respiration I have sometimes found the operation so free and so effective I have wondered at the result as much as the lookers on; in other cases in setting up the artificial respiration I have found the operation at once impeded, and even rendered abortive, by nothing more nor less than the presence of water in the air-passages. In such cases, as we exhaust and refill the chest with air, we can hear the cause of difficulty—hear a moist fine râle, a bronchial râle—and when, the operation being fruitless, the bronchial surface is exposed, we find the smaller tubes filled with frothy secretion.

It is no difficult matter at all to secure the dryness of the air which is required for correct administration, for it is merely necessary to have a good fire in the operating-room at times when the air is naturally charged with moisture. In operating-rooms of Hospitals, George's stove, which I have already described, would answer the purpose of a drying stove with precision, and the degree of moisture can at any moment be determined by readings of the dry and wet bulb thermometer. The rule as to this reading should be that whenever the dry and wet bulb differ less than five degrees, the air is not sufficiently free of moisture. This is a very simple rule, and in Hospital practice, at all events, could be carried out with regularity and determination.

To dryness of atmosphere should be added a proper degree of temperature. I have in previous lectures so carefully demonstrated the effect of temperature on the process of inhalation, I need not do more now than touch on the subject. Suffice it to repeat the following facts:—That as compared with the effects of a low temperature—1. A high temperature quickens the change of chloroform from the fluid to the gaseous state. 2. That it quickens diffusion in the air. 3. That it quickens the process of condensation by which the vapour is received into the blood. 4. That it quickens the narcotic action. 5. That it quickens recovery from narcotism when the narcotic is withdrawn. Concerning these points the second and third named are the most important to remember—in fact, they govern our knowledge on the other points. Snow constructed from his own experiments a most useful table, which is here copied. In this table it is shown that a volume of 100 cubic inches of air will have diffused through it certain given measures of chloroform vapour at certain temperatures, the air being assumed as a constant quantity of 100 cubic inches, which expands to 107, and so on through the series.

Temperature Fahrenheit.	*Cubic Inches of Air.*	*Cubic Inches of Chloroform.*
40°	100	7
45°	,,	3
50°	,,	9
55°	,,	11
60°	,,	14
65°	,,	19
70°	,,	24
75°	,,	29
80°	,,	36
85°	,,	44
90°	,,	55

I have myself further shown, by direct experiment, that in the same atmosphere of chloroform and common air the rate of diffusion and of condensation of the vapour in the blood is so governed by the temperature of the air that the difference of 30° Fahr. makes a difference of six minutes in the time required for the production of the third degree of narcotism; the second degree, or that of muscular excitement, being greatly prolonged by the colder atmosphere and the danger of that degree or stage being specially increased. We require, therefore, to know what is a fair average temperature for inhalation, and I feel no doubt in giving that as from 60° to 70 of Fahrenheit's thermometer. A temperature below 60° is too low; a temperature above 70° is too high. There is no trouble in acting on this rule in practice. And it is, moreover, a good rule even in respect to the performance of Surgical operations, with or without chloroform.

Mode of Administration. — Since the first introduction of chloroform as a general anæsthetic, great attention has been paid to mode of administration. Arguments have been offered on one side to prove that no special apparatus is required, and that all elaborate apparatus are worse than useless. The discoverer of the anæsthetic properties of chloroform and the introducer of it into practice—Sir James Simpson—has from first to last reasoned against complicated methods of administration. He has ever maintained that the effect of the chloroform on the system of the patient was the one absolute caution demanded of the administrator, and he has naturally and instinctively had a large and influential following. I have found in my wanderings amongst Hospitals that in almost every Hospital some apparatus has been used for a time and then has been thrown aside as embarrassing and of no real value. There has been, however, and still is, an opposite school which declares in the most decided voice for an assumed perfect apparatus, and which has supplied instruments of various kinds. Dr. Snow was the energetic founder of this school, and many years of his thoughtful and earnest life were devoted to the elucidation of the one absorbing idea, that the dangers of chloroform could be successfully met by the regulation of the quantity of chloroform used by the administrator. So sincere was John Snow, so hopeful, so industrious, I do not wonder he made converts to his way of thinking, and I regret few things more than that I as one of his converts should have been driven by force of fact to dissent from his views. Snow's theory was that a given per cent. (from four to five per cent.) of chloroform vapour in the air inspired, was amply sufficient for the production of the deepest anæsthesia, and that more was unnecessary and dangerous. He constructed therefore apparatus which should limit the quantity of chloroform to the four or five per cent. First he constructed what he called the hydrogen balloon, which was in fact a bag for receiving chloroform. The description of this bag I will read to you from my edition of his posthumous work published in 1858. The passage is at page 80 of the work. He there says—"The most exact way in which it is practicable to exhibit chloroform to a patient about to undergo an operation is to introduce a measured quantity into a bag or balloon of known size, then to fill it up by means of the bellows and allow the patient to inhale from it, the expired air being prevented from returning into the balloon by one of the valves of the face-piece to which it is attached. I tried this plan in a few cases in 1849 with so much chloroform in the balloon as produced four per cent of chloroform in proportion to the air. The effects were extremely uniform, the patients becoming insensible in three

(a) Delivered on Tuesday, March 1, 1870.

or four minutes, according to the greater or lesser freedom of respiration, and the vapour was easily breathed, owing to its being so equally mixed with the air." Snow did not attempt to bring this method of inhalation into general use because he thought it was inconvenient. He sacrificed, he asserts, "absolute perfection to convenience," and thereupon he invented the inhaler which has so long borne his name, and of which there have been many imitations. "Insensibility," he urges, "is not caused so much by giving a dose as by performing a process." And he shrewdly adds, "Nature supplies but one mixture of dilnted oxygen, from which each creature draws as much as it requires, and so in causing narcotism by inhalation, if a proper mixture of air and vapour is supplied, each patient will gradually inhale the requisite quantity of the latter to cause insensibility according to his size or strength." The argument is forcible, and forcibly put, and it has been employed in various terms many times by other writers. The question is:—Is the argument sound? I fear it fails. It fails, because chloroform in vapour is not a fixed substance like oxygen gas, but is derived from a fluid under the influence of heat, and depends upon temperature for its perfect diffusion in even a limited quantity of air. It fails, because chloroform vapour after it is condensed in the blood is not applied by the blood as oxygen is, and as far as we know is not changed or combined at all. It fails, because it does not take into account the effect of temperature in aiding the diffusion of the vapour into the blood. It fails, because it does not take into account the different respiratory capacity of different individuals nor the rate of respiration. Lastly, it fails, because in practice it has not been found to give the safety it promised. True it is that a few who have followed the method advanced by Snow affirm they have had no fatal cases of administrations. But, unhappily, others following the same method have had fatal cases, so that we are driven to the conclusion either that the successful followers have had unusual good fortune, or that they have been more skilful in administration, independently of any particular method, than the less successful administrators. I think the successfuls have been simply fortunate.

But the strongest argument of all against the percentage theory is, that the most extreme successes have attended administrations which have been conducted without the assistance of any method for measuring percentage of chloroform. In the seventeen thousand cases I have recorded as occurring before a death was chronicled, the mode of administration was as varied as could well be imagined. Suppose, however, one particular instrument or method had been alone employed in this number of cases, what would have been said of it? It would have been raised to an estimate as priceless as fabulous. In two of the largest Hospitals of the United Kingdom there is no record of a death from chloroform, and yet in neither of these institutions has an apparatus for the measurement of chloroform been employed. On the whole, were I inclined to follow up the question sharply, I might urge, on fair evidence, that there have been more deaths from chloroform in cases where an apparatus for adjusting the quantity of chloroform has been used, than in other cases; but this again would be false to nature, as implying that proportion of deaths bears some relation to mode of administration. We will therefore pass on our way, content to know that the natural facts dispel the illusion that in any particular known method there is special security from death.

Can we then by any reasonable hypothesis explain, apart from method, the cause of the many and frequent deaths from chloroform? There seems to me a most reasonable hypothesis which does account for the facts. The hypothesis is simple: it is that in every case where a person has to be made so dead to the outer world that he neither sees, nor hears, nor thinks, nor feels, but hangs on to the mere thread of involuntary organic function and action, he is dead in every part except in the mere parts which remain true to involuntary organic work, and that as in all persons, these necessary parts are not equally sound, therefore some persons succumb. If this be true it is not on the percentage of chloroform inhaled that either safety or danger in a given number of cases of administration rests, but on the percentage of organically sound or unsound persons who are subjected in a given number of cases to the vapour of chloroform.

Still there remains one other consideration. It is acknowledged to be necessary for an operation to induce such a degree of insensibility as shall constitute perfect anæsthesia, and it is very near to the exact truth to assume that to produce this degree a certain given quantity of chloroform must enter the body whether it enter quickly or slowly. We ought to consider, therefore, whether it be safest to introduce what is required quickly or slowly. There is no possible experience on the human subject that can be to us the poorest guide on the particular question here raised. But on inferior animals we can study the question with precision, and without subjecting them to pain can arrive at a very satisfactory result. I have studied by this method, and will put before you the facts under two or three heads.

First, then, I find, and I will demonstrate the fact by experiment at a later period, that a warm-blooded animal subjected suddenly to vapour of chloroform at a temperature over 70° Fahr. will often cease to breathe and to circulate blood, at once; will die as if from sudden apnœal syncope. I think we now know what, in these cases, is the cause of death. It is not from the absorption of vapour of chloroform into the blood. No! it is from the direct action of the vapour on the nervous system. The stimulation excited by the vapour causes the animal spasmodically to cease to breathe, then follows the apnœa and arrest of the action of the heart.

Dr. Rutherford in his most able and suggestive paper, in the *Journal of Anatomy and Physiology*, for May, 1869, "On the Influence of the Vagus on the Vascular System," touches on this subject incidentally, but not less forcibly. He remarks, "if any irritating vapour be brought before the nose of a rabbit, it instantly closes its nostrils and ceases to breath, often for thirty to forty seconds. Within three seconds after the cessation of respiration, the heart comes almost to a standstill, and continues to beat very slowly until respiration be re-established. The arrest of the heart is due to stimulation of the inferior branch of the vagus by the asphyxiated condition of the blood, for the slowing of the heart does not set in until death approach, if the vagi have been previously divided."

Dr. Rutherford's explanation of the arrest of respiratory and circulatory action, under the circumstances named, leaves, as it seems to me, nothing to be desired, and, as I have said, animals (I refer to rabbits specially) sometimes die straight off from this sudden arrest of action of the respiration and circulation.

Have we in the human subject the analogous mode of death? Distinctly. In Snow's table of fifty fatal cases, it is recorded that nine of the patients died within the minute after the commencement of inhalation, and four of these within a few seconds. Various opinions have been adduced to account for such rapid deaths. Some have urged that the deaths are from fear; others, that they are from rapid absorption of the chloroform. The explanation seems simple enough on physiological grounds. The patients have died from the direct action of the vapour on the nervous periphery of the breathing surfaces; they spasmodically ceased to breathe, and the vagus being stimulated by the asphyxiated blood, the heart also ceased to circulate blood. In this same way persons have undoubtedly died under the influence of sudden fear.

The moral of this point is of deep interest, and has at least two meanings. It tells us that chloroform, being a direct irritant, is, in that sense alone, an objectionable narcotic vapour, and it tells us further that it is a bad practice to commence its inhalation too abruptly, or to force on narcotism *rudely* against time. The same observation extends to other agents than chloroform—it extends to all bodies of the same family. Chloride of methyl and bichloride of methylene also act as direct irritants, and are also dangerous when used against time. At this moment there is, nevertheless, a practice of producing instant anæsthesia for short operations by the rapid pushing of bichloride of methylene, so that the patient is made insensible in twenty or thirty seconds. There has as yet been no death from this method, but I am bound to say that an occasional death from it is simply inevitable. One day a frightened woman or an irritable nervous man will take a few inhalations of the vapour, will hold the breath until the heart stops, and will die. And pray observe the truth, that in this form of death it is not the quantity of vapour actually condensed in the blood that kills; the killing is by a primary impression on the peripheral nervous surface from the vapour, and by a secondary excitation of the vagus and arrest of the action of the heart from asphyxia of the blood.(b)

On the whole it is a bad, and likely to be a fatal, practice, to push on narcotism by chloroform against time. In the cases of scared women, feeble children, and irritable and resistent persons of both sexes, the danger of administration is always present until the mind is assured if it be faltering, or tranquillised if it be excitable.

Bearing still on rapid death from chloroform is another observation worthy of notice—viz., that if the lungs be suddenly

(b) Since the delivery of this lecture the fear thus expressed has, unhappily, been confirmed in a sudden death from bichloride of methylene.

charged with chloroform vapour, there is induced often a quick contraction of the pulmonary arterial vessels. The lungs under these circumstances appear suddenly blanched as snow, and the right heart is instantly paralysed from pressure of blood which continues to flow into it, but which cannot be forced into the pulmonary circuit. In these cases there may be one or two efforts at respiration even after the action of the heart seems to have ceased; but when the body is laid open and the heart is exposed to the air there is always some after action of the auricle and ventricle from absorption of oxygen by the contained blood and renewal of muscular irritability. There are many cases on record of death in the human subject where the facts point definitely to this mode of death and, again, suggest the impropriety of narcotising by violence of administration.

We want to know, lastly, in respect to rapid death from chloroform, whether the vapour ever acts directly and primarily upon the heart itself, through the lungs. In investigating this point I have never been able to satisfy myself that in an animal with a perfectly healthy heart, the heart can be arrested in its function by the vapour of chloroform administered through the respiratory surface in any other ways than those described immediately above. At the same time, it admits of the readiest demonstration that the heart may be instantaneously arrested in its motion if chloroform be brought into it directly by the blood. To prove this we have to inject with the hypodermic syringe a few minims of chloroform—ten may suffice—into a vein of a full-sized rabbit. Within a second or two there is death from instant and perfect arrest of the action of the heart. If we now lay open the thorax we find the heart on both sides firmly contracted on firmly clotted blood which fills all the cavities, while the lungs are intensely congested also with clotted blood. If, further, we try the irritability of the muscles with the galvanic current, we find the heart absolutely dead, while all the other muscles of the body respond vigorously to the stimulus, and continue so to respond, it may be, for an hour. In this case the heart receives immediately the fatal dose, and the death is due to the contraction excited by the stimulant. We understand here every step of the process. We follow the chloroform into the right side, over with the pulmonary stream into the left auricle and ventricle, and from the left ventricle into the coronary system of the heart itself, there to excite the cardiac muscular spasm which leads to the irremediable death. Still by this experiment we prove only that the heart is fatally influenced when a large quantity of chloroform is thrown into it through the blood, and we have it still an open question whether the same arrest of the cardiac action will take place when the vapour of chloroform is carried to the heart through the lungs, by inhalation. Twenty years ago it was assumed that in nearly every fatal case death was owing to cessation of the heart, and we are indebted to Dr. Sibson for a very acute and admirable suggestion explaining the cause of the suddenness of the death. The heart, said he in effect, for I forget his exact words, first feeds itself with blood by its coronary system of vessels. It receives, therefore, into itself the first impression of every stroke of itself. If the blood with which it is fed is normal, it is first fed by it; if the blood is abnormal, it is first injured by it; and so when the blood of the left side is charged with chloroform the heart is the organ primarily influenced by the agent. In inspiring vapour of chloroform what, then, do we do? We bring the vapour over an immense surface exposed to blood; there it is condensed, there it commingles with the arterialised blood as condensed, and from thence it travels direct through the left cavities into the structure of the heart. The process is much the same as that of direct introduction through a vein, but yet I cannot in any case, in a healthy animal, bring the heart to a stand still in the same way through the lungs. I always find that as the quantity of vapour is increased the introduction of it into the blood is impeded by the direct action exerted upon the pulmonary vessels. In plain matter of fact, I doubt whether it be possible to kill the perfectly healthy heart by the direct action of a poisonous amount of chloroform introduced into its substance through the respiratory surface. But I will not say the same of a heart that is not healthy, nor of a heart in which the nervous mechanism is injured, the muscular substance appearing healthy. Such a heart might possibly succumb under a dose of chloroform small enough to pass through the pulmonary vessels without exciting contraction in them, and small enough not to produce anæsthesia.

A third series of facts, learned from direct experience in narcotising inferior animals, relates to the inquiry whether, if the idea of narcotising at once and, as we may say, by violence, be given up, it is best to begin with gentleness and to continue slowly, or to begin gently, and, having subdued the preliminary excitement, to push on the inhalation more rapidly. Some administrators give the vapour so cautiously that they rarely have the patient ready for the knife under six or seven minutes. Others carry on the administration quickly through the second and bring the patient into the third degree in from four to five minutes. Snow's rule was two minutes for infants, three for children, and four or five for adults. The rule is a sound one, as is another rule from the same author, that when the second stage of excitement is vehement, it is best subdued by carrying on the inhalation firmly and resolutely. In animals, I find that when the first stage is over, it is always safer practice to narcotise quickly to the third stage than to go on slowly saturating the body with the vapour, and rendering any accident which might be casual fatal. For the fact cannot be too strongly impressed on slow and overcautious administrators that when an animal body is being charged for a long time with chloroform the whole of the substance introduced is not utilised in producing anæsthesia. Some of it is eliminated into the alimentary canal, some is stored up in the liver, some in the cellular tissue, some in the muscular fibre, in all of which parts, as you know, we can detect it chemically. Excess, therefore, is so much dangerous excess; if any organ fail while the excess is present the act of withdrawing the chloroform from the breathing is of no avail, for there is a steady reabsorption into the circulation, from the body, and the narcotic effect is sustained. Some perfect illustrations of the influence of moderately short as compared with long administration have occurred in my experiments for the resuscitation of animals that have ceased to breathe under chloroform vapour, and I can determine, by method of administration, whether an animal shall be recoverable or not after respiration has ceased. If the animal shall have ceased to breathe within four minutes I can insure, in five cases out of six, to resuscitate at a temperature between 50° and 60°. But if an animal remain even in less vapour, for seven minutes, before respiration ceases, I cannot insure recovery in more cases than one in six.

The lesson taught by this series of facts is then not to induce slow narcosis: but having carefully felt the way in the first minute or two of administration, in the adult, to push quickly into the third degree in which, if the body be not surcharged with chloroform, the danger is comparatively small.

Attempts have been made to modify the effects of chloroform, and to render it safer for administration by mixing it with other fluids. Chloric ether (a mixture of chloroform in alcohol) was used, at the suggestion of the late Jacob Bell, before chloroform was introduced at all as an anæsthetic; and so soon as chloroform came into common use, it was tried in various forms of admixture. Ether and chloroform; alcohol and chloroform; alcohol, ether, and chloroform have been combined and applied with varying success. The Vienna mixture, which was composed of one part chloroform and six of absolute ether, has been the most extensively used of all these compounds, and I believe it to be the best. At the request of Mr. Wells, I once administered the Vienna mixture, while he removed the upper jaw from an adult person; and once again while he performed the operation of ovariotomy. I have also used it many times for minor operations, and compared it with other mixtures over which it seemed to me to have advantages. But after all, I could see no possible advantage in this or other mixtures over the simple agent. Snow was early to point out that, when we employ a mixture of ether and chloroform, we produce narcotism with the lighter ether and keep it up with the chloroform, so that there is a mixed effect, and this is essentially true of all mixtures that have been constructed. Let me put on the board the physical properties of the three agents chloroform, ethylic ether, and ethylic alcohol, and you will see how different they are and how improbable, I had almost said impossible, it is that they should act together; that is to say, that they should at the same temperature evaporate uniformly and equally, diffuse uniformly and equally in the air, and condense uniformly and equally in the blood.

	Specific gravity. Water=1000.	*Vapour density.* Air=1.	*Boiling point.*
Chloroform .	1·491	4·141	142° Fahr.
Ethylic ether	0·720	2·586	95° Fahr.
Ethylic alcohol	0·793	1·613	173° Fahr.

We cannot look for a moment at these simple facts without seeing how puerile it is to expect uniformity of result from the evaporation and diffusion at the same temperature of bodies so

physically different and only mechanically admixed. In evaporation the three agents split up into their three distinct vapours, each expanding its own natural way, diffusing its own way, condensing its own way, and, what is more, each playing its own natural part in physiological action. To sum up, when we mix chloroform with another agent, we weaken it as if we diluted it in air to reduce its effect, so that the question of mixtures brings us back to the previous question of quick or slow narcotism, which has already been discussed.

If it were possible to get two fluids which were near to each other in physical characters, we should in a mixture of them obtain a compound on which to bases a scientific research on the effects of admixture. We might take bichloride of methylene and ethylic ether for this purpose, as will be seen when the two agents are compared.

	Specific gravity. Water=1000.	*Vapour density.* Air=1.	*Boiling point.*
Bichloride of methylene	1·344	2·937	104° Fahr.
Ethylic ether . .	0·720	2·586	95° Fahr.

And I could offer other combinations which are nearer than these in relation to physical constitution. Now, such analogous bodies, I admit, deserve to be studied in action alone and in combination, for one of them might be discovered to produce physiological effects corrective of dangerous faults in the other, and a grand result might be obtained. But the empirical method of mixing fluids of different qualities for the assumed purpose of obtaining uniformity and safety of action partakes of the philosophy of the Hospital patient, who partook in one dose of a small quantity of each fellow patient's medicine. As a serious proposition it indicates a scientific coupling, in which love for something new dallies hopelessly with idleness for research.

In conclusion, reviewing the past of chloroform as an anæsthetic from its introduction until now, I see nothing to lead me to assume that any of the deaths which have followed the administration have been due either to absence of skill on the part of administrators, want of special knowledge respecting special apparatus, or absence of special mixtures of chloroform with other fluids. I see nothing, again, in bad quality of specimens of chloroform to account for the fatality which has followed its use. Lastly, I see nothing in operative Surgery (except that there *seem* to have been more deaths from the vapour when it has been used for minor than for major operations), to account for the fatality. All through the chapter one administrator appears to have been as skilful and as thoughtful as another, one quality of chloroform as good as another, one operator as careful as another. I can find no single death from chloroform in which even a pretext of a charge could be raised against these factors in the catastrophe. We must therefore look for the cause of death in some inherent fault in chloroform itself, which unfits it for every person indiscriminately; or, putting it the other way, in some inherent fault in the organisms of certain who die, which renders them unfitted to meet the physiological changes the chloroform excites when it is introduced into the organism.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
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II.—Neuralgia Gastrica.

Synonyms.—Cœliac neuralgia, gastrodynia neuralgica, spasm of stomach.

Under the name of "neuralgia gastrica" I combine the two affections which in text-books are generally treated separately as "gastrodynia neuralgica" and "neuralgia cœliaca," for I have not been able to convince myself that these two different names really imply two affections, each located in different nerves—viz., in the one case the gastric branches of the vagus, and in the other the solar plexus of the sympathetic. Gastric neuralgia is characterised by a spontaneous pain occurring paroxysmally, which is either concentrated in the epigastric region, or is reflected thence to the back and to the sternal region. The paroxysms generally occur suddenly without precursory symptoms, and the very acute pain may subside after a few minutes, to recur again and disappear after several remissions and exacerbations. Pain on pressure at the epigastrium does not exist; on the contrary, firm pressure here generally alleviates the pain, so that the patient is often induced to exercise it.

Amongst the motor phenomena we notice that tension of the abdominal walls is generally present, and that the epigastrium is commonly drawn in. If the pain be very intense, changes in the circulation may be seen. Under these circumstances the extremities and face become cold and pale, the radial pulse small, heart's impulse feeble, and the number of beats retarded or accelerated. A feeling of extreme faintness and anxiety, which may be present here as in cases of angina pectoris, is doubtless connected with these circulatory disturbances. Spasmodic yawning, nausea, eructations of gas, and desire to micturate, are sometimes noticeable towards the end of the paroxysm.

The duration of the attack varies from several minutes or half an hour up to several hours, or even the whole day.

With regard to the seat of origin and pathogenesis of the disease, *Autenrieth*, and after him *Romberg*, assumed the existence of two forms of gastric neuralgia—the one (gastrodynia neuralgica) originated, according to their ideas, in the gastric branches of the vagus, the other (neuralgia cœliaca) in the sympathetic solar plexus. Romberg expressly mentions as pathognomonic of cœliac neuralgia the specific sensation of oppression which he considers to be generally characteristic of sympathetic hyperæsthesia. This specific feeling of oppression —which, it is true, is also found in angina pectoris and in mesenteric neuralgia—is, however, principally the result of the general changes in circulation which are produced by the *anomalous action of the cardiac and vaso-motor nerves* during the paroxysm; and this abnormal action of the heart and vessels is a secondary effect produced by means of reflection, for irritation of the sensitive fibres of the abdominal organs causes increased irritation of the cardiac vagus fibres and paralysis of the abdominal vaso-motor nerves.

That the vagus is the sensitive nerve of the stomach has been shown by numerous experiments, and recently by those of Lussana and Trezoni; (a) all the phenomena of gastric neuralgia may, therefore, be referred to this source of origin. We are in a different position with regard to the sympathetic, and more particularly with the solar plexus, for up to the present time no physiological facts have been adduced to show that sensitive and reflectory nerves of the stomach or sensitive nerves in general arise from the solar plexus. The assumption, therefore, that in gastric neuralgia the pains are consequent on hyperæsthesia of the solar plexus is entirely without foundation until sensitive functions can be shown to exist in the branches of that plexus, nor is it altogether necessary, from a clinical point of view, that we should give such a symptomatic differentiation of the neuralgiæ of the stomach as Romberg requires. Most writers have expressed opinions to the contrary, and justly so, on the ground of absence of therapeutic effect in the different forms of neuralgia.

The etiology of gastric neuralgia is obscure to a high degree. We do not know to what kind of irritation the sensitive nerves of the stomach respond by the production of pain and the reflex phenomena above mentioned. It is only of the predisposing influences of which we possess any knowledge. The disease is most common in youths and in persons of middle age, more so in women than in men, very often associated with anæmia and chlorosis, and often connected with hysteria. The absurd opinion has been propagated that women of excitable and irascible disposition—so-called Xantippes—are pre-eminently disposed to the disease. Sometimes hereditary taint may be discovered; bad nutrition, exhausting diseases, and so on, predispose to gastric as well as other neuralgiæ. Sometimes masked intermittent forms of typical gastric neuralgia are observed. Of the real local cause of the affection we know nothing. Pathology is silent on this subject, and clinical observation shows at least this much, that important changes in the structure of the stomach and organs of digestion do not usually exist, inasmuch as the complete absence of dyspeptic and other digestive disturbances forms the most important criterion in the differential diagnosis of gastric neuralgia.

Concerning diagnosis, the point is not so much to recognise the series of symptoms of gastric neuralgia — which with a little care is not difficult — but not to overlook changes in structure of the walls of the stomach, if such exist. The diagnosis "gastric neuralgia" as such is of almost exclusively negative importance, implying only this — that in the given case the disease is not catarrh of the stomach, not ulcus ventriculi, and so on. Positive exclusion of structural changes in the walls of the stomach is, however, of the utmost prognostic therapeutic importance. The essential differential criteria are as follows: — In gastric neuralgia there exists well-marked paroxysms of pain and painless intervals. These paroxysms

(a) *Gazette Hebdomadaire*, 13, 1863.

are independent of taking food, and the pain is not increased but rather diminished by pressure. In chronic diseases of the stomach on the contrary the pain is provoked and increased by irritation of the diseased mucous membrane, and it therefore occurs mostly when the stomach is full immediately after meals, and particularly after irritating and indigestible solid and liquid food, and it is aggravated by pressure at the epigastrium. Dyspeptic phenomena and changes in digestion generally being absent in gastric neuralgia, the general nutrition is not impaired, even after a prolonged existence of the disease, whilst in cases of chronic disease of the stomach, important digestive changes are never absent, which during the course of the disease produce emaciation and a cachectic condition of the patient.

The mistake of considering gastric neuralgia as intercostal neuralgia or rheumatic pains in the abdominal walls may be avoided partly by strict attention to the paroxysmal phenomena and partly by testing the sensibility to pressure, which is as a rule increased at certain points, both in the intercostal neuralgia as well as in rheumatism of the abdominal walls.

The prognosis of the disease is generally favourable, although spontaneous cessation is not of frequent occurrence, yet the disease usually gives way to appropriate treatment. The least favourable result may be expected in cases where the disease is of centric origin, and in the cardialgia of hysteria.

The aim of the *treatment* must be as far as possible to remove the causes, very few of which, however, and only remote ones, are known to us and are accessible to treatment. In those very frequent cases occurring in young females in connexion with anæmia and chlorosis the preparations of iron and chalybeate waters act very favourably; the spas of Pirmont, Driburgh, Schwalbach, Franzensbad, etc., have gained great renown for such affections; most of these waters may be suitably employed at home and in the winter. The same is the case with the pyrophosphoric chalybeate waters. With the use of the preparations of iron may be combined a strengthening diet, exercise in the open air, gymnastics, etc. The so-called digestive medicines are quite unnecessary and useless. Those typical cases of neuralgia dependent on malaria may be cured by the use of quinine. The cardialgia of hysterical persons has subsided in several instances after the successful treatment of local disease of the generative organs (metritis, erosions, ulcers of uterus, etc.). In many cases of gastric neuralgia our ignorance of its etiology restrict us within the bounds of empirical attempts to treat the disease symptomatically. It is easy to see how many remedies should have been successful in cardialgia since the affection is of a favourable kind, disappearing sometimes spontaneously, and occurring in irregular paroxysms, with intervals of sometimes long duration. But even after such considerations it is almost incredible to see what drugs have been employed for the disease. If we go through the list we scarcely find one drug, worthy or unworthy of mention, in all Pharmacopœias, which has not been used. Arnica, calendula, folia visci, rad. sumbul, rad. artemisia, valeriana, rheum, ol. æthereа, opium, belladonna, hyoscyamus, nux vomica, strychnia, cinchona, sugar, carbo, kreasotum, iodum, and most particularly bismuth in its various forms, preparations of silver, zinc, arsenic, and many more.

Bismuth, and more especially the trisnitrate, is placed at the head of the list by several authors, and it is, in fact, often useful. The nitrate of silver and arsenic also render good service. As palliative remedies during an attack, amongst others, warm poultices to the epigastrium, dry or moist, are preferable to inunction with warm oils and compression kept up by means of bags of warm sand. The use of spirits seems to do good during the attack, but irritating narcotic plasters, narcotic embrocations, and so on, are useless. The most certain palliative remedy is without question morphia injected hypodermically, most suitably in the epigastric region, where absorption takes place most rapidly. Where no special causative indication exists the injection will always be sufficient, and will at least produce in the shortest time all the good effects which can be gained by pharmaceutical treatment.

THE building of the new St. Thomas's Hospital has been attended with remarkably few accidents. The immunity from them experienced by the workmen—from seven to eight hundred in number—has been, considering the magnitude of the undertaking, almost unprecedented, there having been no casualty attended with a fatal result at all, and only two cases even of broken bones.

ORIGINAL COMMUNICATIONS.

ELEPHANTIASIS TREATED BY REMOVAL OF THE TUMOUR AND LIGATURE OF THE FEMORAL ARTERY.

By J. FAYRER, M.D., C.S.I.

I HAVE on a former occasion (*vide* "Clinical Surgery in India," page 688) described two cases of elephantiasis of the leg which were treated by ligature of the femoral artery, according to the recommendation of Professor Butcher, of Dublin, and Dr. Carnochan, of New York. The result of these cases was not encouraging. The first died of pyæmia on the nineteenth day. The limb had diminished considerably, and so far it promised to do well; his death prevented any opinion being arrived at as to the probability of permanent decrease in the hypertrophy, so that, beyond the fact of an immediate diminution in the swelling, as a result of the operation and the consequent bandaging, nothing definite could be arrived at from this case. My own impression is, that the reduction of the swelling is due more to the bandaging and rest in the recumbent posture than to the ligature of the artery, and I have good reason for believing so, as I have frequently observed in the elephantoid legs of those who have been operated on for scrotal elephantiasis that, with the necessary rest in bed after the operation, the leg diminished considerably, but that it increased again when the recumbent posture was no longer continued. Elephantiasis of the leg, like elephantiasis of the scrotum, is the local expression of a constitutional disorder, and I do not see why temporary deprivation of the blood-supply to the limb should have any permanently curative effect on the local disease. The anastamotic circulation provides for the nutrition of the limb, and, indeed, so far it is probable that the part especially diseased, the cutis, is even more vigorously supplied than under ordinary circumstances, for the result of the cutaneous hypertrophy must certainly be an enlargement of the cutaneous blood-vessels, and as these are concerned in carrying on the anastamotic circulation when the main trunk is obstructed, it appears hardly probable that this condition can be conducive to a curative action in the affected part, nor is it at all probable, I think, that a mere change in the mechanical arrangements for the distribution of blood to the limb can have any effect in removing what is only a local symptom of a constitutional disease.

The result of the second case tends, I think, to show that this view is correct, for whilst there was a marked diminution at first, after the artery was tied the swelling gradually returned as the man recovered from the operation, and when I saw him some time afterwards he was just as bad as when I tied the artery.

The third case (that I now record) is not more satisfactory. There was the same temporary diminution of size during the rest and confinement to bed after the operation; but when he recovered the swelling slowly returned, and he is now, six months after the operation, just as bad in respect of elephantiasis of the leg, as he was when the femoral artery was tied.

I have before referred to the improvement that takes place in the constitutional health after the removal of a scrotal tumour—the absence of the periodically recurring paroxysms of elephantoid fever and the consequent cachectic condition it induces. The removal of an ever present source of blood dyscrasia is attended with the best results, and patients have frequently told me that the great relief they had obtained was not so much due to the removal of the abnormal growth, as of the periodic fever which caused them such great distress.

In this case the same improvement took place, and the elephantoid fever was removed with the tumour, but notwithstanding the amendment in the general health, the leg returned to its original size, and thus proved that, in this case, as in others, the ligature of the artery had not been followed by any permanent benefit to the limb.

Gunga Ram, aged 45, a Bengali Sircar, born near Burdwan, who came to Calcutta about nine years ago, and has lived here since, was admitted into Medical College Hospital on April 20, 1869, with elephantiasis of the scrotum, from which he had suffered for ten years, and of the left leg, which commenced about fifteen years ago. He had been subject to attacks of elephantoid fever twice a month, and lately to even more frequent recurrences, attributing it, as his countrymen generally

do, not to the disease, but to lunar influences. After his admission into Hospital he had only one recurrence of the fever before he was operated on. This was probably due to change of air and the influence of quinine, iron, and perhaps the improved diet.

When admitted he was in a wretched state of health, anæmic, flabby, and apparently in a state of fatty degeneration, the heart's action so feeble that the sounds were barely audible, and the areolar tissue of the limbs in an incipient state of anasarca, due no doubt to the impoverished condition of blood caused by malaria and constant recurrences of elephantoid fever.

It was not until June 28, 1869, that he was considered fit to undergo an operation, but on that date the scrotal tumour was removed in the usual way. It weighed 2 lbs. 5 oz. after removal. He bore the operation fairly and recovered, though slowly. On October 4, when the femoral artery was tied, the wound was still not quite cicatrised.

The dimensions of the left leg were as follows before the operation:—September 28, 1869: Just above ankle, 13 in.; below knee, 12½ in.; instep, 12 in. The right leg was also very slightly affected. The corresponding measurements were: Just above ankle, 8 in.; below knee, 11 in.; instep, 9½ in.

On October 4, 1869, I placed a ligature on the femoral artery, at the apex of Scarpa's triangle. The artery was enclosed in a fatty sheath, and required great caution in passing the ligature to avoid injuring the femoral vein. The operation was satisfactorily completed, and the limb was swathed in cotton-wool and wrapped in a flannel bandage. The wound was stitched with horsehair, and dressed with carbolic oil dressing.

October 5.—He is doing well, slept, and complains only of a little pain in the wound. The temperature this morning is as follows: Axilla, 100·4° Fahr.; left ham, 100°; right do., 100·2°; left toes, 97°; right do., 99·2°. No numbness, no tingling of the limb; pulse 94; tongue clean; no pain beyond slight aching behind the left knee. Wound dressed with carbolic oil.

6th.—8 a.m.: Had slight fever yesterday; none at present; no pain or numbness of the leg; pulse 94; purulent discharge beginning from the wound; tongue clean. Temperature:—Axilla, 99° Fahr.; left ham, 98·3°; right ham, 96·5°; left toes, 95·6°; right toes, 92°. Thus the affected limb is two degrees warmer than the other limb. Measurements of the left leg this morning are as follows:—

	October 6.	October 4.
Above ankle	12½ inches	13 inches.
Below knee	13 „	12⅝ „
Instep	11 „	13 „

The foot has become smaller, and the skin of instep shrivelled.

7th.—Was feverish again during the day; pulse 96; integument above the wound slightly inflamed; apply argenti nitrat. solution. This morning reddish pus discharged from the wound. Temperature:—Axilla, 98° Fahr.; left ham, 95°; right ham, 94°; left toes, 92·6°; right toes, 93°. Measurements:—Instep, 11 in.; above ankle, 11½ in.; below knee, 12½ in. The leg to be anointed with an ointment of iodide of lead, and he takes a solution of quinine when he is free from fever. He has no numbness in the leg.

8th.—Slight fever yesterday, but none at present. Wound looks healthy. Two ligatures in the wound came away this morning. Temperature:—Axilla, 99°; right ham, 96°; left ham, 95·4°; right toes, 93·2°; left toes, 92·6°.

11th.—Doing very well. Sutures removed from the wound, which is rapidly healing. Pulse 80; no fever. Temperature:—Axilla, 97·8° Fahr.; right ham, 96·8°; left ham, 96°; right toes, 93·6°; left toes, 94°. Measurements:—Instep, 10⅞ in.; above ankle, 10¾ in.; below knee, 12⅜ in. He is in very fair general health now.

12th.—Ligature on femoral artery came away to-day. Temperature:—Axilla, 98° Fahr.; left ham, 96°; right ham, 97·2°; left toes, 95°; right toes, 96°. Measurements:—Instep, 10½ in.; above ankle, 11½ in.; below knee, 12¼ in. He now takes quinine and iron.

15th.—He is doing well. Wound healing. Temperature of limbs about equal.

19th.—He is doing well. The wound is nearly healed. Temperature: Axilla, 98° Fahr.; left ham, 96·3°; right ham, 95·8°; left toes, 93·8°; right toes, 90·4°. Measurements: Instep, 10½ in.; above ankle, 10½ in.; below knee, 11¼ in.

22nd.—Doing well. The temperature of the limbs is about equal. The wound is healed to a point. He eats and sleeps well. Measurements: Instep, 10⅜ in.; above ankle, 10⅝ in.; below knee, 11 in.

24th.—Has been walking about the ward since last report. He says the leg and feet feel lighter.

Measurements.

	October 24.	September 28.	Difference.
Instep	10 in.	12 in.	2 in.
Above ankle.	10 in.	13 in.	3 in.
Below knee	11 in.	12½ in.	1½ in.

November 6.—He is doing very well. Has no fever. He walks about the wards.

16th.—The wound has quite healed for some days. Measurements: Instep, 10 in.; above ankle, 10 in.; below knee, 11 in.

23rd.—The foot and leg have been steadily increasing in size during the last few days. Instep, 10¼ in.; above ankle, 10¼ in.; below knee, 11 in.

December 4.—He is very well, but the leg is gradually increasing. Instep, 10½ in.; above ankle, 10½ in.; below knee, 11 in. It should be noted that the scrotal wound is not yet quite cicatrised.

13th.—For the last few days he has had a low remittent fever, and for change he has been transferred to the Medical wards.

27th.—He returned to my ward weak, but recovered from fever. Measurements: Instep, 10½ in.; above ankle, 10¼ in.; below knee, 10¼ in. He is taking quinine. Scrotal wound almost quite cicatrised.

30th.—He would not remain in Hospital any longer; feeling quite well, he took his discharge.

Measurements.

	On discharge.	At operation.	Difference.
Instep	10½ in.	12 in.	1½ in.
Above ankle	10¼ in.	13 in.	2¾ in.
Below knee	10¼ in.	12 in.	1¾ in.

So far there is an improvement, the leg being 1¾ inches smaller below the knee, 2¾ inches above the ankle, and 1½ inches round the instep than on admission, but the improvement is not permanent, and, since his discharge, it has already almost returned to the original size.

Measurements on April 16, 1870, six months after the operation:—

	April 16, 1870.	Sept. 28, 1869.	Difference.
Instep	11 in.	12 in.	1 in.
Above ankle	12¼ in.	13 in.	¾ in.
Below knee	12¾ in.	12½ in.	¼ in.

The patient says that he is in better health, and much relieved by the removal of the scrotal hypertrophy, but that his leg is now just as it was before the operation. He thinks it is just as large, and that it is growing larger. As a matter of fact, the leg is still somewhat smaller than it was before the operation, but it is gradually returning to the original dimensions. When he left Hospital on December 30 the measurements were: Instep, 10½ in.; above ankle, 10¼ in.; below knee, 10¼ in.

On April 16 it had increased to: Instep, 11 in., increase ½ in.; above ankle, 12¼ in., increase 2 in.; below knee, 12¾ in., increase 2½ in.; so that I think there can be no doubt that, in this case also, the operation has not conferred any permanent benefit.

ON A NEW OPERATION FOR REMOVAL OF POSTERIOR ADHESION OF THE IRIS.

By ALEX. OGSTON, M.D. Aberdeen,
Ophthalmic Surgeon to the Aberdeen Royal Infirmary.

When, in iritis, a single point of adhesion between the pupillary margin of the iris and the lens has been formed, there is great danger that the eye will remain ever after a damaged organ. Should the use of atropine (as is very usual) fail to destroy, while yet soft, this point of adhesion, the disease tends to go on from bad to worse, for the fixed part acts as a continual irritant, causes more or less severe relapses of the iritis, and leads to the increase of breadth of the adhesion, and to atrophic changes in the iris itself. Hence it happens that the usual result of such cases, when left to themselves, is that, finally, the pupil becomes totally adherent to the lens, the anterior capsule in and near the pupil becomes covered with the products of inflammation, and this capsulitis, interfering with the nutrition of the lens, leads to the formation of cataract, while the atrophic iris is bulged out at its periphery by the fluid in the posterior chamber, and forms a convex ring round the occluded pupil. The deeper structures of the eye usually suffer at the same time.

The treatment of adhesion between the iris and lens, posterior synechia, as it is called, is one of the least satisfactory

parts of ophthalmic practice. In the cases of iritis and cornitis, where these are so apt to be formed, the use of atropine furnishes us with a means of preventing, in many cases, this annoying occurrence; but, in spite of the most careful treatment, adhesions often happen, and constitute a germ of mischief tending continually to progress.

When the adhesions are broad and extensive, no better or surer means could be wished for than the performance of iridectomy, which radically cures the whole mischief at the expense of a slight deformity. When, on the other hand, the adhesions are few and involve mere points of the pupillary margin, it would be greatly to be desired that we could break down synechiæ without producing deformity of the eye. The use of atropine commonly fails us entirely in such cases, and operation is the only means of attaining this end.

As a substitute for iridectomy in such cases, it has been proposed (Stellwag's *Augenheilkunde*, 1864, p. 179) to make a peripheral incision in the cornea with the usual iridectomy knife, then to introduce a peculiar flat hook, sharp at its concave side, and break down the adhesions by pushing with the convex side, or cutting them with the concave portion. It was hoped that this operation would succeed in an eye under the influence of atropine, but the proposal seems never to have found favour, and I am ignorant of what success, if any, is said to have attended it. The description of it would cause any experienced oculist to hesitate before even giving it a trial.

More recently (*Archiv für Ophthalmologie*, 1869, Bd. xv. Ab. I.) Dr. Passavant, in a letter to Professor von Graefe, suggests that limited adhesions of the iris to the lens should be broken down in the following manner:—The iris being under the influence of atropine, a peripheral incision, as for iridectomy, is to be made in the cornea opposite the site of the adhesion. The knife is then withdrawn, and an iris forceps is introduced, which, seizing the iris near the pupil, and at a point corresponding to the adhesion, is made to drag the iris outwards towards the wound until the adhesion is seen to rupture. The forceps is then loosed from its hold on the iris by opening the blades, and withdrawn, the operation being thus completed. Dr. Passavant usually contents himself (p. 261) with the destruction of one adhesion at a time, and operates on another after an interval of a few days. He says —"In more than fifty such operations I have not met with a single injurious result."

This paper of Dr. Passavant appeared so honestly written that a trial of his method was instituted in the next case that presented itself in the Aberdeen Hospital. In this, as in all the cases where I have tried it, the operation was followed by no bad result as regards the iris; but, though the adhesion was seen to tear, the contraction of the pupil, which invariably followed on the escape of the aqueous humour, allowed the two ends of the adhesion to lie so close to each other that they united again in spite of the free use of atropine, and by the time the corneal wound was healed the same state of matters existed as before the operation, only the adhesion was not so broad as previously.

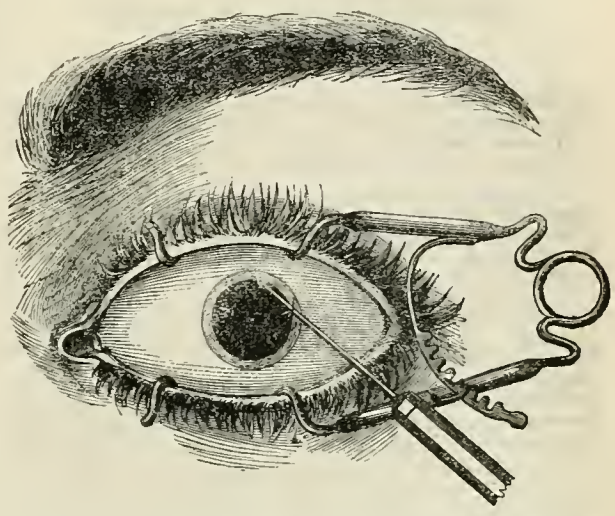
In both the above-mentioned operations the fault lies chiefly in their necessitating the escape of the aqueous humour, and so permitting the contraction of the pupil which follows to bring the ends of the separated adhesions so close that they reunite. They show, however, with what impunity the iris may be manipulated, and that iritis is not even a usual result of careful and well-judged interference.

The following mode of operating on cases of limited adhesions for which iridectomy is too severe a measure is based upon two facts—first, that the iris is a structure sufficiently tough to resist very decidedly attempts to transfix it, and will be pushed before the point of a sharp instrument so as even to tear from its attachments rather than allow the sharp point to pass through it; and second, that if the aqueous humour be not permitted to escape, an instrument may be introduced into the anterior chamber, and the iris manipulated without causing contraction of an atropised pupil.

Fig. 1.

The pupil being put well under atropine, and the patient being under chloroform or bichloride of methyleue, a spring speculum is fixed on the lids, and the operator fixes the bulbus with a pair of forceps held in the left hand. The situation of the adhesion is now well studied, and, if necessary, concentrated artificial light is employed to render it distinct. This latter, however, is necessary only with feeble daylight or opacities of the cornea. A needle (Fig. 1) is now introduced through the cornea, near its sclerotic margin, at a considerable distance on one side of the adhesion, and in such a direction that, when pushed onwards, it crosses at right angles that radius of the lens in which the adhesion is lying (Fig. 2). The needle is pushed onwards into the anterior chamber, and so guided by the operator that its point becomes

Fig. 2.



engaged in the pupillary margin of the iris at the root of the adhesion. The simple contact of the needle point with the iris is sufficient for this, and no attempt must be made to bury the needle in the tissue. By a gentle lever action of the needle point towards the periphery of the iris, the corneal wound being the fulcrum, the adhesion is broken down by being stretched and ruptured, and the needle being slowly withdrawn from the eye, the operation is completed.

The needle I use is depicted in Fig. 1, and its point is rounded off a little, so as not to be acuminate.

There seems to be no reaction of iris or cornea consequent on this slight interference; on the contrary, I have found the dilatation of the pupil always keep the torn ends of the adhesion apart under the use of atropine until absorption had taken place.

The simplicity of the proceeding obviates the necessity of detailing cases, but the following example will show how readily it succeeds where Passavant's method fails:—

Case.—Jas. T., aged 18, admitted into the Aberdeen Hospital on October 25, 1869, with nebulous opacities of both corneæ and synechia posterior iridis on both eyes. The right pupil was nearly totally adherent, the left pupil being fixed only at two points—viz., above and to the outer side. On October 28, 1869, the external adhesion of the left iris was separated by Passavant's method. There was no subsequent reaction, but the adhesion reunited to nearly its former extent, in spite of the assiduous employment of atropine. On November 23, an iridectomy was performed on the right eye with complete results. On December 16 the external adhesion on the left eye was broken down by the operation above described, and on December 21 the upper adhesion was similarly operated on, a round movable pupil being secured, and the boy was dismissed cured on December 27, with orders to return after six weeks to be treated for the haziness of the corneæ.

Danger in the Preparation of Oxygen.—The neighbourhood of the *Palais de Justice* has been thrown into consternation by the occurrence of an explosion at the laboratory of the Hôtel-Dieu during the preparation for the use of the patients of oxygen by means of the chlorate of potass and oxide of manganese. While M. Dugué, the *interne* of pharmacy, 20 years of age, was engaged in its production, the crucible, from some unknown cause, exploded with such violence as to throw him down insensible on the floor. The furnace and chimney were destroyed, the materials being dispersed in every direction. The recipient was twisted and torn up; and it is thought that had not the laboratory been constructed with great solidity, still more destructive results would have ensued. M. Dugué is horribly injured, so that he is in a most pitiable and dangerous state.—*Union Méd.*, May 21.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

OPERATIONS

For Harelip, Removal of Diseased Bone from Tibia, Excision of Hip, Ligature of Nævus, and Excision of Elbow — By Sir WILLIAM FERGUSSON. *Lithotrity, Excision of Elbow, and Ligature of External Iliac Artery*—By Mr. HENRY SMITH.

WE witnessed the operations at this Hospital on two Saturdays lately (May 7 and May 14), and were happy in the selection of days which furnished good material for reporting for the benefit of those of our readers who, no longer able to attend the operating theatres, are glad to read, from time to time, how the old work goes on, and glean something from the clinical remarks which these occasions call forth. It is always pleasant to get a Saturday afternoon in the theatre at King's. Even when there is not much going on in the way of "heroic" Surgery, the minor cases are turned to such good account for instruction that one never fails to learn something: and perhaps one is taught the most valuable lesson of all by the admirable order that is preserved in the theatre. All the trifling details are here under such perfect management that one does not know which to admire most—the beautiful easy litter which noiselessly wheels the patients off from the table, the care taken not to obstruct the view of the students, the after-dressings brought forth just when required spread out on clean platters, the orderly arrangement of the instruments, the neat uniforms and grave attention of the sisters and nurses, and, above all, the absolute silence and regularity accompanying every step of the work, are all so many useful lectures to the young Surgeons who are learning to take their part in this important branch of their art. Of course, it would not be becoming to refer here to the cool nonchalance and ready skill of the operators, although perhaps this, after all, strikes an ordinary observer more than anything. To see a Surgeon commence a severe and difficult operation with a cheerful confident smile and a firm unhesitating hand, like a professed pianiste sitting down to rattle off an exercise on the piano, is a pleasant and exhilarating sight enough, and is itself a sufficient reward to those who take the trouble to attend some of our London operating theatres, and who know that this confidence is the legitimate result of long and careful practice.

On May 7, after Mr. H. Smith had crushed a stone in the usual way, Sir W. Fergusson operated on an infant with harelip. The edges were pared and brought together with pins, etc., and Sir William explained that although there was also a cleft in the palate, with which he did not consider it well to meddle, yet, the sooner the lip was put right the better. The next case was also a small affair: a boy, aged about 10, from whose tibia Sir William had removed much necrosed bone two months previously. The wound had refused to heal thoroughly, and although no loose bone could be felt, it was thought well to cut down upon the part and explore. No necrosed bone was found, but some redundancy of new bone was removed with gouges and pliers, oiled lint inserted in the wound, and water dressing applied over it. The same Surgeon next excised the head of the femur and a portion of the acetabulum in a case of morbus coxæ of sixteen months' standing, the result of a fall. The lad had already had a large abscess opened, and now further search discovered extensive disease, chiefly in the femur, but invading also the pelvic bone. A free T-shaped incision was made over the joint, the head of the bone well cleared with a blunt pointed bistoury, and sawn off, the rest of the carious bone being removed with gouges. Oiled lint was laid in the wound, and water dressing put over all.

The first case on May 14 was one of excision of the elbow by Mr. Henry Smith. The patient, a boy aged about 10, had been for a long time under observation, and Mr. Smith remarked afterwards that the operation ought to have been done some two months ago; "but," said he, "we are of course always anxious—even in this place—to avoid such operations when possible." However, in this instance the Surgeon was brought to overcome this very natural reluctance by the boy's constitution becoming undermined, so that it became clearly necessary to remove the joint or limb to save life. A single longitudinal incision was made, the bones carefully cleared, and the ends of all three removed. Carious cavities were found above the condyle of the humerus and in the fossa at the base of the olecranon. A solution of chloride of zinc was sponged into the wound, and the limb arranged on a rectangular splint. Mr. Smith observed that the usual mistake made in this operation was to remove too little bone—an error which he had been careful not to commit on the present occasion.

An interesting case of aneurism was now brought into the theatre. The patient, a compositor, aged 33, had first noticed a small swelling in the left groin twelve months before, following no strain or injury, and giving so little inconvenience that he thought little of its gradual growth until it had attained the size of a hen's egg. This was two months ago, and he then sought advice at a London dispensary. It is melancholy to have to record that at this institution, according to the man's statement, this large aneurism was treated as a bubo and painted with iodine ("without materially reducing the swelling," as Mr. Smith pleasantly remarked), whilst, in spite of the man's denial of any venereal affection, copaiba, etc., were administered in the orthodox fashion, the denial being probably taken as a kind of additional evidence of the latent gonorrhœal affection. After six or eight weeks of this treatment, the man came under Mr. Smith's care, and was promptly sent into the ward. By this time the aneurism was as big as a large lemon, partly below, but mostly above, Poupart's ligament, having a strongly marked expansile impulse, and the whole limb being much swollen. After a fortnight's rest in bed this swelling of the limb had greatly diminished. Mr. Smith was uncertain whether enough of healthy vessel would be found above the aneurism to admit of a thread being applied below the common iliac artery, and his first incision was therefore made rather higher than usual. The deeper muscles were very carefully divided, and then, Mr. Wood holding back the intestines and peritoneum with a butter-pat, the artery was readily discovered, found to be perfectly healthy, and tied well below the bifurcation. The wound was then sewn up and a pad and spica bandage applied.

Mr. Smith, in his remarks upon the operation, said that this was the fifth time that he had been called upon to tie this vessel, and that, on the whole, he had never had a more favourable or simple case. Three of the other four had turned out successful, and he was inclined to regard this operation as the most satisfactory of all cases of deligation of large vessels. One could never surely predicate the simplicity of the procedure, however. For instance, in a case of Sir William Fergusson's, which some of those present might remember, inflamed glands were so densely matted about the vessel, that it was long before this could be isolated; and this was not infrequently the case where the aneurism attained a large size and set up much irritation. It was further explained that great care is requisite in going through the deeper muscles, and although the use of a director is generally to be deprecated in these operations, it is safer to use one than to rashly divide the structures with the unshielded knife. Mr. Smith had used a director once on this occasion, both because the man was unusually fat, and the wound therefore deep, and because there was not a little struggling under the influence of the chloroform.

Sir William Fergusson next tied two portions of a large nævus of rapid growth in the face of a child about 14 months old. A patch the size of a crownpiece projected below the left eye, another and smaller portion at the inner angle of the orbit (these two were now tied with Sir W. Fergusson's knot), and the growth involved besides the superior maxilla, and appeared in the roof of the mouth as well as in the lip. Commenting upon the case, the operator said that vaccination of this nævus had been performed elsewhere, a practice which he characterised as "quite a mistaken piece of weak silly Surgery, more fitted for a chamber dissertation than for practice in the theatre—a practice which has very seldom done any good to the nævus and has, when so performed, not seldom failed in securing the far higher object which the vaccinator should have in view." Sir William exhorted his hearers never to fail in early grappling with a growth which might eventually assume such formidable proportions, and stated that in his experience, although many means of treatment might succeed, he was most used to rely on the ligature of the growth *en masse* or piecemeal with the special knot used by him for this purpose. This plan, he said, very seldom failed, though even here one could not always insure success.

Whilst waiting for the next patient to be brought in Mr. Wood exhibited a girl for whom he had some time since operated for relief of contracted burn cicatrices, which had bent the arm

to a right angle, and drawn the face down to the shoulder. Both deformities had been treated by transplantation of flaps of healthy skin, and with a very unusual amount of success, the girl now possessing free movement of the head, and carrying her hand to her mouth or extending the arm quite easily.

The last case was one in which Sir W. Fergusson excised the diseased elbow of a boy, aged 8. The operation resembled in all respects that done by Mr. Henry Smith earlier in the afternoon. Describing the case Sir William stated that the boy had been a martyr to diseased elbow since he was two years old. He had long been under Mr. Partridge's care, and at one time the disease really seemed to have given way, but a fresh injury recently sustained lighted up fresh inflammation, and it was thought best to remove the joint; for with such an amount of disease (there was ulceration of all the cartilages, and pulpy synovial membrane), a very long time would have been needed for recovery, and even then it would have been with a stiff joint—a result so undesirable that Surgeons were often called upon to remove such to secure a movable joint. The present case was also an example of resection during the progress of acute disease. Many Surgeons have recommended waiting for the subsidence of acute symptoms, but some of Sir William's best cases have been examples of excision during acute disease. In one notable case of the kind where the knee was excised, the patient walked in the ward three weeks after the operation. The operation of excision of any joint should be performed at as early a stage as it is deemed necessary to resort to such a measure, whether the symptoms present be acute or no.

LIVERPOOL SOUTHERN HOSPITAL.

CASES OF POISONING BY BREATHING ARSENIC AND COPPER FUMES.

(Under the care of Dr. CAMERON.)

[Communicated by W. LITTLE, L.R.C.P., M.R.C.S. Eng., etc., House-Surgeon.]

C. G., AGED 33, employed at copper smelting works, was admitted into the Hospital on September 7, 1869, complaining of circumscribed pain in the epigastric region, frequent vomiting, especially after food, occasional hæmatemesis, loss of appetite, soreness of the gums (which had a slight blue line apparent), and looseness of the teeth. Says he has been ill for about six months, this being the second attack of the kind within the last fifteen months. Has got much thinner; looks haggard and feels very depressed. He was ordered to take nothing but beef-tea, milk mixed with lime-water, arrowroot, etc., and put on the following mixture:—℞. Liq. bismuthi ʒiij., æther chlorici ɱxl., M. aquæ destill. ʒviij., ʒj. ter die sd.

September 28.—Appetite improving; has less pain over abdomen, but stomach still very irritable; vomiting once or so every day, substances ejected being very bitter. The mixture to be continued with the addition of three-minim doses of acid. hydrocyanic. dilut.

October 10.—Pain quite left the abdomen, and only slightly felt on pressure; vomits only every two or three days, substances being retained longer, but when ejected are still tinged with blood; the teeth are not near so loose, and gums look healthy. To omit the mixture, and to take the following:—℞. Ferri ammon. cit. gr. xl., liq. bismuthi ʒiij., M. aquæ ʒviij., ʒj. ter die sd.

The patient after this rapidly recovered, and was discharged convalescent about a fortnight afterwards.

J. W., aged 38, a furnace-man at the Widnes Copper Smelting Works, was admitted into the Hospital on March 15, 1870, suffering from symptoms of irritable dyspepsia. He says that he has been unwell for a month, first complaining of nausea, then vomiting frequently during the day, unable to retain anything on his stomach; pain in epigastric region circumscribed, the substances vomited being green and viscid; no purging; thirsty; total loss of appetite; loss of flesh; the pain in abdomen increases on pressure. The man on his admission was suffering acutely from the above-mentioned symptoms in an aggravated form. Lungs, heart, and kidneys healthy. He was ordered the following mixture:—℞. Liq. bismuthi ʒiij., ferri ammon. cit. gr. xl., M. aquæ ʒviij., ʒj. ter die sd., and to take nothing but beef-tea, milk and lime-water, and arrowroot.

March 17.—Feels better already; has vomited twice since his admission; nausea disappearing; has less pain in the abdomen; bowels regular.

19th.—Since last note has only vomited once; appetite returning; pain quite gone; says he feels well.

21st.—Was discharged convalescent.

F. G., aged 34, employed at copper smelting works at Widnes, was admitted into Hospital on March 22, 1870. He says he has been unwell for a year, but that he has been much worse the last three months. He first began to lose his appetite; had a constant nasty taste in his mouth; a feeling of languor, nausea, headache, and vertigo. These symptoms increased, and being a great smoker, he left it off, thinking it to be the cause of all his ills; but he still became worse, and for the last three months the symptoms have been the same as on his admission—viz., much pain in the epigastric region, headache, and vertigo; total loss of appetite; constant feeling of nausea; vomiting immediately after swallowing, and also during the intervals of food-taking, matters rejected being green, acid, and viscid; great depression; has a sulphureous taste in his mouth; gums spongy and teeth loose; no diarrhœa; tongue moist, but furred; pulse 100 and weak. Was perfectly healthy before working at the smelting works; had rheumatic fever five years ago. Heart, lungs, and kidneys healthy. The pain over the stomach is increased by pressure. He was put on a milk diet, and ordered the following:—℞ Liq. bismuthi ʒiij. ferri ammon. cit. gr. xl., M. aquæ ʒviii., ʒj. ter die sd. ℞ Tinct. krameriæ ʒiij., aluminis ʒij., M. aquæ ad ʒviii., ft. gargarisma sæpe utend.

March 24.—Pain less; no vomiting since admission; had some tormina last evening, for which he took olei ricini ʒj., the stools after this being slimy and of a greenish hue.

26th.—Slight vomiting yesterday.

28th.—Fever much better; appetite returning; all symptoms complained of on his admission have disappeared.

29th.—Put on full diet. Gums are much healthier.

31st.—He feels quite well, and was discharged at his own request, surprised at his rapid cure.

Remarks.—The symptoms in the three cases are consistent with the recognised effects of a metallic irritant poison, be it copper, arsenic, or both. This is rendered the more probable by the rapid improvement and recovery when the patients were removed from the influence of the poison, and this is totally unlike what is usually seen in natural diseases of the stomach. The urine, owing to the short time the patients were in the Hospital, was not examined with that minuteness which could have been desired with the view of tracing the elimination of the poison by the kidneys. The cases are interesting in our being able to trace the action of poison in minute doses, but of long continuance, and also in regard especially in preventing the men from pursuing their means of livelihood for any length of time when subjected to a vitiated atmosphere.

TWO CASES OF POISONING BY THE SEEDS OF RICINUS COMMUNIS.

Edward R., aged 6, and Esther R., aged 3, brother and sister, were admitted into the Hospital on the morning of March 17, 1870, suffering from a state of extreme collapse, accompanied by purging and vomiting; perspiring freely; very pale and listless; pulse 130. The substances ejected from stomach were of a pultaceous nature; stools frequent and watery; pain over the abdomen increased by pressure; great thirst; tongue furred and rather dry; pupils equal and natural; no cerebral symptoms, but twitchings of mouth were noticed once in the boy. A great desire for sleep. The children ate some small beans, which turned out to be castor-oil seeds, the night before admission; but no Doctor was called. Through the night they were very unwell, but being much worse the next morning, they were brought to the Hospital. The children being small, the stomach-pump was not used, but an emetic was given instead, which caused them to vomit freely large quantities of a white curded substance, which seemed to afford them great relief. Brandy in iced water was given them very often, and sinapisms were applied over the epigastrium, and when the vomiting was a little allayed, small doses of sp. ammoniæ co. were given every hour. In the evening they were better; pulse 120; vomiting and purging less; still very desirous of sleep; stools very offensive; ordered to keep on with the medicine and brandy every two hours, and to take a little arrowroot.

March 18.—They are better this morning; slept well last night; vomiting has stopped; ordered ol. ricini ʒij. s.s., and to omit the brandy and medicine.

19th.—Stools more natural; pain left the abdomen; children are much better, and were discharged next day convalescent.

Remarks.—These cases are very interesting from contrast with the former, there being a chronic poisoning and a metallic irritant, the latter being an acute poison and a vegetable irritant, and the difference in the effects of a gradual accumulation of minute doses of a metallic irritant poison in the system to that of large doses of a vegetable irritant. Again, suppose that the

eases had occurred during the season in which cholera is rife, and the history of the cases obscure, the symptoms which were developed would have rendered it doubtful whether they had not proceeded from that disease.

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Medical Times and Gazette.

SATURDAY, MAY 28, 1870.

DIRECT REPRESENTATION.

When, early this year, so eminent a member of Her Majesty's Government as the Lord President of the Privy Council made known his readiness to introduce into Parliament a Medical Acts Amendment Bill, we hailed the announcement with great gladness, as a sure and long-desired help towards the settlement of Medical legislation; and when the Bill prepared by his lordship's directions was brought forward, though it fell short of our hopes and wishes in many respects, still, as it promised us the great boon of the establishment of the one-portal-to-the-Profession system, and some other advantages, we were ready to accept it, *faute de mieux*, and to do our best to promote its success. Some amendments which we thought absolutely necessary we have frequently and urgently insisted on, and the Lord President has shown himself ready to fully consider them, and to accept some of them. But, unfortunately, he has also, in obedience to pressure from some quarter, placed on the table of the House of Lords some amendments to his own Bill which, if carried, will take out the very pith and backbone of the measure, and will make it worse than worthless. We have more than once pointed out what an extremely mischievous effect these amendments must have; how, instead of introducing order and oneness into Professional qualification and status, they will make confusion worse confounded; and why, if they are insisted on, it will be imperative on the Profession to use every constitutional means to insure the rejection of the Bill.

But we confess that we should much regret such a result as this, for no one can dispute the fact that we urgently need a comprehensive Medical Acts Amendment Bill, and we do not doubt that the Lord President has earnestly and honestly endeavoured to comprehend and supply our need. For the time and labour he has given to the subject we owe him grateful thanks, but he must permit us to know what our Professional dignity and independence will allow us to accept, and what they require us to reject at the hands of Government, and with all respect and deference to his lordship we must insist that some of the amendments which he has been induced to propose are such as the Profession cannot possibly accept. And as he has shown himself so open to pressure, we cannot but greatly regret that the British Medical Association should have so thrown away the opportunity they had of urging on him really practical and important amendments to his Bill, instead of wasting their undoubted weight and strength on the resolutions they elected to bring forward. We made some remarks on these resolutions last week, and we now propose to consider a little more fully the subject of what is called the "direct representation of the Profession on the Medical Council." This means, we understand, the election of a certain number of members of the Council by the "Profession at large," in contrast to election by and through the "Medical authorities." That is, that England, Scotland, and Ireland are to be divided into electoral districts, and the Medical Practitioners, of all grades, in those districts are to enjoy at uncertain intervals the excitement, turmoil, and expense of returning representatives to the Medical Council. We should like to know how many of the supporters of this demand for "direct representation" have considered what is to be thereby represented;—the intellect, culture, and thought of the Profession?—or mere numbers? How is a candidate to recommend himself to any one of the electoral districts? What kind of Medical man is likely to undertake the expense, trouble, anxiety, and self-advertising necessary to insure his preference to all rivals? Is it in the least degree probable that the intellectual chiefs of our Profession will for a moment entertain the idea of submitting themselves to such an ordeal? Surely it is all but certain that the "direct representatives" will be the busybodies of the Profession, the stump-orators and Medical politicians; not the men who, by intellect, practical knowledge, and every day working with and in the Profession, have really learnt its needs and the defects in its government. And who will venture to say that the General Medical Council will in any way or sense be strengthened by the presence of such men?

We allow that to pure *doctrinaire* reformers the ideas of universal franchise, electoral districts, and so on, must be very charming; but we have no faith in exactly rounded, or squared, paper constitutions, in cut and dried library-table schemes of representation. Enough, and more than enough, has been seen elsewhere, and in other fields of politics, of the futility of such attempts. We need a scheme which, if theoretically imperfect, will be workable by a busy hard-worked liberal Profession, and which will, without too great a demand on its time and resources, give it representatives of high Professional standing, eminence, and practical experience. And this end, we believe, may be obtained by enlarging, to a greater or less extent, the elective franchise in the several bodies which already return members to the General Medical Council.

There is, we believe, a very general feeling throughout the Profession that the constitution of the General Medical Council must be amended, but the resolution of the British Medical Association expresses this feeling in the crudest and most meagre manner possible, and, if simply carried out, would make an already large and very expensive Council more expensive and larger by the addition of several, as we believe, by no means valuable or useful members, burdening the Profession at the same time still more by entailing on it the expense and worry of general elections. All this we believe to be in every way most undesirable. We hold that the Council ought to be lessened in number, not enlarged, and we hold also that the Profession ought to have a larger and more direct voice in the election of the members of the Council; and we have long ago (in July, 1869) shown how this might be done by a grouping of the universities and corporations, and a liberal extension of the electoral franchise among the members of those bodies. Had some definite, carefully worked out scheme of this sort been put before the Lord President by such a body as the British Medical Association, we have no doubt it would have commanded respectful and earnest attention and consideration; but we cannot think that any end can be gained by so bold and crude a resolution as that which the Association did prefer.

CANVASSING AT THE COLLEGE OF SURGEONS.

On Thursday, the 7th of July, another election is to take place at the College of Surgeons. There are two vacancies at the Council Board to be filled up, and at least four gentlemen are candidates for the seats. One of these gentleman has been a candidate for several successive years past, and on the last occasion obtained a very large amount of support. Another also polled a large number of votes last year; and it is pretty well understood that at least a year ago many Fellows promised to vote at the coming election for one, or other, or both of these gentlemen; and this necessarily without any knowledge as to how many vacancies there would be, or who would be the candidates. Last year canvassing attained to a degree of development which almost reached the scandalous, and led to an angry correspondence between one distinguished Fellow and an indiscreet canvasser for one of the candidates, whose only fault was that he had done openly and without disguise what others had long been doing in a more quiet way. The most persuasive influences, social and gastronomic, were brought into play for weeks and months before the last election, and on the day when the voting took place every Fellow who reads this article will bear us out in our assertion that the most disgraceful *touting* (no other word so well expressing the process) for votes was carried out at the College in the courtyard, the hall, the staircase, and museum, and in the library. It was no uncommon thing for a Fellow who took up his paper and proceeded to one of the tables to run his pen through the names of the Fellows whom he did not wish to vote for, to find a *tout* at his elbow, or looking over his shoulder, and an urgent request made to give *one* vote to —— "who is such a good Fellow, and will be so disappointed if he is passed over." And if this was not successful, then followed, "Well, at any rate, promise me a vote for next year, Blank will be sure to come forward again." In some cases, gentlemen likely to come forward at future elections, have told us that open and direct proposals were made to them, promising to vote for them when their turn came if they would vote for A. B. or C. This discreditable electioneering is working its own cure. Good men refuse to come forward, because they will neither ask for votes, nor allow their friends to ask for them, and are assured that they cannot succeed unless they do so. And the loss to the College will be incalculably great, if the best men hang back and leave the higher offices to the canvassers and their friends, until the present mode of election is amended. So long as this mode of election is the law, it must be obeyed by all those who wish to come on in their turn to the Council. And it renders a few appeals to personal friends absolutely necessary. Every candidate must be proposed by six Fellows, who certify that in their opinion the candidate is a fit and proper person to become a member of Council, and three other Fellows must certify that he does not practise as an apothecary. So that nine Fellows must positively be asked to give their names to each candidate. But beyond this we hold that no man of independent spirit ought either to ask even his personal friends for a vote, or encourage any of his friends to exert themselves in his favour upon any plea of friendship or Professional ties, or upon any other than public grounds. And no Fellow ought to allow any private solicitation, or any indirect influence, to bias him in the discharge of what ought to be regarded as an important public trust. He ought to ascertain what are the opinions of each candidate upon the Medico-political questions which affect the College and the Profession, especially in their relations with the Government and the public, and vote for the man whose views most nearly coincide with those which his own judgment approves, and whose ability to support and promulgate his opinions is most apparent.

If we are asked how are the opinions of the several candidates to be known if there is to be no canvassing, we answer that our own columns, and those of our Medical contemporaries, are always open to gentlemen who wish to address the Fellows of the College, and if this publicity be thought insufficient there can be no objection to the circulation by any candidate of a statement of his political opinions in the form of an address or letter to the Fellows. Thus every Fellow would have a full opportunity for considering the comparative claims of the different candidates before the day of election, as on that day the law does not allow, as at a Parliamentary election, any proposing, or seconding, or speechmaking by candidates, but strictly confines the proceedings to the recording of the votes of the Fellows present.

When a Fellow has been informed fully as to the opinions of the candidates, and has considered well their Professional standing, social position, and general character, he will be perfectly well qualified to make up his mind whom to support without the advice of any tout; and, unless we are much mistaken, the time is approaching when every independent thoughtful man will regard any solicitation for his vote as an impertinence, which, if not resented, ought certainly to be contemned.

MR. FOWLER'S BILL FOR THE REPEAL OF THE CONTAGIOUS DISEASES ACT OF 1866.

The only, and a sufficient, excuse for the unusual course taken by Mr. Craufurd in reviving an obsolete rule of the House of Commons on the occasion of the discussion on Mr. Fowler's Bill for the Repeal of the Contagious Diseases Act, whereby all strangers and the reporters of the press were excluded, is furnished by a letter from Mr. R. N. Fowler which appeared in the *Times* of Thursday last. Mr. R. N. Fowler, like his relative who moved the first reading of the Bill, is an opponent of the Contagious Diseases Act. He, therefore, was at least an unbiassed observer, and he gives as a reason for the unusual course pursued by the House that not only many gentlemen were present in the strangers' gallery, but also that a number of so-called ladies persisted in remaining. All we can say is that if a proportion of English women have lost all modesty and decency, it is high time that Englishmen should show them that the loss does not extend to both sexes. We can only applaud the action, unusual as it was, which Mr. Craufurd took, and express a hope that on another occasion it may not be necessary to repeat it.

Dr. Lyon Playfair, as we intimated a few weeks ago to be his intention, opposed the introduction of Mr. Fowler's Bill, of which the real result would be to deprive our soldiers and sailors of sanitary safeguards, of the value of which the statistics of the army furnish incontrovertible proof. In the period of three years ending 1866, there was a small difference in favour of the stations protected by the experimental Act of 1864, the ratio of admissions from syphilis being—in the protected 93, and in the unprotected stations 107 per 1000. The first efficient Act was passed in 1866, but was only brought into operation at the end of that year. In the next period of three years ending 1869, there was a large reduction, for the ratio in the "protected" was now 71, as against 111 in the "unprotected" stations. While the average ratio in the unprotected stations was the same in the two periods, it was continually decreasing in the protected stations; in 1867 it was 86, in 1868 it was 70, and in 1869 only 58. In the year preceding the application of the Act of 1866 the percentage of cases of all forms of venereal diseases in the protected stations was 22·8, and in the first quarter of this year (1870) it was reduced to 11·2, or less than one-half. The severity of the cases and the length of time necessary for treatment have also been considerably diminished, not only among the soldiers, but also among the unfortunate women themselves.

The *Times*, in an article on Wednesday morning, strongly protests against any reversal of legislation as regards the naval and military stations in which the Act of 1866 is now in force, and in which it has only yet had a few months' trial.

We feel but little doubt that the result of the adjourned debate on June 24 will be the rejection of Mr. Fowler's Bill, and that the Royal Commission promised by Mr. Gladstone, while thoroughly investigating the Act of 1866 as regards its moral aspect, its results, and the mode in which it may best be carried out, will have the effect of calming down the excitement lately induced among the more emotional portion of the public by the passionate declamations on the platform and by what the *Times* calls "the rose-coloured philanthropy of advanced thinkers."

The question as to the advisability and practicability of extending the Act of 1866 to the civil population, although not likely to come directly before the forthcoming Commission, will no doubt receive a considerable amount of collateral consideration, and will probably be held over for ultimate decision at some future time, when the results of the Act in the stations now under its influence shall have been more thoroughly established.

SIMPSON'S LAST CONTRIBUTION TO MEDICAL LITERATURE.

The last contribution of Sir James Simpson to our Medical literature lies before us. His life was passed in incessant work, varied by the turmoil of controversy, and it was in defending his just rights that, so to speak, he passed away. When, some time ago now, Simpson was presented with the freedom of the city of Edinburgh, the then Lord Provost, the well-known William Chambers, felt himself called upon to say something of the discovery of the anæsthetic properties of chloroform, and Simpson was bound to reply. This reply, dealing as it did with chloroform solely, excited, however, considerable discontent in Boston, and elicited an answer from Dr. Jacob Bigelow, which was published in the Boston *Medical Journal*, although it was addressed to Sir James Simpson. This letter elicited a reply, which was published in our columns, and also in the New York *Medical Journal*, and we supposed the matter over; but the reply brought a rejoinder from Dr. Bigelow, and this, in its turn, a second letter from Sir James Simpson, apparently the last of the kind he ever wrote, for in it he complains of being a sad invalid, and which now lies before us. It is in no controversial spirit we undertake to comment on this last production of a powerful pen; we shall try to place matters in the fairest possible light. In the first place, therefore, let it be said that Simpson never did, nor did any well-informed person on his behalf, lay claim to the discovery of artificial anæsthesia. But that he did, in conjunction with two others, discover the virtues of chloroform, that this substance was immediately and successfully applied in Surgical and obstetric practice, and that its convenience of application caused its use to become so speedily and generally diffused all over the world, except at Boston. This no one will venture to deny. It was this rapid and extraordinary success of chloroform inhalation which caused many to look upon Simpson as the author of anæsthesia, but he never arrogated to himself this title, nor did any well-informed individual do so for him. Were we to seek for the real author of anæsthesia, we should probably find him in the person of Sir Humphry Davy, who discovered the wonderful effects of nitrous oxide gas, but we in England here are not disposed to dispute the claims of Dr. Wells to be its actual introducer into practice, any more than we are to disbelieve that in so doing he was hissed and hooted out of the theatre of the Massachusetts General Hospital, where, if we are to believe the "ether memorial" (which, by the bye, we do not), "the discovery that the inhalation of ether causes insensibility to pain" was "first proved to the world." But nitrous oxide soon fell into disuse, and the merit of reintroducing it into practice is again most undoubtedly the due of an American, who put himself to no small trouble and expense in making its value known here in London. Nobody disputes this; neither do they dispute that Dr. Morton, on the suggestion of Dr. Jackson, was the first to use the vapour of sulphuric ether as an anæsthetic agent—not, however, in the Massachusetts General Hospital; and far be it from us to detract from the honour due to Dr. H. J. Bigelow for his courageous operation under ether in that Hospital. We are perfectly willing to give every one their just due; but, on the other hand, we are not prepared to submit to overbearing claims. If we are to accept the Boston claims literally, we must look upon the introduction of chloroform not only as a special injustice to their school, but as an injury to the world at large; whereas we are rather inclined to look upon the discovery of chloroform and the rapid spread of the practice of general anæsthesia as cause and effect. The process of inhaling ether was disagreeable, the resulting anæsthesia slow in making its appearance, the quantity consumed considerable, implying difficulty in stowage and transport, all obstacles to its general use. But chloroform changed all this. A denser, yet more volatile fluid, took the place of the other, and its use rapidly spread over the world. It has been contended that ether is safer, and that fewer fatalities (we believe there have been some, but for the sake of argument let us say none) have followed its use; but this loses its significance if we reflect on the numberless cases in which chloroform has been used, cases fit and cases unfit, and compare these with the comparative rarity of ether inhalation. This much is significant enough: chloroform, notwithstanding its dangers, has been hitherto accepted as the anæsthetic of the world; ether, with all its boasted safety, has been deliberately set aside. These are facts, and facts speak for themselves. Simpson never claimed more than justice, we ask no more for him. Nor could there be a stronger assertion of the claim, or a more powerful series of arguments on its behalf than the pamphlet just published, the last words of Simpson, who being dead yet speaketh.

THE WEEK.

TOPICS OF THE DAY.

Two questions are uppermost in Medical circles. They are—What are the chances, and what is the value of the Government Medical Reform Bill? In discussing the first we no longer hear the confident tone that was generally prevalent up to and even after the meeting of the General Medical Council. The universal feeling now undoubtedly is, that if no Medical Reform Bill be passed this year, a grand opportunity will have been lost, and that the whole Profession must regret it. But on the other hand there is a still stronger general feeling that the Bill as amended is a delusion and a sham; that if it be passed in its present state, the opportunity which the present session has presented will have been equally wasted as far as the unification of the Profession is concerned; and that worse still, we shall have parted with a certain portion of our independence, and have received nothing in return. We therefore think that, unless Earl De Grey can see his way clear to reintroducing clause 18 of the Bill, or at least to limiting the right of granting honorary Medical diplomas conferring no right to practise to the universities alone; to expunging or materially altering the clauses relating to the admission in examinations of homœopathic and other heterodox theories of medicine; to greatly modifying the clauses which refer to the suppression of illegal practice, the admission to practice of colonial and foreign non-resident Practitioners, and to the omission of clause 30 or the majority clause, which, as we have shown before, gives to the University of Durham, which makes, perhaps, a couple of Doctors of Medicine a year, more power and weight in the formation of a conjoint scheme of examinations than to the Royal College of Surgeons or to the Apothecaries' Society; and unless, lastly, the Government are prepared at once to introduce some well-considered clause for altering the constitution of the General Medical Council, not by increasing, but, if possible, by diminishing its numbers and

placing it on a broader basis by giving some measure of indirect representation through the Medical authorities—unless, we say, all these alterations can be made in the Bill, we are certain that, however we shall regret a lost opportunity and disappointed hopes, the Medical Profession will not regret the failure of the Lord President's Medical Act (1858) Amendment Bill. It must be thoroughly understood that the Medical Profession is neither prepared for, nor desirous of, a succession of Reform Bills. We hear that on the occasion of a deputation from the British Medical Association waiting on the Lord President last week, to urge the resolutions passed at the meeting of the Association, which we reported in our previous number, Earl De Grey intimated that the Medical Profession must not look on this Bill as a final settlement of its difficulties. He is reported to have said, "He was not sanguine enough to think that that or any other Bill would last for ever, or that it would never be changed. No legislation would be so permanent as that." We quite agree with his lordship that no legislation in this or any free and advancing country can be permanent, but this is no reason that it should be purposely and designedly imperfect. The Medical Profession does not want to be made the subject of a series of State experiments. We look with dread at the prospects of a Medical Reform Bill every few years. We want a Bill that shall unify and consolidate the Medical Profession, which shall make use of everything that is good in its existing machinery, which shall conserve its great institutions, which, whilst it should bring us into closer relations with the Government of the country, shall still leave the Profession practically free, which shall protect the public if they wish to be protected from imposture, and which shall discountenance if it cannot prevent quackery of all sorts; lastly, which shall improve—not as we think, by the introduction of new elements, but by giving greater weight to the elements of which it is already composed—the Council of British Medicine. Some, at least, of these objects were secured by the Bill as introduced into the House of Lords. Not one of them will be gained by the Bill as amended. But the Profession of Medicine will not be satisfied with reform by instalments. They have waited so long that they can well afford to wait a little longer; certain, that even the present system of things would only be made worse by a process of continual tinkering.

But we return to our first question, What are the chances of the Bill? And we answer, Diminishing. One rock ahead is the call which comes principally from Ireland for a single examining board for the three kingdoms. It is generally believed that a leading peer on the Conservative side will be most willing to represent the opinions of Trinity College on this point. We may well expect that the vote of the majority at the recent meeting of the British Medical Association will be spoken of as representing the opinion of English Medical Practitioners on the subject. We are certain, however, that any representation of the kind will be a misrepresentation. English Doctors are a practical set, and they are not likely to hold opinions which it is simply impossible to carry into practice except at the expense of the character of the examinations for admission into the Profession. A single board must either be fixed in London or it must be peripatetic. If the former, a great hardship and expense will be inflicted upon Scottish and Irish students; if the latter, the examiners must be chosen either from mere teachers and dilettanti Medical men or from Medical Practitioners who have failed to secure patients—in either case from a class below the highest. We say nothing of the difficulty of carrying out anatomical and chemical examinations in provincial towns, or of the national jealousies which are sure to be aroused by visiting examiners, though these are valid objections to the plan. But we repeat that, however in theory a single board may be better than three, the scheme is impracticable, and we cannot think that Lord De Grey can accede to a plan which, he must know full well, cannot be carried into execution. Still, the movement for a single examining board may become a powerful engine to upset the Bill, and it is one the force of which is likely to be tried. If Lord De Grey give way on this point, we can only hope that the common sense of the Profession will make itself felt in the House of Commons. If, on the other hand, he be firm, it will very probably be at the expense of the whole measure. This, perhaps, is the most immediate of the dangers to which the Bill is exposed. There are others, however, which are sure to be urged before the Bill can become law. Considering that we are now at the end of May, and that grouse shooting begins on August 12, we think that a hardier bantling than the Medical Reform Bill would stand but little chance of surviving the short but sharp struggle.

We have received a letter from Dr. M'Clintock, of Dublin, disclaiming any intention of presenting himself as a candidate for the vacant Professorship of Midwifery in the University of Edinburgh. The report had been circulated, and apparently on good authority, but we are happy to contradict it, as we should be sorry that the obstetrical school of Dublin should be deprived, even by an honourable transplantation, of one of its brightest ornaments.

We are informed that the former and present pupils of Dr. Matthews Duncan have spontaneously come forward to urge upon the curators of the University of Edinburgh his very high claims as a candidate for the vacant chair of Midwifery. Already upwards of 300 signatures have been attached to the testimonial which has been drawn up for presentation to the curators in Dr. Duncan's behalf.

Dr. Michael Foster has been elected to a newly constituted Prælectorship of Physiology in Trinity College, Cambridge.

The candidates for seats in the Council of the College of Surgeons at the coming election are, Professor Erasmus Wilson, F.R.S., Mr. T. Spencer Wells, Mr. Henry Lee, and Mr. Holmes Coote. There are two vacancies, caused by the resignation of Mr. Joseph Swan, and the retirement of Mr. Thomas Paget. It would be premature at present to speculate on the chances of the contest.

A Royal Commission has been issued "to make inquiry with regard to scientific instruction and the advancement of science, and to inquire what aid thereto is derived from grants voted by Parliament, or from endowments belonging to the several universities in Great Britain and Ireland, and the colleges thereof, and whether such aid could be rendered in a manner more effectual for the purpose." *The Gazette* of Friday, May 20, contains the names of the Commissioners, amongst whom are the following members of our Profession:—Professor Sharpey, M.D., Professor Huxley, and Dr. Miller, Professor of Chemistry in King's College.

The forthcoming meeting of the Pathological Society for the discussion of the amalgamation scheme proposed by the Medical and Chirurgical Society is looked forward to with much interest. Of all the Societies, the Pathological has the least to gain by amalgamation. Its position is so prosperous and flourishing, and its utility is so great, that neither can be improved by its being affiliated to an Academy of Medicine. The proposals, therefore, of the Medical and Chirurgical Society are pretty sure to meet with an unbiassed and dispassionate discussion at its hands; and it is, perhaps, not too much to say that on its decision rests the success or non-success of the scheme.

The Government have announced to the Royal Geographical Society through Lord Clarendon that they have authorised a grant of £1000 in the hope that this sum may be the means of promoting the return of Dr. Livingstone in safety to this country. One thousand pounds is all the Government of Great Britain thinks fit to grant for rescuing from his difficulties the great traveller whose enterprise and endurance have thrown into the shade the exploits of all explorers of this or

former generations! The Duke of Argyll seems to have been almost ashamed of the Government, which he represented at the Society's dinner, and therefore followed the line which Mr. Lowe has taken on similar occasions, and praised the self-supporting and independent spirit of the British public. He said:—

It would be a great disgrace to this country if Dr. Livingstone should be prevented from pursuing his investigations by want of means, and if it were necessary to supplement the Government grant of £1000 by a voluntary subscription, the appeal, he was certain, would be liberally responded to.

We have no doubt that it will be so responded to, but this does not excuse the parsimony, wherever the interests of science or of scientific men are at stake, of a Government which boasts itself Liberal.

SIR THOMAS WATSON.

Sir Thomas Watson's progress has been uninterrupted; he is gradually regaining strength, and in the course of a few days he will leave town for Weybridge. The Profession will be interested to learn that Sir Thomas has resumed the work of preparing a new edition of his Lectures, a large proportion of which has already passed through the press.

THE ALEXANDER MEMORIAL PRIZE.

It is, we believe, expected that the decision of the adjudicators of this prize will be announced at the forthcoming annual dinner of the officers of the army, naval, and Indian Medical services at Willis's rooms on Friday, June 3, and that the fortunate recipient, if within a reasonable distance of town, will be the guest of the evening. This would certainly be a very agreeable feature in the entertainment, and particularly gratifying to the successful competitor, and likely, on future occasions, to stimulate others to worthy emulation. The value of the medal will, we understand, be £10 instead of £5, as at first intended.

DR. FOWLER AND THE CITY OF LONDON GUARDIANS.

We have to call attention to what we must consider a flagrant disregard of the services and claims of a Medical Practitioner on the part of the Guardians of the City Union. Dr. Fowler has for many years fulfilled the duty of Medical officer to the late East London Union, and he has performed these duties to the satisfaction of every one concerned. His period of service is greater than that of any other Medical officer in the City, yet, when the board of the new union, consisting of the three amalgamated ones, met to consider the new appointments Dr. Fowler was left out in the cold. It is exceedingly difficult to understand on what principle this was done. Dr. Fowler has not only done his work most efficiently and most satisfactorily, but is besides a man highly esteemed in the Medical world as a skilful and scientific Practitioner. No better man could be found to fill his post, and in this country long and faithful service is generally considered a claim to an office as long as its duties are efficiently fulfilled. We trust the Board will, at their next meeting, reconsider their appointment.

THE NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

This, which promises in time to become a most valuable national institution, and whose existence is mainly due to the exertions of Dr. Hassall, celebrated its anniversary at the City Terminus Hotel, Cannon-street, on Wednesday. The chair should have been occupied by the Lord Mayor, but in his unavoidable absence was taken by Sir Lawrence Peel. A new feature in the dinner was the presence of ladies, which added much to the success of the affair, both pecuniarily and otherwise. The dinner was excellently served, and the toasts were diversified by some capital music. The most striking of the guests were the Nawab Nazim, his two sons and attendants, who were also liberal contributors to the Hospital funds. Towards the close of the evening, Mr. Horne, the energetic London Secretary, read a long list of subscriptions to the Institution. Many well-known members of the Profession were present.

RATING OF HOSPITALS.

An important meeting was held on Monday last, under the presidency of Sir T. Tilson, to confer respecting the rating of charities, schools, etc. Several of the London Hospitals sent representatives. The rating of charities had been in disuse for nearly 300 years, and has only been lately revived. Some of the speakers dwelt with much force on the injustice and the inconsistency of rating Hospitals, which afforded so much relief to the poor, and were frequently the means of preventing pauperism. Eventually, resolutions framed with the intention of removing the grievance were carried, with but one dissentient. Undoubtedly the rating of Hospitals, when they are *bonâ fide* public institutions for the relief of the poor, is a mistake and an anomaly, and the sooner it is done away with the better. But it is a very different thing when mushroom "Hospitals" and "dispensaries," now "as plenty as blackberries," are mere private speculations, got up and carried on for the express purpose of obtaining practice. It would be unfair to the ratepayers that these should be exempt. The proprietors should pay taxes just as do other tradesmen.

ROYAL IRISH ACADEMY.

At a meeting held on the evening of Monday, May 23, the Rev. Professor Jellett, F.T.C.D., F.R.S., president, in the chair, Dr. Robert M'Donnell, F.R.S., read a paper on a New Theory of Nervous Action, as regards the propagation of sensation along the nerves. The author's views are in fact an application of the wave-theory of light to the phenomena of nervous conduction. Instead of supposing that there exist distinct conductors for various kinds of impressions, such as those of heat, pain, tickling, red, yellow, etc., it is assumed that each impression is progagated by undulations, the wave-length of which varies, and that thus the same conductor may be able to transmit several impressions. The author stated that he believed this view would be found more in harmony than any other hitherto advanced with the teachings of physical science in its other departments. He also illustrated his hypothesis by a reference to Professor Tyndall's experiments, proving the absorption of heat-waves by vapours and even scents, and to the well-known phenomena of absorption bands in the solar and other spectra. Further communications on the same subject were promised by the author.

SURGICAL SOCIETY OF IRELAND.

A *conversazione* was given by the President and Council of the above Society at the Royal College of Surgeons, St. Stephen's-green, on the evening of Tuesday, the 24th inst. His Excellency the Lord Lieutenant, attended by several members of the Vice-regal household, arrived at 9 o'clock, and was received by the President, Mr. Rawdon Macnamara, the Vice-President, Dr. Albert J. Walshe, and the Council of the Society. The general assembly included several of the nobility, together with the leading members of the various learned professions. The different museums and halls of the College were thrown open, and a number of valuable specimens of science and art were inspected with much interest by the company. The microscopic objects were particularly beautiful, and included some rare forms of desmidiaceæ, specimens of the siliceous envelopes of the cells of the diatomaceæ, the circulation of the blood in the frog's foot, besides many recent spectroscopic effects. A newly invented instrument for collecting atmospheric dust, with a view to microscopical examination, was exhibited by Dr. J. Barker, the Curator of the Anatomical Museum of the College. Casts of Dean Swift's and of Stella's

skulls lay upon one of the tables, and several volumes of most beautiful photographs, illustrative of military Surgery and operations in the course of the late American war, attracted the attention of numbers during the evening. The Albert Hall of the College was arranged as a supper-room, and the *prestige* of the Surgical Society as a hospitable body was adequately maintained on this as on other occasions. The *conversazione* was a brilliant success, and brought to a suitable termination one of the most important and interesting sessions on record in the annals of the Society.

FREE MEDICAL SCHOLARSHIP.

THE managers of St. Peter's School, Eaton-square, have founded a Medical scholarship, to be first competed for in July, 1870, as a memento of the support the proprietors have recently received from the Medical Profession in their application for a Royal Charter of Incorporation. The following are the rules applicable to the scholarship :—

"1. Those Medical men who have signed the petition, and the Vice-Presidents of the school, shall each have the privilege of nominating one candidate (at each vacancy) to compete for the free scholarship.

"2. The scholar shall, after examination, be selected for superiority of attainments and talents in proportion to his age.

"3. Each candidate shall be under 15 years of age the preceding January 1, and shall produce testimonials of good conduct from his last tutor.

"4. The scholar shall (during good behaviour and the pleasure of the committee) be offered a *free education* in this school till aged 19.

"5. The first examination shall be held at the school, and shall commence on July 14, 1870. The examiners shall be those who conduct the annual school examinations.

"6. The subjects shall be such as are ordinarily taught in schools—*e.g.*, English grammar, history, geography, arithmetic, algebra, and easy passages from Latin and Greek authors, to be translated at sight.

"7. Any unsuccessful candidate may, on entering the school as an ordinary pupil, retain his nomination against any future competition, and will, *cæteris paribus*, be preferred to fresh nominees."

THE INDIAN MEDICAL SERVICE.

THE last attempt to spread discontent amongst our brethren in India is thus spoken of by the Indian correspondent of the *Times* newspaper :—

"A scheme is before the Government of India for reorganising the two Medical services—the Queen's and the Company's. Would you believe it that India pays more than three-quarters of a million sterling every year for two sets of Doctors, who often clash with each other, and each set of whom has its expensive and unnecessary staff? What would have been easy in 1862—amalgamation—is impossible now. The plan favoured is that of making the Indian service purely civil, handing over the Sepoy regiments to native Doctors, supervised by the British service, and allowing any of the Indian service to join the Queen's, the two forming a sort of Medical staff corps. The difficulty lies in this—that there are some members of the Government of India with no love for the Doctors, who will try to take away the Inspector-General, and Deputy-Inspectors-General, of the Indian service, and put the whole under a civil secretary utterly ignorant of Medical and sanitary matters. It is to be hoped, for the sake of efficiency, justice, and peace, that this will not be attempted. If the new civil Medical service is properly organised, so as to unite in one system the present scattered units of sanitary commissions, inspectors of vaccination, superintendents of gaols, civil Surgeons, and so on, who so often neutralise each other, it will be a great change for the people of India. The whole force of a skilled department will then be brought to bear on them, who at present are neglected, in spite of the enormous sums spent on the Medical service. At least a fourth of the cost of both may be saved, with a great increase in powers and usefulness. This is the opinion of the ablest Surgeons of both services whom I have spoken to on the subject."

We fear the whole secret of the injustice to which our brethren of the Indian service have been subjected, consists in the fact specified above of some of the powers that be, being no friends to the Doctors. It is a disgrace to the Indian Government that it has pursued so vacillating and so offensive a course.

EASTBOURNE.

As the season of the year is rapidly drawing nigh when the annual migration from London and other large towns to the seacoast will be setting in, we have been asked to place before our readers for the guidance of those who consult them on such matters, the following interesting and reliable facts in connexion with ozone and its influence on public health, as observed to exist at Eastbourne by Dr. Allnatt, the accepted authority on such matters :—Eastbourne, as is well known to many of our readers, is placed at an angle on the southern coast, close beneath that great landmark, Beachy Head. For a sea-side place it is peculiarly rich in trees and foliage of a luxurious growth, the plantation and wood around Compton-place, the Sussex seat of the Duke of Devonshire, being beautiful in the extreme. The noble range of South downs in the immediato vicinity of the town, are unsurpassed for beauty and extent in any part of England; the turf is soft and velvety as a carpet, and the western breeze as it comes soaring across this wide tract of fine upland country, brings with it the perfume of wild thyme and other fragrant plants that are indigenous to the soil of this favoured locality. The drainage of the town, that most important sanitary feature, is almost unequalled in the completeness of its details; the entire sewage being discharged into the sea at a point of the coast nearly three miles to the eastward of the town, where the set of the tide carries it out far into the ocean; thus precluding the possibility of any return of noxious vapours, or deleterious effluvia, or a polluted sea.(a) Great attention has been given, and great expense incurred, to secure an abundant and unfailing supply of the purest water. Wells have been sunk into the green sandstone, from which the water is raised by steam power into capacious reservoirs, whence it is supplied to the town upon that exceptional but only perfect system, constant pressure; thus providing ample means for the flushing of drains and ready removal of effete matter, which, when allowed to remain in the neighbourhood of dwellings, is so fertile a source of disease. The waterworks, reservoirs, and mains, have cost the Duke over £30,000. The air of Eastbourne is dry and peculiarly bracing, imparting to the system a sense of vigour, experienced at but few other watering places. The effect of all these advantages has been carefully observed by Dr. Allnatt, who has been staying at Eastbourne for many months, and who, from his individual experience, has furnished the subjoined particulars.

"Ozone.—The table shows a large development of ozone, and there was not a single period of elemental antozone.

"The salutary effect of efficient drainage in purifying the atmosphere of towns is well exemplified here. On turning to my notes, I find that during a visit to Eastbourne in February, 1866, the aggregate quantity of ozone from the 1st to the 26th inclusive, was 88 degrees of Schönbein's scale. During the same period in February last the quantity amounted to 183 degrees, which, compared with that of the year 1866, gives upwards of twice the amount of pure air than existed under the old system. These are really important physical facts which should be admitted as indispensable elements of calculation in all sanitary arrangements for populous districts."

Dr. Allnatt has since written as follows :—"In confirmation of the recognised fact that ozone is intimately connected with the origin and maintenance of a high standard of public health, I am enabled, after several months' residence at Eastbourne to state that the town, which now exhibits a very increased

(a) The entire sanitary arrangements have been carried out under the guidance of Mr. M'Clean, late President of the Institution of Civil Engineers, at a cost of over £40,000. The Duke of Devonshire, with his usual munificence, has contributed £30,000 of this sum, and the town of Eastbourne, £10,000. This speaks for itself, considering the resident population of Eastbourne is a little over 10,000 people!

quantity of elemental ozone, has scarcely at any former period shown a condition of more perfect health, and consequent freedom from disease, than at the present time."

THE ROYAL COLLEOE OF PHYSICIANS AND THE SOCIETY OF APOTHECARIES.

A LETTER has been addressed to the Members of the Court of Examiners of the Apothecaries' Society by Mr. Bradford, the Chairman of the Court. It is a reply to a paragraph in Sir James Alderson's recent address to the Fellows of the Royal College of Physicians, in which he referred to the claims which the Society of Apothecaries have asserted to the appointment of examiners in Medicine in the proposed conjoint board. The following is Mr. Bradford's letter :—

To the Members of the Court of Examiners of the Society of Apothecaries.

"Gentlemen,—An address by the President of the Royal College of Physicians, delivered to the Fellows, on April 11, and since printed at their request, conveys, as I consider, so erroneous a representation of the course pursued by the Society of Apothecaries in the recent conferences relative to the formation of a conjoint Board of Examination for England, that I am induced briefly to call your attention to it.

"It is not necessary to dwell on the position, which, during the last half-century, has been held by the Society of Apothecaries in connexion with the education and examination of general Medical Practitioners.

"It is not asserting too much to say that it is mainly due to the temperate and enlightened regulations which have been originated by this Society, that the system of Medical education has been raised to its present condition, and that the country is now served by a body of skilful and honoured Practitioners of Medicine such as are not excelled in any nation of Europe.

"The Society are not unmindful of the large diffusion of knowledge in modern days throughout the country, and of the improvements which have been introduced in the manner of testing this knowledge. They admit the necessity of still further improvement in the means by which the attainments of candidates for licence to practise Medicine may be raised, and they recognise the necessity of a uniform standard of examination in each of the several divisions of the kingdom.

"They have ever been willing to combine their efforts to those ends with those of other Medical authorities; but after their long course of usefulness and approved success, it cannot be supposed that they will consent to be remitted to the comparatively inferior position which they held in bygone days, before the important functions which they now discharge were entrusted to them.

"This degradation has, however, been sought to be effected, and it is imputed to the Society, that by the assertion of unreasonable claims, they have obstructed the design for the formation of a conjoint board of examiners.

"At the first conference, which took place at the College of Physicians on February 12, it was seriously proposed, that for the future, the examiners to be contributed by the Society of Apothecaries to the conjoint board should be restricted to the subjects of pharmacy, Medical botany, and midwifery. In a subsequent scheme, chemistry and forensic Medicine were allotted to them in addition.

"The representatives of the Society considered that, to accept such proposals, to the exclusion of the science and practice of Medicine—the subject specially assigned to them by the Act of 1815—would be virtually to admit that their court of examiners had hitherto exercised functions for which they were unfitted, and that the many thousands of their Licentiates, very many of whom occupy distinguished positions in general practice and in the public services, were in future to be regarded as an inferior class.

"They therefore claimed to participate (though to a very moderate extent) in the nomination of examiners in Medicine.

"This claim is now denounced by the College of Physicians as an immoderate pretension, and it is declared 'to be unreasonable that members and licentiates of the colleges, as well as gentlemen preparing for graduation at the English universities, should be required to pass an examination conducted by apothecaries.'

"If the proposed combined board of examiners were truly designated by this language (which it certainly is not) it might still be asked what greater indignity would be offered to those gentlemen by an examination in Medicine by a board thus constituted, than by a like examination in the other subjects.

"That no such feeling exists among students of Medicine is attested by the fact that, during the last three years, not less than thirty of the graduates and undergraduates of the Universities of Oxford, Cambridge, and London, twenty or more gentlemen holding the licence, or having passed the first examination of the Royal College of Physicians, two of the Fellows, and a very large number of the Members of the Royal College of Surgeons, applied for, and, after due examination, have obtained, the licence of the Society.(a)

"A plea has been advanced that clinical facts (which are admitted to be an essential element in an examination in Medicine) are at the command of the College of Physicians alone, but this is quite unfounded, seeing that effective clinical examination has been regularly practised at the Society's examinations during the last three years, and the resources at their command would enable them to enlarge such examinations to an unlimited extent.

"Since the conferences above alluded to took place, the subject has assumed an entirely new aspect by the intervention of the Government, and by a Bill for the future regulation of the Profession having been submitted to Parliament. It was fully anticipated by the Society that legislation would be found indispensable in order to effect the desired changes, and they considered the provisions of the Government Bill, as originally framed, to be, for the most part, well calculated to effect the purpose.

"The Society trust that, in the conferences which must shortly ensue in the event of the Bill becoming law, they will be met by the other Medical authorities in the spirit of liberality and concession by which they are themselves actuated, and the President and Fellows of the Royal College of Physicians may rest assured that in the selection of Members of the future combined examining board, the Society will not fail to nominate gentlemen worthy to represent the great and honourable body of General Practitioners, and fully deserving of the confidence and respect of the other Members of the Board.

"I am, &c.,

"EDWARD BRADFORD, D.I.G."

PARLIAMENTARY—BROADMOOR ASYLUM—POOR RELIEF (METROPOLIS) BILL—THE CONTAGIOUS DISEASES ACT.

On Thursday, May 19, in the House of Commons, in answer to Dr. Lush,

Mr. Bruce stated that there had been long-standing disputes with the Commissioners in Lunacy respecting the mode of treating the more violent of the prisoners confined there. If the hon. gentleman however would have the patience to wait until the report for 1869 was printed he would find that things were in a much better condition, and that the Commissioners were perfectly satisfied with the present state of affairs. In filling up the vacancy which existed every care would be taken that the appointment should be a satisfactory one.

On Friday, in the House of Lords,

Lord Kimberley briefly recapitulated the objects and provisions of the Poor Relief (Metropolis) Bill, and moved its second reading.

The Duke of Richmond expressed a general approval of the Bill, but thought that equalisation and centralisation were carried quite far enough by this measure.

Lord Devon also supported a Bill which he hailed with satisfaction as founded upon just principles.

After a few words from Lord Redesdale and from Lord Kimberley in explanation,

The Bill was read a second time.

On Monday, May 23, in the House of Lords, the Poor Relief (Metropolis) Bill passed through committee.

On Tuesday, May 24, on the occasion of a number of petitions against the Contagious Diseases Act being presented by the Earl of Minto and other Peers, Viscount Lifford drew attention to the fact that a large number of the signatures appended were in one handwriting, and many appeared to be those of women and children.

The Earl of Minto said that, to the best of his belief, the signatures were *bonâ fide*, and the Duke of Argyle said that the petitions expressed a widely prevalent feeling.

The Poor Relief (Metropolis) Bill was read a third time and passed.

In the House of Commons,

Mr. W. Fowler moved for leave to bring in a Bill to repeal the Contagious Diseases Acts of 1866 and 1869. Before the

(a) It will be understood that these numbers are exclusive of Scotch and Irish candidates.

debate commenced, Mr. Cranfurd called attention to the fact that "strangers" were present, and thereupon, after a moment's hesitation, the Speaker ordered the galleries, including the reporters' gallery, to be cleared.

The House debated the question *in camerâ* for exactly four hours (from 7·15 to 11·15), and at the end it was understood an adjournment for a month was carried on a division by 229 to 88.

PROFESSOR LONGMORE, C.B., ON THE REGIMENTAL AND GENERAL STAFF SYSTEM IN THE MILITARY MEDICAL SERVICE.

In the introductory lecture delivered at Netley on commencing the twentieth session of the Army Medical School, on April 1, a copy of which—printed by request—is now before us, Professor Longmore, C.B., chiefly directed the attention of his audience to the discussion of the relative merits of the regimental and general staff system of administration of the Army Medical Department. Fully admitting that to many regimental officers the general staff system will be a source of much disappointment, he expressed his hope that in the change, due consideration may be shown to the circumstances of such officers. He at the same time observed that it has been foreseen for a long time past that the duration of the regimental Medical system was approaching its termination. The present system of concentration of troops in camps and garrisons at home removes the cause which appeared to render necessary the regimental system under former circumstances, when the British Army was scattered by regiments and detachments, not only over Great Britain, but over all parts of our colonial empire. The system has now been proved to be, even on home service, a waste of Professional power, a useless multiplication of Surgical equipment, and therefore of expense, and in time of war has constantly broken down, as in the early struggles in the Crimea, and at a later period before Sebastopol, while the Medical officers of some regiments were overtasked with the number of wounded under their charge, others were without any professional occupation at all, so far as the exigencies of the occasion were concerned. The advantages of the opposite system were fully demonstrated during the war of 1860 in China, during which, with the sanction of the general in command, the principal Medical officer had the regimental as well as staff Medical officers entirely at his disposal, so that, without reference to the commanding officers of regiments, he could remove and distribute regimental Medical officers whenever and wherever he considered their services would be most advantageous. The result was so satisfactory that the Minister for War stated in the House of Commons that the Medical arrangements of the expedition had been conducted with the most complete success, and that the health of the troops had been better attended to and preserved than they had ever been in any previous campaign. From the experience gained on this occasion, Inspector-General Dr. Muir, C.B., was led to express the opinion that the regimental system must eventually give way to the more comprehensive and practical general Hospital system.

Inspector-General Mouat, C.B., V.C., during the late New Zealand war, obtained similar experience, and reported that the regulation regimental system of field Hospital service was attempted to be carried out at first, but the difficulties met with were such as to show its utter inapplicability to a state of war. Hospital marquees and equipment generally being found to be useless incumbrances to the regiments while moving in the field were left behind, and the regiments disencumbered of them. All the grave cases of wounds and sickness were treated in the stationary or general Hospitals, the duties of the regimental Medical officers being limited to applying the primary dressings during action, sending the wounded and serious cases for treatment to the nearest general Hospital, and treating the slight cases of illness and accidents on the line of march. It was the same during the great war in America: the regimental Hospital system was at first tried, it failed in the same way, and very early in the war the general Hospital system was adopted in its stead, as it is in the armies of all the great military nations of Europe. Such being the experience of times of war, Professor Longmore asks, can it be wise to keep up the regimental system in time of peace, instead of familiarising the Medical officers of the army with, and trying to improve the garrison or general Hospital system which *must* be resorted to in practice when war comes?

The regimental system is beneficial in various ways as regards *the military service*, but, as regards *the Medical service*, it restricts the sphere of observation and practice within comparatively narrow bounds. The evils which attended general Hospitals in former years were the result of neglect of discipline, of hygienic measures, and proper supervision, which, in these days of general enlightenment and observation, could not occur without speedy and severe reproof.

Besides the advantages of the general staff system as above sketched, it will have the effect of rendering the roster of service more fairly distributed, though it is questionable whether this would have been sufficient to effect such a change had not the regimental system been proved to be unworkable in time of war, as well as under the new circumstances of the British army, needlessly complicated and expensive in time of peace.

But what Professor Longmore considers to be the most important point in favour of the proposed system is, that it will be the means of fixing a more thorough feeling of Professional character throughout all ranks of Medical officers, and lead to a common aim for sustaining the reputation of the whole Professional body. In remarking upon the analogy between army Medical officers and the Royal Engineers as members of scientific corps engrafted on the military system, and performing duties common to civil and military Professional practice, Professor Longmore remarks upon one great difference between the two bodies—that Engineers frequently are seen to resign the military ranks, and take a distinguished part in great public works and scientific undertakings, while, with a few honourable exceptions, army Surgeons do not take such conspicuous part among the civil pursuits of our Profession. As a result of the new system, and of the spirit of Professional emulation which may be engendered by it, Professor Longmore expresses the hope that this may no longer be the case, but that the reputation of army Surgeons may be proportionally extended, and that they may be sought after to fill some of the appointments which at present seem only open to their civil brethren. Although the Surgeons of the army may be destined to go through changes similar to some of those through which the Royal Engineers have gone in their time, Professor Longmore does not think that the analogy will be made complete in our army, at any rate for many years to come, although in the Prussian army such is now the case.

The warrant introducing the system of "unification" of the Army Medical Department has not yet appeared, and meanwhile many protests from regimental Medical officers have appeared in the various journals Medical and military. We are, however, inclined to agree with Professor Longmore in looking forward with much hope that, if brought into force, the result of the proposed change of system will be highly advantageous to all concerned.

We have also before us a pamphlet for private circulation containing a correspondence on the same subject between Dr. J. M. Grant, Deputy Inspector General of Army Hospitals, Principal Medical Officer of the Cape of Good Hope Command, and Colonel Browne, of the 2nd Battalion, 20th Regt., commanding the District of Port Natal. The question is discussed from the Medical and commanding officers' point of view respectively, the former strongly advocating the general staff, and the latter the regimental system.

We have not space to notice the arguments adduced on either side, but Dr. Grant appears to us to have established his proposition, that the relation of the Military Medical Service, instead of being limited to individual regiments, ought to be to the Army as a whole, as is the case with the commissariat and all the other Civil departments.

Women Physicians.—The Russian Government has decided to admit women into the Medical University of St. Petersburg, after passing an examination. They will be taught separately from the male students, and the whole course of study is limited to a period of four years. A diploma as midwife, which confers the right to practise, is to be given to those who go through all the prescribed examinations.

REVIEWS.

Public Health: A Popular Introduction to Sanitary Science. By William A. Guy, M.B. Cantab., F.R.S., Professor of Forensic Medicine and Hygiene in King's College, London. London: Renshaw. Pp. 216.

Dr. Guy has, we think, done good service to the cause of sanitary science by publishing the lectures he last winter delivered at King's College. This much he has done, he has shown that the study of public health can be rendered as attractive and interesting as a good novel. He gives us in short space an account of the health of London, drawn from the most authentic sources from the days of the Black Death downwards. He shows how insalubrious seasons were rendered more unhealthy by the want of any sanitary system, and how epidemics were assuaged only by sanitation, as the Physicians of the time soon found out. His notes on the sweating sickness, which was emphatically an English disease and pursued Englishmen abroad, and of the plague as it prevailed in England, are full of interest. An episode in the latter, the plague at Eyam, and the heroism of the rector of the place, read like a page from a romance, but they tell their own tale and append a moral—the advantages of isolating those sick with contagious diseases. Our readers will do well to make themselves masters of this little book, and still better by commending it to their patients (the book is intended for laymen as well as Professional men) as a most interesting and instructive introduction to sanitary science.

Klimatische Wintercurorte, mit besonderer Rücksicht auf die Winterstationen der Schweiz, Tirols, Oberitaliens und des südlichen Frankreichs. Ein Leitfaden für Aerzte und Laien. Von Dr. Hermann Reimer. Berlin: Reimer. 1869. Small octavo.

Climatic Health Resorts during Winter, with Special Reference to the Winter Stations of Switzerland, Tyrol, Upper Italy, and the South of France. A Manual for Physicians and the Public. By Hermann Reimer. Berlin: Reimer. 1869.

The author having visited, during two winters, certain health resorts, gives a pretty complete description of them. This is preceded by an introduction occupying thirty-one pages. It contains observations on the influence of climate on health, the principles on which to choose a health resort, and advice to invalids who are going to visit winter stations. What is said on the latter point is most likely more intended for the general public than the Profession, as we are conversant with everything regarding precautions in travelling, dress, good lodgings, etc. It is, however, a good idea to remind the visitor that he may usefully fill up his time at these places with studying botany, meteorology, or climatology, and to provide himself with the necessary manuals before he starts. On pp. 32—100 we find the following inland places noticed:—Montreux, Meran, Gries, and Pau. The whey and grape cure is mentioned in connexion with the three first-named health resorts. The grapes of Meran are considered as inferior to those of Montreux. The climate of Montreux is milder than that of North Germany; the air is clear, and approaching the rarefied one of higher regions. Regarding Gries, the lack of social comforts is animadverted upon. Pau is considered expensive, and it rains too frequently there.

On pp. 100—198 a synopsis is given of the following seaboard places:—Hyères, Cannes, Nice, Mentone, San Remo, Ajaccio. At Hyères the mistral is a great drawback, which suddenly changes the climate from being sunny and mild to be cold and dry. Speaking of Cannes, the author reminds the reader of the exertions of the late Lord Brougham. Those for whom the climate of Cannes is too bracing find it milder in the neighbouring Le Canet. At Nice the mistral is not often troublesome, but there the bad drinking water forms a disadvantage. Superior accommodation and comforts may be had. San Remo is stated to be an English colony, founded by some stray visitors from this country twelve or thirteen years back. Three hundred English visitors were there during one of the latest winters. Lastly, Ajaccio is noticed as the youngest health-resort, having come into fashion only since 1867. During the last season the visitors had increased to 500. A great advantage of Ajaccio is that it seldom rains, a range of mountains protects it from the northern winds, and the sirocco is rare.

The little book concludes with tables of the climate of various other health-resorts and towns. It is of course written more for Germans, but may be also recommended to others for perusal. Its principal merit is that it gives correct and detailed information on the meteorological points of interest.

NEW BOOKS, WITH SHORT CRITIQUES.

Inaugural Address Delivered on the 97th Anniversary of the Medical Society of London. By John Gay, F.R.C.S., President, Surgeon to the Great Northern Hospital etc. London: A. Schulze.

*** This pamphlet contains Mr. Gay's inaugural address when he was inducted into the presidential chair of the London Medical Society. It deals mostly with the past history of the Society, and with modern scientific research. Mr. Gay is to be complimented on an essay eminently able and readable.

Public School Reform: a few Remarks and Suggestions on the Mental, Moral, and Physical Training of Youth. By M. A. B. Booth.

*** This pamphlet contains a reprint of various letters which have appeared in the public journals from the prolific pen of M. A. B. There is much good practical common sense in them, and we are glad to see them thus reproduced.

FOREIGN CORRESPONDENCE.

FRANCE.

Tent Hospitals.

(*From our Paris Surgical Correspondent.*)

Though this is not the weather for tents or talking about treating patients out in the open air, nevertheless the time will come again when tent-hospitals may be useful; and it may therefore be well to possess exact results of previous experience, from which, in a measure, we may know what to expect in the future.

Everybody, to-day, is convinced of the danger of large Hospitals and crowded wards. Most of the important operations practised in the larger Hospitals of Paris—the Lariboisière, for instance, which is one of the best kept of all—end in the autopsy chamber. The Surgeons there, the best of them, are discouraged; yet, in spite of such facts well known to the Paris administration, another tremendous Hôtel-Dieu is being constructed, which, if intended as a place for the study of pathological anatomy, cannot fail to attain its aim; but woe to the unfortunate patients who have to enter it! Convinced, therefore, that small Hospitals are preferable to large ones, and tent-hospitals better than all, for six months of the year at least, I propose to add a few more details on the subject which were omitted in a previous communication.

A very important point in the construction of the tent-hospitals was to see if the patients were sheltered from the elevation of the temperature during the day-time, and from the cold of the night. The temperature in the tent on August 26 and 27 last rose in the middle of the day to 29° Cent. (84·8° Fahr.), and on 28th to 30° Cent. (86° Fahr.); but the thermometer in the open air in the sun marked 46·3° Cent. (115° Fahr.) on August 26 and 27, and 50° Cent. (122° Fahr.) on August 28. The highest average temperature in the tent, experienced during the month of August, was from 22° to 25° Cent. at noon. The temperature taken inside the tent at six o'clock in the morning, during the months of August and September, varied between 15° and 24° Cent. (59° to 75° Fahr.).

A thermometer *à minima* was employed during October to note the lowering of the temperature at night. The lowest degree, 6° Cent. (43° Fahr.), was attained on the night of October 25. This was the night of a snowstorm. The patients, being questioned one after another as to the cold, insisted upon remaining where they were; but seeing the snow on the ground, and fearing the development of pleurisy or pneumonia, M. le Fort, not wishing to be imprudent at the expense of others, evacuated the tent, and had the patients removed to the wards of the Hospital.

The sojourn under the tent was most agreeable, especially when the fine weather permitted the raising of the outer canvas and the opening of the inner curtains. As the project of the construction was only slowly executed towards the end of June,

the number of severe cases there treated has been too small to permit of a rigorous conclusion. So far, however, everything seems favourable to tent-hospitalisation. The wounds always did well, and not a single complication came up. Of pyæmia, hospital gangrene, erysipelas, etc., there has never been question. Among the most serious cases treated we may note a diffuse phlegmon of the fore-arm, two ditto of the thigh, one ditto of the fore and upper arm; a fracture of the elbow with penetrating wound into the articulation; a fracture of the inferior portion of the leg, with protrusion of the tibia, and laceration of the integuments; a sub- and intra-condyloid fracture of the femur, with protrusion of the fragments through the skin, and blood and air in the knee-joint. All these patients, thanks to conservative Surgery, were rapidly cured. Two cases of penetrating wounds of the palm of the hand were treated with suture of the palmar arches—in one, the hæmorrhage could not be stayed, and the ligature of the humeral artery had to be practised. A case of multiplied scalp wounds, produced by a knife; a primary amputation of the leg at the point of selection, the limb having been crushed by the fall of a large building stone; an amputation of the thigh for an old white swelling—resection impossible. All these patients left the tent cured.

Three deaths occurred—one from a comminuted fracture of the bones of the face, produced by the kick of a horse; one from a fracture of the skull, with cerebral commotion; and one from pulmonary consumption after an amputation of a tuberculous testicle. Of course, these three deaths cannot be ascribed to any special treatment; for the first and the second of these patients died, the first a few hours, the second two days after entry into the Hospital, and the third died of phthisis.

I have already had occasion heretofore to speak of the simplicity of the dressings employed at the Cochin Hospital and in the tents; a slip of linen dipped into water or alcohol and water is all the dressing used. This fact is well worth mentioning as long as many of our Surgeons, strange to say, still keep filling up wounds with large cakes of charpie and fatty substances, which, I think, are admirably suited to shut up the pus and give it an opportunity of being absorbed, whence the well-known train of symptoms. The dressing of wounds, consequently, is one reason why the success of Surgical operations and accidents is greater at the Cochin Hospital than elsewhere here; but another reason, and to my mind a very great one, is the food and stimulants which M. le Fort prescribes for his patients. A person on full dict in a Paris Hospital—that is to say "quatre portions"—is allowed the following:—

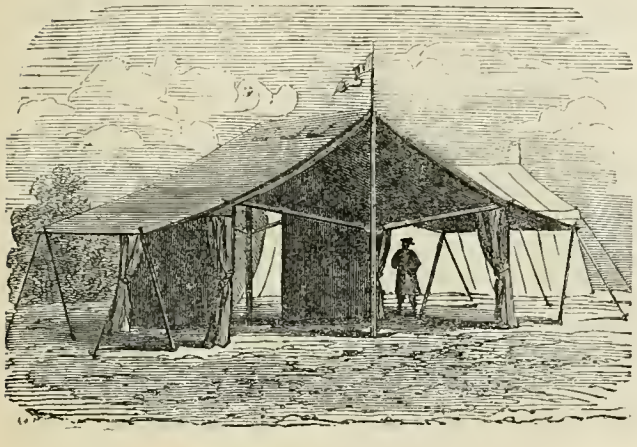
Distribution for the whole day.—White bread: man, 15 ounces; woman 12½ ounces. Wine: man, 15 ounces; woman 10¼ ounces.

Before the morning visit.—Vegetable soup, 9⅜ ounces.

Morning meal.—1. Roast or boiled beef, 2¾ ounces; or offals, 3¾ ounces. 2. Dry vegetables or vegetables of the season, 5 ounces; or two eggs.

Evening meal.—1. Meat soup, 9⅜ ounces. 2. Boiled beef, 3¾ ounces; or fish, 5 ounces. 3. Fresh vegetables, 5 ounces; or potatoes, 7½ ounces; or boiled rice, 6¼ ounces.

M. le Fort, persuaded that stimulants and nutritious food are as essential as pure air to the wounded, who in every other respect enjoy good health, refused to accept the above regulations laid down by M. Husson. An exchange of letters and words ensued, but M. le Fort succeeded in carrying his point, so that to-day extras can be ordered by the Surgeon in charge, provided he sign a "bon pour;" and that this is not neglected at the Cochin I can vouch for.



The annexed figure represents another of M. le Fort's ambulance tents, very much like the one described in my former letter. The only modification in this one is a division of the inner canvas into two parts (compare fig. 2, page 639, *Medical Times and Gazette*, November 27, 1869); these are drawn aside like window curtains, and the patients find themselves quite in the open air, yet shielded from the rays of the sun.

GENERAL CORRESPONDENCE.

FURTHER NOTES ON THE USE OF CHLORAL.

Letter from Dr. H. Bence Jones.

[To the Editor of the Medical Times and Gazette.]

Sir,—In a letter which I have lately received from Dr. Oscar Liebreich he gives me some further information on the treatment of disease by the hydrate of chloral. I hope he will before long have some important facts on the use of the hydrate of bromal to communicate to your readers.

I have in no case used more than 60 grains of chloral for one dose. Dr. Liebreich states that 200 grains may be given for one dose. I have never used it as an injection beneath the skin. He has used it in 7-grain doses frequently. He tells me he has given it every night for three months without any loss of its property of causing sleep. I have only given it for a few nights consecutively. The largest quantity I have given in the shortest time has been 150 grains in six hours, for the most intense neuralgic pain with violent gout in the foot. Between the first and second dose of 30 grains there was only one hour, afterwards two hours. Broken sleep of nearly ten hours was produced, and entire forgetfulness of the pain and of the time, so that the two days were thought to be only one. No bad symptom was produced, but there was no great good done to the gout, although the neuralgia was taken away.

In a patient who was liable to gouty sciatica and had frequently got instant relief from the subcutaneous injection of morphia, I tried what doses of 30 grains of hydrate of chloral would do. Two doses with an hour's interval gave sleep for many hours. A third dose was then taken and it caused heaviness of the head and drowsiness the greater part of the next day. The sciatica was stopped.

Epileptical headache returning at very irregular intervals has been stopped over and over again in one patient by a dose of chloral that caused eight or ten hours' sleep. Large doses of bromide of potassium were given daily for weeks with great good effect in preventing the frequency of the attacks, but no medicine and no alcohol was able to stop the headache when it began, until the chloral hydrate was tried in September, 1869. Since that the patient has rapidly got better, and now takes only a very small quantity of bromide, and very rarely uses the chloral. Even the epileptic convulsion may be stopped by the chloral if I may believe the report I get of one patient.

The rapidity of action of the hydrate of chloral is very great when the stomach is quite empty. It is very different when the medicine has to wait for the solution of the food. Probably it acts much more rapidly when given in sugar and water than in mucilage of gum. Over and over again I am told that it causes sleep in less than five minutes. A patient who for years had habitually taken opium slept all night with 30 grains of hydrate of chloral. Two patients who were accustomed to take full quantities of brandy, when given the hydrate of chloral to cause sleep, declared that they were obliged to give up the brandy, as it caused oppression of the chest and head. They got good and full sleep with 30 grains of chloral, but after some days they chose to give up the chloral and return to the brandy, saying they could not take both at the same time.

With regard to any bad effects of the medicine, I may almost say that I have met with none at all. The very strong taste, which soon goes off, has frightened two or three patients, and they have objected to any further trial of the medicine, saying that it heated and headached them. Some of the cases of neuralgia in which I have used it have not lost the pain nor slept as I expected. When it has been taken in the early morning or in the day—when disturbing causes have prevented sleep—I have been told of uncomfortable headache, lasting for many hours, but I have never heard of sickness nor constipa-

tion, nor even loss of appetite, in the great number of cases that are within my own knowledge. Many patients, after eight or ten hours' sleep from a 30-grain dose, have thought themselves lower and weaker than they would have been if they had not taken the chloral the previous night, but neither the pulse nor tongue showed any confirmation of their sensations. I have had two very aged patients cause alarm to their friends by the long and sound sleep which 30 grains of the hydrate gave when other remedies had failed. That a medicine should be able to do so much good without doing any harm is so contrary to the ordinary therapeutical law that the suspicion will arise that more has to be learned about it.

With regard to the mode of action of the hydrate of chloral, perhaps Dr. Liebreich may be led to change his present opinion. The discovery of the effect was made by means of a beautiful idea. If it could be shown that the alkali of the blood is sufficient to decompose the hydrate of chloral, and that the chloroform combines with Dr. Liebreich's protagon of the nervous substance, forming a temporary compound, less capable of the peculiar motion of the nervous substance than the nerve substance itself, Dr. Liebreich would have made a noble advance in therapeutical rationalism; but the hydrate of chloral is not easily decomposed by weak alkaline solutions, even at the boiling temperature, and it is very possible that the hydrate of chloral acts as such, and not altogether or at all as a generator of chloroform. Possibly new chlorals, and other compounds of chloral, than the hydrate may by their actions give more knowledge as to the mode by which the hydrate of chloral produces its effect.

Meanwhile, there is some fear that variations in the preparation may cause uncertainty in the effects produced, and the enormous demand that now exists may lead to the sale of hydrates of chloral that may have very different actions from that hydrate of which I have been writing.

I am, &c. H. Bence Jones.

84, Brook-street, May 23.

THE WEIGHT OF THE BRAIN.

Letter from Dr. T. W. M'Dowall.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the notice of the late Sir James Simpson which appeared in the *Medical Times and Gazette* of Saturday, May 14, there is an error, evidently a slip, in stating the brain-weight of Cuvier at 53 ounces. Authorities differ to the extent of about 1½ ounce as to the exact weight, but Broca gives it at 64·5 ounces, and this has always been regarded as the heaviest normal brain on record.

In the *Journal of Mental Science*, 1866, there is an elaborate paper by Dr. Shuman on the "Weight of the Human Brain," and he gives the following interesting table of the brain-weight of fifteen distinguished men:—

	Age.	Oz.
1. Cuvier, naturalist	63	64·5
2. Abercrombie, Physician	64	63
3. Spurzheim, Physician	56	55·06
4. Dirichlet, mathematician	54	53·6
5. De Morny, statesman and courtier	50	53·6
6. Daniel Webster, statesman	70	53·5
7. Campbell, Lord Chancellor	80	53·5
8. Chalmers, celebrated preacher	67	53
9. Fuchs, pathologist	52	52·9
10. Gauss, mathematician	78	52 6
11. Dupuytren, Surgeon	58	50·7
12. Whewell, philosopher	71	49
13. Hermann, philologist	51	47·9
14. Tiedemann, physiologist	80	44·2
15. Hausmann, mineralogist	77	43·2
Averages of ten distinguished men	50-70	54·7
Averages of fifteen distinguished men	50-80	52·7

The average brain-weight, between the ages of 20 and 60, of Scotchmen is given by Dr. Peacock at 50 ounces, and from these figures it is evident that whilst Simpson's brain is much above the average of his countrymen, it is really lower than that of the brains of the ten distinguished men given in the preceding table who died between 50 and 70.

In connexion with the present subject it may be not uninteresting to know that, some years ago, Sir James collected statistics from hatters, principally in London and Edinburgh, as to the sizes of the hats sold in these cities; and the result of his inquiries clearly proved that, on an average, a Scotchman required a larger hat than an Englishman. When the late Professor related this fact to his class or in private, he frequently added that he trusted that this necessity for large hats arose from the size of the brain, and not from unusual thickness of skull.

There is, no doubt, much truth in the remark which I have more than once heard the late Professor Goodsir make in reference to the cerebral hemispheres—"Besides quantity we must have quality." I am, &c. T. W. M'Dowall, M.D.

Inverness District Asylum, Inverness, May 20.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 12, 1870.

George Burrows, M.D., F.R.S., President, in the chair.

A paper, by Frederick James Gant, F.R.C.S., was read on

EXCISION OF THE JOINTS FOR DISEASE, AND SPECIALLY OF THE KNEE, HIP, AND ELBOW.

The primary object of this paper is to lay before the Society the conditions of disease which, in the author's experience, seem to be appropriate for excision of the joints in general; and those conditions also which specially pertain to the knee, hip, and elbow, severally, with relation to this operation, as illustrated by the accompanying cases. So far as the appropriate nature of these conditions of disease may be established by the typical character of the cases adduced, and confirmed by an increased number, they will represent principles whereby to determine the propriety of performing the operation of excision in diseases of the joints. With this view the author has appended a careful analysis of each series of cases in regard to their pathology and the operation itself, and its results; and also of the general results of excision in the cases taken collectively, and the relation of these results to the pathology of the joints subjected to operation. The necessity either for excision or for amputation in joint disease implies incurability by non-operative treatment. As regards excision, incurability is defined to signify that condition of the local disease wherein the joint has become functionally useless by destruction of the articular cartilages, without the supervention of anchylosis, but while the constitution still retains the reserve power requisite for the long process of reparative union—averaging three months after removal of the diseased bone. Any other cases—namely, of advanced local disease—if not falling within the provision of the latter clause of the definition as to the requisite constitutional reserve power, but which are accompanied with prolonged hectic and exhaustion, will be proportionately unfavourable or unfitted for excision, and must be submitted to the alternative operation, amputation. As compared with the natural cure by anchylosis, as a possible result in joint disease, excision would seem to be preferable in proportion to the more prolonged period of recovery when unaided by Surgical removal of the diseased bone, a probation which entails long continued suffering, and ultimately leaves the constitutional vigour reduced and inadequate to sustain the contingencies of disease in after life. Failures of the natural cure are then considered with regard to excision. This comprises two results, defective kind of anchylosis for the functional use of the limb, as fibrous anchylosis in knee-joint disease, and osseous anchylosis in elbow-joint disease; or malposition of the limb accompanied perhaps with defective anchylosis. The author then proceeds to state in extenso the pathological conditions, or those of disease, and their results from failures of reparation, which severally justify the operation of joint excision, and those also which specially pertain to the knee, hip, and elbow. The histories of the illustrative cases are narrated, and their analyses appended. The following general results may be enumerated in this abstract:—1. Excision proved successful, by one operation, in 16 out of 20 cases of the joints referred to. 2. Of the 4 unsuccessful cases, by one operation, 3 were cases of scrofulous disease and of the knee-joint, out of a total of 9 cases; the remaining one being chronic synovitis and of the elbow-joint, out of 5 cases. 3. Re-excision was resorted to in 2 of the 4 cases; 1 knee-joint and 1 elbow-joint, the latter with a successful result. 4. Secondary amputation in 3 of the 4 cases. All 3 were knee-joint cases and of scrofulous disease; 1 of

which had been subjected to re-excision. The 3 amputations made rapid recoveries. These results tend to show that if the attempt to preserve a limb by excision, and even by re-excision, of a large joint, as the knee, should fail, the operation is not unfavourable to secondary amputation for the preservation of life. 5. No death ensued in any of the 20 cases of the knee, hip, or elbow-joints, whatever had been the condition of disease, or the operation, excision, re-excision, or secondary amputation. The paper was accompanied by drawings and by specimens of bone.

Mr. Solly expressed his acknowledgments to Mr. Gant, and spoke of the change which had been wrought in the feelings of the Profession with regard to excisions. Such operations were now performed, and their value fully recognised, in all great Hospitals; but he believed the advantages attending them were not sufficiently recognised in the country; and that many limbs which might be saved were even now sacrificed by amputation. In cases of failure of union, re-excision was almost always practicable; and he believed the chief cause of failure of union was that the bones were not kept perfectly still, and that the method of putting up the limb was more likely to be at fault than the constitution of the patient.

Mr. Partridge related a case in which he excised the knee-joint fourteen years ago, with excellent results. Quite lately the part sustained some injury, a superficial abscess formed, and was followed by caries of bone. He re-excised the joint, and the patient again made a good recovery.

Mr. John Wood said that the full value of excision of joints had only lately been admitted. The chief difficulty of the Surgeon now was to know when to interfere, or rather the earliest period of time at which he was called upon to do so. The author of the paper had laid down one rule which might be of great value if we could only determine when its conditions were fulfilled. It was to operate when the cartilages were removed by ulceration. He believed, however, independently of the difficulty of determining when this had happened, that joints would recover not only after the removal of cartilage, but after the removal of bone itself; and that such removal would be effected by absorption, without there being necessity for any external opening. While fully recognising the merits of Mr. Gant's paper, he was surprised to hear in it no mention of the greatest modern improvement in the practice of excision—the method of gouging away the diseased bone, and leaving its periosteum, and the attachments of its muscles, undisturbed. He also thought it important that the Surgeon should confine his incisions within the limits of induration, so as to avoid the burrowing of matter. He did not concur with Mr. Gant in his employment of the elliptical incision. At King's College Hospital it was now the custom to employ a single straight incision across the front of the joint, level with the head of the tibia; and it was found that this incision very much facilitated the application of the saw.

Mr. Barwell expressed his belief that neither the removal of cartilage nor the gelatiniform degeneration of the synovial membrane rendered excision necessary. He had treated such cases successfully by ordinary means, together with firm pressure. With regard to the subperiosteal removal of bone, he referred to Dr. Sayer, of New York, by whom that practice had been long ago advocated. He regretted that the author had given no particulars about the degree of shortening of the limbs in his cases. He could not approve of leaving the limb to assume its own position after removal of the head of the femur, for he believed that shortening was much increased by adduction. It was his own practice in such cases always to use an interrupted splint applied in such a manner as to abduct the limb.

Mr. John Wood explained that he had not claimed originality for the practice of leaving the periosteum, but only for the practice of removing the bone piecemeal through a small opening.

Mr. Timothy Holmes said that the cases given by the author, and the principles laid down by him, were such that his results threw no light upon the general question of mortality after excision. The cases were selected ones; and in such there was an almost entire absence of risk in amputation. To have had twenty cases of excision without a death was in itself a very gratifying fact; but he wished to know what became of the rejected cases. Did they die, or did they undergo amputation? He believed that, with all necessary care, many of these cases of joint-disease might be guided to good recovery, and that the joints would be more solid after spontaneous cure than after excision. He was not himself an advocate for subperiosteal resection, and believed some of those Surgeons who had at one time performed had now seen reason to abandon it. He saw no benefit from not severing the attachments of the muscles. In ordinary excision of the elbow, muscular attachments were severed very freely, and the muscles recovered full power and usefulness.

Mr. William Adams thought we should compare amputation and excision rather by considering the latter a resource for saving limb, the former for saving life. He referred to the value of persistent pain, in addition to other symptoms of joint disease in the knee, as a symptom that the bones were extensively implicated; and briefly described his own case of subcutaneous division of the neck of the femur, with an intimation that he hoped to bring it before the Society.

Mr. Callender moved the adjournment of the debate to the next meeting.

Mr. Barwell seconded the motion.

The President appealed to the two ex-Presidents among the audience with regard to the custom of the Society.

Mr. Partridge said that debates had been adjourned, but that they always languished on the second occasion, and that the practice was not desirable.

Mr. Solly expressed an opposite opinion on the general question, and a particular wish that the adjournment might be carried.

On being put to the vote, it was carried almost unanimously, and the meeting was then rendered special for the purpose of confirming the previous resolutions upon the amalgamation scheme.

Wednesday, April 20.

Dr. Burrows, F.R.S., President, in the chair.

Adjourned Debate on Mr. Gant's Paper.

The President said the Fellows were aware that it was the wish of the Society to adjourn the debate on Mr. Gant's paper read at last meeting. They were now met to resume its discussion, but to give those absent an idea of the paper it was advisable to have an abstract read, and he would call upon the Secretary to do so.

Mr. T. Smith then read an abstract of the paper.

Mr. Callender, as mover of the adjournment, was then called upon to resume the discussion. He said he wished to refer to some remarks by Mr. Holmes as to the comparative death-rates in excision of the knee-joint and amputation at the thigh. The latter, if performed early in life, was nearly free from danger; all under 10 did well. So, also, for the most part of those under 20. This was at St. Bartholomew's Hospital. Age was therefore a most important fact in estimating the value and risk of the two. In the paper reference was made to 3 joints, in 2 movement had been secured, not so with the knee. He trusted we might yet hope to secure this. He could not help thinking of Neudorfer, who told him that he constantly had some movement. In one instance at St. Bartholomew's movement had accidentally been retained. Considerable modifications were required in the operation to secure motion. The extensor tendons would have to be left, the articular surfaces of the bone alone removed, and the femur not cut straight across as now, but after the contour of the joint. They wanted clear evidence as to the growth of the limb after excision. In three cases under his own observation there was no shortening beyond that consequent on the portion originally removed. He thought it better to have the limb slightly flexed than quite straight.

Mr. Henry Lee said he would first allude to the question of death-rate. If all Hospitals were taken, instead of one only, the results would be very different. Some years ago he belonged to a society of observation, and their *Transactions* showed that the results, after amputation, in persons under 16, were not nearly so favourable as those given by Mr. Callender. Next, as to motion, he had been unfortunate enough to have motion of the knee-joint after excision, but it was in any direction; hence it was not so good as anchylosis. In the elbow it was different. Mr. Gant's preparations suggested certain notes; in one instance the head of the bone did not appear to be diseased at all, or only slightly so. It this respect it resembled two of his own cases, where he had operated by Wood's method; the diseased bone was gouged out, and the joint not opened. In one case, that of a young woman with symptoms of hip disease, the skin became painful, and an abscess formed and opened on the outside of the thigh; dead bone was found, and removed by gouging. Othe abscesses afterwards formed, the case extending altogether over six years. Thus hip-joint disease may be simulated when the

joint is sound. In the second case a good deal of the trochanter was removed. Mr. Gant's cases were called typical, but he would like to know if these were all in which Mr. Gant had operated. He must be fortunate if all his cases were typical, whilst if they were selected they lost their value. He thought the danger of recision was overstated. There was no joint to open, and they might only have to remove some fibrous material or some condensed bone. To secure perfect union the splints required to be carefully applied, and that the extension was not too great, otherwise the bones were too far separated.

Mr. Willett would ask one question, which he hoped might be answered at once; this was whether these were all the joints Mr. Gant had excised.

Mr. Gant replied in the affirmative.

Mr. Willett thought such success was remarkable. At St. Bartholomew's, in six years, there had been twenty-two excisions, with one death; thirty-eight of the knee, with eight deaths; whereas in one particular year there were ten of the knee, with no deaths. The success was, therefore, exceptional, and could hardly be expected to continue. There was nothing unusual in Mr. Gant's mode of operating to account for the success. He had done modified excision of the shoulder and hip, and something of the kind at the ankle. He would like to know the results altogether at the Royal Free Hospital, and how many were passed over as unfit. Two boys were present in whom the disease had lasted a long time; had they not passed through the dangerous stage before being operated on? The danger was greatest when the disease was acute.

Mr. Hancock could not think certain of the cases referred to were true disease of the hip-joint, but rather sequestrum of the great trochanter, the joint not being affected. No Surgeon would excise for this; but the same could not be said of true joint disease. He had seen a good many, and had done great good by removing the head of the bone. It especially relieved the patient's suffering. In the earlier period of the operation, it was said that the bone must be dislocated before performing the operation, and that it was not to be done if the acetabulum was diseased. In the great majority of cases there was no dislocation, even although there was much disease. In the last case he had operated on, movement was quite free, and roughness could only be detected on pressure; yet, on cutting down, the head of the bone was found nearly gone, and the acetabulum was full of pus. He had first pointed out the propriety of operating even if the acetabulum was perforated. If there was an abscess in the pelvis, the pus could be so removed without injuring the fascia. He would like to know the steps of Mr. Callender's proposed operation. He had found removal of cartilage insufficient.

Mr. Savory thought the choice of proper cases was all-important. They might classify diseased joints in three groups—Where the disease was advancing, where it had ceased leaving a good joint, and where it had gone leaving a damaged joint behind. The last were the best for excision. When the disease was still active, on the common principles of Surgery the parts were unfavourable for interference. The bones were then congested, when cut through there was undue constitutional disturbance, they did not go on well, and finally there was further disease ending in recision. He had extreme distrust in the operation at the time it was performed by Mr. Hancock. Extension was then the great thing, and produced almost complete cessation of all active symptoms. They wanted the more remote results of excisions. Professor Humphry gave no measurements, and they wanted these not only as to the length of the limb but also as to the epiphysis cut through.

Mr. Callender explained that the figures he referred to were in the Society's *Transactions*. This included all cases of amputation on persons under 10. As to plans of excision these were merely suggestive. Neudorfer used two semi-lunar incisions, and had so performed the operation in Mexico. The crucial ligaments no doubt went.

Mr. T. Smith remarked that it was curious no single champion of amputation had come forward. Nowadays, indeed, excision was in danger rather from injudicious friends; all admit its advantages, but it was also tempting in tedious cases which might end well of their own accord. It was urged against it that it was never used among the upper classes; this is fallacious, as joints were rarely destroyed among them. Among the poor treatment was unsatisfactory. The joint was first neglected, and then patched up from time to time to enable them to pursue their calling; finally they became fit subjects for resection. At St. Bartholomew's the time referred to by Mr. Willett was when the operation was new and not run after. He confirmed Mr. Savory that, as a rule, the operation was not required in children for pain.

Mr. Weeden Cook said that as to the cases selected by Mr. Gant, his colleagues had looked upon the operation almost with jealousy; and he was bound to say that in every instance it was justifiable.

Mr. Gant, in reply, said that when in the course of joint disease there was a marked increase of pain, with starting at night, and laxity of the ligaments, it was better to perform excision. He thought that amputation and excision should not be compared. Excision was for early disease, amputation for late, when the system would not bear the demand implied by the long-continued healing process. The true comparison was with anchylosis. He adduced some important statistics in behalf of the operation. He said he never excised the knee under 10. His cases were called typical because they had been carefully selected, and all unsuitable ones rejected.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following Members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board on the 25th inst.:—

Clark, Audrew, L.S.A., Greenford, Middlesex, diploma of Membership dated November 17, 1869, of University College.
Goodsall, David Henry, St. Mark's Hospital, City-road, May 19, 1868, of St. Bartholomew's Hospital.
Preston, Theodore Julian, L.S.A., Belsize-road, January 26, 1870, of St. Mary's Hospital.
Timothy, Peter Vincent, L.S.A., Worship-street, E.C., July 13, 1855, of St. Thomas's Hospital.
Walker, Samuel, York, April 19, 1870, of Guy's Hospital.

Two candidates, having failed to acquit themselves to the satisfaction of the Board, were referred to their studies.

The following gentlemen passed their primary or anatomical and physiological examination for the Fellowship on the 24th and 25th inst.:—

Alcock, John, of King's College.
Allen, William Edward, of University College.
Barlow, Thomas, of University College.
Beavan, James, of the Dublin School.
Bindley, Philip Henry, of University College.
Bradley, Charles, of University College.
Buchanan, Arthur, of Guy's Hospital.
Clarke, Thomas Kilner, B.A. Cantab., of Guy's Hospital.
Cookson, Henry, of the Edinburgh School.
Cooper, Alfred, of St. Bartholomew's Hospital.
Coupland, Sydney, of University College.
Cross, F. C., of King's College.
Cuddeford, Thomas, of St. Bartholomew's Hospital.
Dalby, William Bartlett, of St. George's Hospital.
Davies-Colley, J. N. C., M.A. Cantab., of Guy's Hospital.
Deakin, Charles Washington Shirley, of University College.
Duke, Douglas William, of Guy's Hospital.
Eagles, Woodfield, of the Middlesex Hospital.
Edge, Stonard, of St. Bartholomew's Hospital.
Edwards, John Ellis, of Guy's Hospital.
Fitt, Samuel Weekes, of King's College.
French, John Gay, of the Dublin School.
Furnell, Michael Cudmore, of St. Bartholomew's Hospital.
Giffard, Douglas William, of St. Bartholomew's Hospital.
Hall, Geoffrey Craythorne, of Guy's Hospital.
Harding, Alfred William, of University College.
Hawkins, Thomas Henry, of King's College.
Keene, James, of St. George's Hospital.
Mackenzie, John Thomas, of Guy's Hospital.
Magrath, John, of University College.
Phillips, George Arthur, of St. Bartholomew's Hospital.
Pitts, Henry Yate, of the Liverpool School.
Rayne, Charles Alfred, of University College.
Read, Charles, of St. Bartholomew's Hospital.
Royston, Charles, of St. George's Hospital.
Russell, Ebenezer Geer, of Guy's Hospital.
Saunders, Arthur R., of University College.
Saunders, Henry William, of St. Thomas's Hospital.
Shaw, John Edward, of the Edinburgh School.
Southee, Henry Edward, of Guy's Hospital.
Stanger, William, of Guy's Hospital.
Treeves, William Knight, of St. Thomas's Hospital.
Verley, Reginald, of University College.
Warner, John, of St. Bartholomew's Hospital.
White, Barrington Syer, of King's College.
Woodman, John, of Guy's Hospital.
Wreach, Edward Mason, of St. Thomas's Hospital.
Wyman, William Sanderson, of St. Thomas's Hospital.
Yate, Edward, of St. Bartholomew's Hospital.

Ten candidates out of the fifty-eight examined failed to acquit themselves to the satisfaction of the Court, and were therefore referred to their anatomical and physiological studies for six months.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medi-

eine, and received Certificates to practise, on Thursday, May 19, 1870 :—

Eagle, Henry Fredk. Chas., Bethnal-green-road.
Latham, William Henry, Sandback, Cheshire.
Leigh, Richmond, Shaw-street, Liverpool.
Smith, William John, Park-gate, Rotherham.

As an Assistant in Compounding and Dispensing Medicines:—

Walker, John Sydenham, Beverley, Yorkshire.

The following gentleman also on the same day passed his First Professional Examination :—

Latimer, Henry Arthur, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Burdon, Henry Samuel, M.D. Univ. Glasg., L.R.C.P. Edin.—Physician to the Belfast General Hospital, *vice* John Swanwick Drennan, M.D. Univ. Dub., resigned.

Gosse, Mr. Chas.—Resident Medical Officer at the Charing-cross Hospital.

Huohlings-Jackson, John, M.D. Univ. St. And.—Physician to the Seamen's Hospital, Greenwich.

Law, Alfred R., M.B. and C.M. Edin.—House-Surgeon at the Greenock Infirmary, *vice* William M'Laurin, M.B. and C.M. Univ. Glasg., appointed temporary Assistant to the Resident Medical Officer of the London Fever Hospital.

Norton, George Everitt, M.R.C.S.E.—Surgeon to the Western General Dispensary, Marylebone-road, *vice* Henry Arnott, F.R.C.S.E., resigned.

Nunneley, Frederick Barham, M.D. Univ. Lond.—Physician in Ordinary to the Western General Dispensary, Marylebone-road, *vice* Duncan Menzies, M.R.C.P. Lond., resigned.

Rix, Mr. William K.—Resident Surgical Officer at the Charing-cross Hospital.

Robinson, Mr. John D.—Resident Obstetrical Officer at the Charing-cross Hospital.

BIRTHS.

Bantock.—On May 18, at 44, Cornwall-road, Westbourne-park, the wife of Dr. G. Granville Bantock, of a son.

Frodsham.—On May 18, at Upper Streatham, the wife of John Mill Frodsham, M.D., of a daughter.

Kidd.—On May 23, at 6, Newton-terrace, High-road, Lee, the wife of Leonard Kidd, M.B., Surgeon, Army Medical Staff, of a daughter.

Salomon.—On May 11, at Malmo, Sweden, the wife of Ernest Salomon, M.D., of a son.

MARRIAGES.

Bourne—Fitzgerald.—On May 18, at Christchurch, Rushbrook, county Cork, Walter Bourne, M.D., late of Calcutta, Honorary Physician to the Infirmary, Bradford, Yorkshire, to Geraldine Caroline, only surviving daughter of the late Sir John Judkin Fitzgerald, Bart. No cards.

Brenan—Rogers.—On May 24, at St. James's, Spanish-place, George Woulfe Brenan, C.E., only son of the late Edward Brenan, M.D., L.R.C.S.I., to Florence Juliette, youngest daughter of Captain Rogers, R.A., of Old Castle, County Sligo.

Dukes—Harford.—On May 17, at St. Andrew's Church, Watford, Clement Dukes, M.B., B.S., Grove-road, Kingston, eldest son of the Rev. Clement Dukes, of Dalston, to Alice Mary, third daughter of Mr. James Unwin Harford, of Watford.

Kemp—Greenwood.—On February 17, at Christ Church, Nelson, New Zealand, Wm. George Kemp, M.R.C.S.E., to Charlotte, daughter of J. D. Greenwood, Esq., of Woodland-house, Nelson.

Morris—Kellock.—On May 24, at St. Giles's, Camberwell, Gerald De Courcy Preston Morris, son of the late Harvey Morris, Surgeon, R.N., and grandson of the late Dr. Clutterbuck, to Elizabeth, only daughter of John Kellock, Staff Commander, R.N.

Pern—Warner.—On May 19, at the Parish Church, Botley, Hants, Alfred Pern, F.R.C.S. (exam.), L.R.C.P. Lond., of Botley, to Harriette, second daughter of William Warner, Esq., of Brook House, Botley.

Symons—Lee.—On May 21, at Hackney, James P. Symons, son of the late Mr. John Symons, Surgeon of Penryn, Cornwall, to Sarah Ann, daughter of the late Mr. John Lee, of De Beauvoir-town, London.

Taylor—Hastings.—On March 22, at St. Mary Magdalen's Church, Mcean Meer, Adam Taylor, Surgeon, H.M.'s Bengal Army, and Civil Surgeon of Umritzur, to Alice Johnstone, eldest daughter of T. Hastings, F.R.C.S., Deputy Inspector-General of Hospitals, Lahore Circle.

DEATHS.

Burrell, William, late Superintending Surgeon, E.I.C.S. Madras Presidency, at Egremont House, Redland, Bristol, on May 19.

Irving, William, F.R.C.S., late of Crown-square, Penrith, Cumberland, at Barrett's Hotel, Cecil-street, Strand, on May 21, aged 61.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Cornwall County Asylum, Bodmin.—Assistant Medical Officer. Applications and testimonials to the Medical Superintendent on or before May 28.

General Dispensary, Retford, Notts.—House-Surgeon and Apothecary; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before May 31. Election on June 7.

Infirmary for Consumption and Diseases of the Chest, 26, Margaret-street, Cavendish-square.—Visiting Physician; must be M.R.C.P.L. Applications and testimonials to the Secretary on or before June 9.

Liverpool Royal Infirmary.—Junior House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Chairman of the Committee, on or before May 28.

Liverpool Royal Infirmary School of Medicine.—Chair of Descriptive and Surgical Anatomy. Applications and testimonials to the Registrar, on or before May 28.

London Fever Hospital.—Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, N., on or before June 7. Election on June 10.

National Sanatorium, Bournemouth.—Junior Physician; must be F. or M.R.C.P. Lond., Edin., or Dub. Applications and testimonials to Mr. J. G. Horder on or before June 1. Election on June 8.

Nottingham Dispensary.—Assistant Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before June 13. Election the same day at 12 o'clock.

Ripon Dispensary.—House-Surgeon and Resident Dispenser. Applications and testimonials to the Hon. Secretary.

St. Marylebone Provident Dispensary.—Medical Officer in ordinary; must be qualified. Applications and testimonials to the Secretary, at the Dispensary, 16A, Duke-street, Portland-place, on or before the 28th inst. Further particulars may be obtained on application.

South Staffordshire General Hospital.—House-Surgeon; must be F. or M.R.C.S. London, Dublin, or Edinburgh, and L.R.C.P.L. or L.S.A. Applications and testimonials to the Secretary on or before the 28th inst. Election on June 14.

Stratford-on-Avon Union.—Medical Officer for the Union Workhouse. Candidates must be duly qualified. Applications and testimonials to R. H. Hobbes, Esq., Clerk, Stratford-on-Avon, on or before June 1. Election on the 3rd.

Sunderland Infirmary.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

Victoria Hospital for Sick Children.—Assistant-Physician; must have a Medical qualification, and not be engaged in the practice of Pharmacy. Applications and testimonials to the Secretary, at Gonghouse, Queen's-road, Chelsea, on or before May 31.

Victoria Hospital for Sick Children.—Assistant-Surgeon; must be F. or M.R.C.S.E. and be registered, and not practising Midwifery or Pharmacy. Applications and testimonials to the Secretary at Gough-house, Queen's-road, Chelsea, on or before May 31.

Weston-super-Mare Hospital and Dispensary.—House-Surgeon; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to the Secretary, on or before May 31.

West Riding Lunatic Asylum, Wakefield.—Clinical Clerk. Applications and testimonials to Dr. J. C. Browne on or before May 30.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Burton-upon-Trent Union.—Mr. Edward N. Martin has resigned the Lullington District; area, 2907; population, 625; salary £10 per annum.

Knighton Union.—Mr. J. A. T. Cartwright has resigned the Brampton Brian District; salary, £20 per annum.

Sevenoaks Union.—Dr. Charles Lovegrove has resigned the Second District; area, 5400; population, 4042; salary, £70 per annum.

APPOINTMENTS.

Brighton Parish.—John H. Ross, M.R.C.S. Eng., L.S.A., to the Northern District.

Islington Parish.—William H. W. Wilkinson, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., to the Fourth District.

St. Thomas Union.—George H. Whidborn, M.R.C.S. Eng., to the Tedburn St. Mary District.

Sunderland Union.—Jonathan Shaw, M.R.C.S. Eng., L.S.A., to the Ford and North Hylton District.

Totnes Union.—David Philipps, M.R.C.S. Eng., L.S.A., to the Staverton and Rattery District.

Walsall Union.—John Burton, jun., L.R.C.P. Edin., L.R.C.S. Edin., L.M., to the Borough District.

Wells Union.—Thomas M. Edwards, M.D. Univ. Lond., L.F.P. and S. Glas., to the Fourth District.

Dr. Daly, of Hull, has been made a magistrate for the East Riding of Yorkshire.

Medical Club.—We understand that, as the first Wednesday in June is the Derby-day, the next house dinner of this Club will be held on Wednesday, the 8th instant, and that the chair is to be taken by J. Brady, Esq., M.P.

The Epidemic of Small-pox in Paris.—So far from diminishing, as Dr. Vacher, from the experience of former epidemics, predicted it would do in May, this terrible epidemic is on the increase, *one hundred and ninety-five* deaths from this cause having been returned for the week ending May 21, the total mortality for that week being 1239.

Mr. George Garnham has been presented with a valuable silver salver, bearing the following inscription:—"Presented to George Garnham, Esq., M.R.C.S.L., L.S.A., by the members of the several sick clubs in Ripley and vicinity, as a small token of gratitude for his unbounded kindness and attention to them during the last twelve years.—May 1870."

ROYAL COLLEGE OF SURGEONS.—During the whole of the present week the Court of Examiners has been engaged in testing the knowledge of candidates for the Fellowship of the College. On Friday last 59 candidates underwent the written portion of their Anatomical and Physiological Examination in the theatre of the College—a much larger number than has been known since the establishment of the Fellowship. Of these, 28 were members of the College, holding the following Medical degrees and licences, and therefore not required to go through an examination in this department, viz.:—"M.D. St. Andrews and L.S.A.," 3; "L.R.C.P. Lond.," 1; "L.R.C.P. Ireland," 1; "L.R.C.P. Edinburgh," 1; "L.S.A.," 11; and "M.B. Trinity College, Toronto," 1. There were 19 candidates who had passed their "primary" examination for the diploma of Membership, and 12 who had not passed any examination. The following paper was submitted on the first day:—1. Describe the entire lacrymal apparatus; its use, and the manner in which its functions are performed. 2. Describe the intrinsic muscles of the larynx, the position, relations, and functions of each, and their nerve-supply. Describe particularly the distribution of the motor and sensitive filaments of the superior laryngeal nerve, and the probable origin of each set of filaments. 3. State the chemical composition of bone, and the relative proportion of organic and inorganic matter. Describe the arrangement of the osseous tissue in a long bone (say the tibia). State the sources whence the tibia is supplied with blood, and describe how the arteries permeate its structure. 4. What is the condition of the humerus at birth? Describe its mode of growth in length and thickness, the order in which the epiphyses ossify, and the age at which each epiphysis is united to the shaft. 5. Describe the secretory structure of the liver, and give the arrangement and mode of distribution of the different kinds of vessels when they reach or leave the lobules. 6. Describe the method of making a side view of the contents of the male pelvis, and give a general description of the parts thereby exposed. On Tuesday, 32 of the candidates underwent an oral examination on the beautifully dissected preparations, of a quarter of an hour each, at two tables. On this occasion 4 were rejected. On Wednesday the remaining 27 underwent a similar examination, when 6 were rejected, making a total of 10 who had failed to acquit themselves to the satisfaction of the Court of Examiners, and who cannot offer themselves for re-examination until the expiration of six months. On Thursday, the 26th inst., 21 candidates presented themselves for the written portion of the final examination in Surgery, when the following paper was submitted to them:—1. Describe the process of reparation which nature adopts to unite fractured bone, divided tendon, muscle, nerve, skin, mucous and serous membrane. 2. Describe the different forms of gangrene which may be produced; 1st, by disease of arteries; 2ndly, by lesions of arteries; 3rdly, by acute inflammation. State the treatment to be employed in each case, and your reason for its adoption. 3. Describe the treatment which your observation and experience would lead you to adopt for the relief and cure of permanent stricture of the urethra. 4. Mention the different forms of disease (including malignant affection) to which the knee-joint is liable, and which may possibly render amputation or excision necessary. Describe the pathological conditions and the symptoms, local and constitutional, which would induce you to save a diseased knee with the view of obtaining anchylosis. 5. State the symptoms of congenital syphilis; and mention the internal lesions which frequently exist. Describe the treatment to be adopted. Prescriptions to be written in full. 6. Describe the local symptoms which precede and accompany the formation of phlegmonous suppuration; and state the chemical, physical, and microscopic characters of pus. On Friday the candidates underwent their clinical examinations at some of the metropolitan Hospitals, and to-day, Saturday, the oral examination with operations on the dead body will be gone through and the examinations concluded. The result cannot be known until the report from the Court of Examiners shall have been made to the Council.

THE following anecdote is going the rounds of the Paris newspapers, respecting the late Dr. Cabarrus:—"He was called to see a well-known actress, and after duly feeling her pulse, and looking at her tongue, pronounced that there was only one thing to cure her. 'And pray what is that, dear Doctor?' inquired the fair patient. 'Marriage,' replied he. 'You are single, are you not, my dear Doctor?' 'Yes, madam, but Doctors only prescribe remedies—they do not take them,' was the witty homœopath's rejoinder." This is somewhat different from the story of a member of the Profession in London, who, whilst attending a celebrated actress, made her an offer and was married to her. "Doctor, I'm very ill," said she. "What shall I take?" "Why, ma'am, take me!"

THE Kells Board of Guardians have granted Dr. Pentland £66 13s. 4d. per annum, the highest superannuation allowance to which he is entitled for length of service and satisfactory conduct.

EARTH-CLOSETS. — Mr. Norton Manning, the superintendent of the Hospital for the Insane, Gladesville, Victoria, in a very elaborate annual report to the Colonial Secretary, says:—"The establishment of earth-closets instead of the filthy privies which before existed has been the greatest possible improvement; but I cannot report them as altogether a success, since at times, owing to their constant use, to the difficulty of obtaining a full supply of sufficiently dry earth, and to the fact that the earth is applied by hand instead of by mechanical arrangement, they are somewhat offensive. Earth-closets with mechanical arrangements for applying the earth, had, before the recent alterations, been tried in one of the closets used by the patients, and in those used by the officers of the institution, and had signally failed. In fitting the new closets in the wards, as no new mechanical appliance could be procured without considerable trouble and delay, it was deemed advisable to apply the earth by hand at the back of the closets, wherever such an arrangement was practicable, and from the front where the arrangement of the buildings did not allow of any other approach. Experience has proved what I fully anticipated — that such an arrangement is only a partial success — that with a paid servant to apply the earth, and every possible care to ensure frequent application, the closets are often by no means free from smell, because every excretion is not immediately covered. The deodorising power of dry earth, which has been the subject of such extravagant laudation, is well known to all who have had practical experience on the subject to have been grossly exaggerated, if it is not absolutely non-existent. Its mechanical action in preventing offensive exhalations has been well known since the days of Moses, whose direction to the Israelites for every man to go abroad without the camp, to dig with a paddle and turn back and cover that which came from him is, after some centuries of neglect, with curiously little modification, one of the most approved sanitary regulations of our day. To ensure the full action of dry earth in preventing offensive exhalation, it is absolutely necessary that every excretion should be immediately covered, and this is only possible either by each individual applying it by means of a scoop on rising from the seat, or by the use of some mechanical contrivance. In all large public institutions (with the single exception of those for the insane), in schools, barracks, and in private houses, the use of mechanical contrivances may be dispensed with; they are unnecessary to any one in possession of his intellect and a scoop; but with all except a very small number of the insane, some simple yet strong piece of mechanism, working with the seat, and throwing a shower of earth after every use of the closet, is absolutely essential. No regulation, no drill, no watchfulness, will serve in an institution for the insane without some mechanical means; and without this, almost absolute freedom from smell—the success which attends the dry-earth system only under the best arrangements and the most favourable conditions—cannot be attained.

CONGENITAL SMALL-POX.—At one of his recent clinical lectures, M. Depaul gave an account of an interesting case of congenital variola. A woman, 20 years of age, came into the Clinical Hospital, and was confined of twins, being five and a half months gone in pregnancy. One of these twins exhibited numerous, but not confluent, small-pox pustules of undoubted character, while its fellow-twin and its mother had none whatever. Neither the fœtus nor the placenta showed any other lesions which could explain the miscarriage, which can only be attributed to the small-pox in the one fœtus. It could not be made out distinctly whether the mother had been in communication with persons having small-pox; but, as the disease prevailed epidemically, this might easily be the case. She certainly had not the disease herself, and on her arms were good vaccine cicatrices.—*Gazette des Hôp.*, April 14.

ENCEPHALOID IN A YOUNG SUBJECT FOLLOWED BY TETANUS. — M. Humblé read, at the Brussels Pathological Society, an interesting case met with in M. de Roubaix' wards at St. Pierre. A young man, 24 years of age, entered the Hospital with a tumour of the left upper arm, which, in the short period of six weeks, had attained such an enormous size that it measured thirty-five centimetres in circumference opposite the shoulder-joint, and in a day or two afterwards had increased by two centimetres. Some doubt existing as to whether it was an encephaloid or aneurismal tumour, a large exploratory

incision was made, when its malignant character became obvious. The case was considered as unfit for operation, and was treated only by palliatives. Abundant suppuration was set up, and a week after his admission the patient was seized with symptoms of tetanus, which, becoming continuously aggravated, terminated fatally in twenty-four hours.—*Presse Belge*, April 17.

TETANUS TREATED IN A CHLOROFORM ATMOSPHERE.—M. Simonin, of Nantes, related a case at the Academy of Medicine in which he had cured a patient of tetanus by keeping him in an atmosphere loaded with vapours of chloroform. Symptoms of tetanus came on in a man, 57 years of age, who thirteen days before had bruised his hand. The symptoms kept increasing, the pulse being at 121, and the respiration at 40, and death by the ninth day seemed imminent. The patient was now placed in a closet which would contain forty cubic metres of air, and a napkin covering the upper portion of his chest was kept almost incessantly moistened with chloroform for twenty-two consecutive days. The quantity used daily varied from 400 to 1400 grammes, 20 kilogrames having in all been employed. Amendment manifested itself on the twenty-fourth day, but the cure was not complete until the forty-ninth, and, owing to the tediousness of the wound in healing, the patient was not discharged until the seventy-third day. In two other cases the same treatment failed. M. Larrey observed that this was probably one of those primarily chronic cases which are curable by the most varied and opposite modes of treatment.—*Gaz. Hebd.*, April 29.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Bence Jones is thanked.

J. A. S.—The proof was not sent owing to a mistake on the part of the printer.

J. B. G.—The Medical Bill has not yet passed the House of Lords. You had better proceed as if there were no Bill before Parliament.

THE CORRELATIONS OF DISEASE.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The topic mooted by Dr. Winn on the "Correlations of Disease" is one of deep interest, as I think it is the truest basis of nosology. I have worked at it for years. The late Dr. C. H. Parry, of Bath, Trousseau, and Trelât, of Salpetrière, have furnished very valuable materials.

I am, &c. JOHN MANN.

3, Warlters-ville-road, Hornsey-rise, N., May 21.

Chester.—Canon Kingsley's admirable lecture on the "Study of Physical Science" appeared *in extenso* in the *Chester Courant* of Wednesday last.

Pater.—Yes; in "the manner of an apprentice."

Studens should mention the circumstance to the lecturer.

N.—Yes; in October, 1823.

ANCIENT SIAMESE TWINS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—In reference to a lecture by Professor Virchow on the Siamese twins mentioned in the last number of the *Medical Times and Gazette*, I observe in an old volume of the *British Apollo*, published in 1726, that such freaks of nature were at that period the subjects of comment and inquiry; hence the following questions and answer, the *British Apollo* consisting of queries and replies:—

Question: "Gentlemen,—You would much oblige the publick, in giving some rational account, how the twins to be seen at Charing-cross could happen to be joined together in so wonderful a manner."

Answer: "To form in your minds some idea how this unhappy conjunction might be occasioned, we must consider the bodies of embrios may be compared to a soft wax, being very apt to receive and keep any strong impression made on the mother's body, so that, supposing the mother, when big with these unfortunate twins, either only saw two people strike one another buttock against buttock, or else received herself such a hard stroke, it occasioned in the same parts of the twin embrios, then in her womb, the same violent motion, by which, being soft and tender, they were closely joined and confounded together. Though this may appear a very unaccountable suggestion to some, yet the following account (we doubt not) will render it very rational—viz., Schenkius, in his Observations, relates out of Munster's Cosmography that in the year 1495, in a village called Burstadt, near Worms, as two women were talking together, one of which was with child, a third, coming unexpectedly, knocked their foreheads together, which so surprised and frightened the big woman that she was, in due time, delivered of two female children as inseparably joined together in the top of their foreheads. Having lived so ten years, one died, and was cut off from the other, which also died soon after. The same author and Pareus, in his chyrurgical works, relate many instances of monstrous coalitions, more strange and unaccountable than this which is now the subject of our wonder and admiration, though we confess this very well deserves it too."

Question: "Gentlemen,—Pray can you give us some account relating to the two monstrous children lately brought into England, as to their birth, how they could be brought forth, and whether the mother survived their birth?"

Answer: "The best account we could gain was that one was born three hours before the other, the last coming into the world with her body doubled, and, to be sure, not without extraordinary hard labour to the mother, who notwithstanding is reported to be still alive, and to have had another child since."

The transcriber of these questions and replies does not recollect whether the late Sir J. Y. Simpson, in his able paper "On the Siamese Twins," published in the *Medical Times* of February, 1848, was aware that London had been visited by the monstrosity above alluded to, where the children were united by their nates, and as Professor Virchow's paper has not been inspected, he is not cognisant, whether this may have made mention of the case. Therefore, as the writer has taken much interest in the Siamese twins, and two years ago proposed a means for their gradual disunion by the instrumentality of two converging metallic discs, moved by a male and female screw; he thought that the above quaint and to modern notions ridiculous account of a resembling phenomenon, might interest your readers if inserted at the end of a number amongst the "Notes and Queries."

T. S.

Liber.—The last edition is out of print.

A. B. C.—The subjects of the preliminary examination will be found in the Students' Number of the *Medical Times and Gazette*.

Reader—The house in which Dr. Denman lived is in Denman- (late Queen-) street, Windmill-street, Haymarket. Smellie practised as an "apothecary" in Pall-mall. William Hunter's house, in Great Windmill-street, is now a French hotel; the Little Windmill-street School a carman's; Brooke's School, in Blenheim-street, a lead warehouse.

Wolverhampton.—We really cannot see that the memoir of Sir James Simpson in the *Wolverhampton Chronicle* is open to the objections of our correspondent. It is pardonable in a biographer, particularly when he had been a pupil of the deceased, to express his gratitude for benefits received at the hands of his former teacher and guide.

M.D.—Dr. Greenhow's researches on miner's lung, etc. (beautifully illustrated), are partly contained in the last volume of the Pathological Society's *Transactions*. The disease as connected with the pottery trade was discussed in a capital paper published in the *British and Foreign Medico-Chirurgical Review* some years ago. See also Dr. Parsons, "On a Form of Bronchitis peculiar to certain Branches of the Pottery Trade;" Edinburgh; 1864.

THE TOAD AND THE CARP.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—The following passage from Izaak Walton's "Complete Angler" no doubt refers to the so-called "animosity" of the toad to the carp, which has lately been brought to the notice of the Académie des Sciences by M. Duchemin, although old Izaak's informant has evidently confounded the frog with the toad:—

"Now as the increase of carps is wonderful for their number, so there is not a reason found out, I think, by any, why they should breed in some ponds and not in others, of the same nature for soil and all other circumstances; and as their breeding, so also are their decays very mysterious. I have both read it, and been told by a gentleman of tried honesty, that he has known sixty or more large carps put into several ponds near a house, where, by reason of the stakes in the ponds and the owner's constant being near to them, it was impossible they should be stole away from him; and that when he has, after three or four years, emptied the pond and expected an increase from them by breeding young ones (for that they might do so he had, as the rule is, put in three melters for one spawner), he has, I say, after three or four years, found neither a young nor old carp remaining. And the like I have known of one who had almost watched the pond, and, at a like distance of time, at the fishing of a pond, found, of seventy or eighty large carps, not above five or six; and that he had forborne longer to fish the said pond, but that he saw, in a hot day in summer, a large carp swim near the top of the water with a frog upon his head, and that he upon that occasion caused his pond to be let dry; and I say, of seventy or eighty carps, only found five or six in the said pond, and those very sick and lean, and with every one a frog sticking so fast on the head of the said carps that the frog would not be got off without extreme force or killing. And the gentleman that did affirm this to me told me he saw it, and did declare his belief to be, and I also believe the same, that he thought the other carps, that were so strangely lost, were so killed by the frogs and then devoured."

Taking this in connexion with the facts adduced by M. Duchemin, there can be little doubt that the carp is occasionally destroyed by the toad, but it is difficult to conceive that this results from any peculiar "animosity." Did such an "animosity" exist as an instinct in the toad, it would no doubt be constantly exhibited and the fact would be a familiar one; but although it was known two hundred years ago to Izaak Walton, it is brought forward as an entirely new observation in 1870, which would hardly be the case if a constant instinctive enmity existed. We may therefore fairly doubt the theory of a natural animosity and look for a different explanation of the fact. I beg to suggest the following:—The male toad is well-known to undergo a remarkable change in the breeding season; the first toe of his forefoot acquires a peculiar thumb-like development which gives him so great a grasping power that (as I have myself observed) it is extremely difficult to release the female from his grasp, and he will suffer very great injury rather than relinquish his hold. May it not therefore be that his attack upon the carp is only a blind and perverted στοργή? There might be an excess of male toads over females, and the un-mated males might thus obey the copulative instinct. The reason why the carp should be the object of attack is readily found in his habit of sluggish basking near the surface of the water, and the edges of his orbits would afford so good a hold to the toad's thumbs as quite to account for the difficulty of displacing his assailant. It is stated that although so tenacious while the carp lives, he leaves it when it has died; this again tallies perfectly with the natural instinct of the reptile. I have observed that female toads die in numbers after spawning, but I have never seen a male holding on to a dead female, though he cannot be easily separated from her while she lives. In cases where toads are found thus attacking carp it would be well therefore to ascertain whether the assailants are all males; should they be proved to be so, it would greatly corroborate the idea of the attack being a

perversion of the natural στοργή, and the case would be further strengthened if there were found to be coincidently a dearth of female toads.

Romford, May 23. I am, &c. NORRIS F. DAVEY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I observe in the *Medical Times and Gazette* of this week, a paragraph relating to M. Duchenin's observations as to the destruction of carp by a species of toad. That gentleman is incorrect in supposing that this animosity of the toad to the carp had not been noticed by any prior observer. In Isaac Walton's Complete Angler, is related (Rennie's edition, 145) a story of a gentleman who saw in a hot day in summer, a large carp swim near the top of the water with a frog on his head; and that he upon that occasion caused his pond to be let dry, and of seventy or eighty carps, only found five or six in the said pond, and those very sick and lean, and with every one a frog sticking so fast on the head of the said carp, that the frog would not be got off without extreme force or killing. Again in the previous chapter about the pike, the author quotes a story from Bishop Dubravius's book Of Fish and Fish-ponds. The bishop appears to have been Bishop of Olmutz, in Moravia, in the sixteenth century, and the book was translated into English in 1599 by George Churchey, of Lion's Inn. He describes how a frog blinded a pike by eating out his eyes, in language so quaint as to be worth citing were it not for its length. In every respect these accounts coincide with the statement of M. Duchemin, both as to the part injured, the unwillingness of the frog or toad to quit his hold till the fish be dead, and how immediately upon death he voluntarily looses his hold. I had always put this down as on a par with old Isaac's nonsense about various other natural subjects. I am, &c. PISCATOR.

3, Paper-buildings, Temple, May 21.

COMMUNICATIONS have been received from—

Mr. C. F. OLDHAM; Mr. N. F. HORNE; Dr. G. G. BANTOCK; ALPHA; Dr. BAKEWELL; PISCATOR; M.D.; Mr. JOHN MANN; Mr. B. W. GIBSONE; Dr. ALDIS; Dr. J. W. M'DOWALL; P.; Captain BURGESS; Dr. BENCE JONES; Dr. SYMONDS; Dr. DALY; Mr. H. KINGSLEY; CIVILIAN; J. B. G.; Mr. A. M. MACDOUGAL; Mr. N. F. DAVEY; Dr. J. W. MOORE; Dr. W. LITTLE; Dr. BEIGEL; Mr. H. ARNOTT; Mr. JABEZ HOGG; Dr. B. W. RICHARDSON; Mr. J. CHATTO; J. S.; Dr. GRAVIS; Mr. R. FREEMAN; Dr. M'CLINTOCK; Mr. E. BRADFORD; Dr. COQUILL.

BOOKS RECEIVED—

Public School Reforms, by M. A. B.—Trousseau's Clinical Medicine, vol. iii.—Traité de Médecine opératoire, Bandages et Appareils, par Drs. Sédillot et Legouest—Report of the Royal Edinburgh Asylum for the Insane—Dupré on the Characteristics of the Principal Wines we Drink—Nashville Journal of Medicine and Surgery, April—Thirty-first Annual Report of the Registrar-General of Births, Deaths, and Marriages in England (Abstracts of 1868)—Bateman on Aphasia—Schmidt's Microscopical Anatomy of the Human Liver.

NEWSPAPERS RECEIVED—

Wolverhampton Chronicle—The Perthshire Journal—Nature—Sydney Morning Herald—Chester Courant—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

May 28. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

ROYAL INSTITUTION, 3 p.m. Prof. Grant, "Comets."

30. *Monday*.

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

31. *Tuesday*.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Seeley, "Present English History."

June 1. *Wednesday*.

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

OBSTETRICAL SOCIETY. 7 p.m.: Council Meeting. 8 p.m.: Dr. Wynn Williams, "Cases of Cancer of the Womb successfully treated by Bromine." Dr. Routh, "Case of Bilocular Uterus." Dr. Rogers, "Case of Uterus and Vagina divided by a Septum." And other Papers by Dr. Hornblow and Dr. Sahoia.

2. *Thursday*.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 n.m.

LONDON INSTITUTION, 7½ p.m. Dr. Cobbold, "Geology" (Swiney Course).

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "Electricity."

3. *Friday*.

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Max Müller, "Migration of Fables."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON, 8 p.m. Annual Meeting. The Reports of Council and Treasurer will be read. The Election of Officers for the ensuing Session will take place. For the Narration of Cases.

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 21, 1870.

BIRTHS.

Births of Boys, 1217; Girls, 1060; Total, 2277.
Average of 10 corresponding weeks, 1860-69, 1970·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	697	616	1313
Average of the ten years 1860-69	660·7	590·1	1250·8
Average corrected to increased population	...	...	1376
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	5	24	1	1	1	1	3	2
North ...	618210	13	15	25	1	5	2	4	3	1
Central ...	383321	...	7	6	...	3	...	2	...	3
East	571158	3	4	3	1	9	4	1	2	7
South	773175	2	5	23	2	17	...	6	4	4
Total	2803989	19	36	81	5	35	7	14	12	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·953 in.
Mean temperature	59·8
Highest point of thermometer	85·4
Lowest point of thermometer	42·1
Mean dew-point temperature	49·5
General direction of wind	S.W.&W.S.W.
Whole amount of rain in the week	0·04

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 21, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending May 21.	Deaths Registered during the week ending May 21.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2277	1313	85·4	42·1	59·8	15·44	0·04	0·10
Portsmouth ...	122084	12·8	69	34	77·7	41·9	55·0	12·78	0·18	0·45
Norwich	81087	1·09	64	38	80·0	41·7	58·6	14·78	0·05	0·13
Bristol	171382	36·6	140	82	70·4	42·8	54·2	12·33	0·01	0·03
Wolverhampton ...	72990	21·5	67	34	78·1	42·2	56·2	13·44	0·01	0·03
Birmingham ...	369604	47·2	284	123	77·2	43·1	56·7	13·72	0·10	0·25
Leicester	97427	30·4	71	38	81·2	39·5	57·7	14·28	0·02	0·05
Nottingham ...	88888	44·5	50	36	72·6	39·9	56·2	13·44	0·04	0·10
Liverpool	517567	101·3	411	248	75·4	46·7	56·8	13·78	0·08	0·20
Manchester ...	374993	83·6	299	178	80·3	41·0	57·8	14·33	0·03	0·08
Salford	121580	23·5	102	61	78·4	40·8	56·3	13·50	0·07	0·18
Bradford	143197	21·7	138	81	72·4	44·9	57·8	14·33	0·00	0·00
Leeds	259527	12·0	237	120	75·0	44·0	58·3	14·61	0·04	0·10
Sheffield	247378	10·8	175	112	78·0	42·5	57·8	14·33	0·03	0·08
Hull	130869	36·7	89	57	78·0	37·0	57·3	14·05	0·00	0·00
Sunderland ...	94257	30·5	83	30	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	107	53	64·0	45·0	52·6	11·44	0·11	0·28
Edinburgh	178970	40·4	131	75	65·7	45·0	55·5	13·05	0·20	0·51
Glasgow	468189	92·5	390	224	61·5	45·5	52·0	11·11	1·05	2·67
Dublin (City, etc.*)	321540	33·0	163	129	74·4	40·0	56·6	13·66	0·38	0·96
Total of 20 Towns in United Kingd'm	7209603	33·8	5347	3066	85·4	37·0	56·5	13·61	0·13	0·33
Paris—Week ending May 21	1889842	242	...	1239	...	...	...	...	...	...
Vienna—Week ending May 14 ...	605200	167	...	477	...	...	62·2	16·75	...	...
Berlin—Week ending May 19 ...	702437	128	563	436	...	...	61·9	16·62	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·953 in. The highest barometrical reading was 30·13 in. on Wednesday, and the lowest was 29·69 in. on Monday.

The general direction of the wind was S.W. and W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

SIX LECTURES
ON
PRACTICAL HELMINTHOLOGY,
ILLUSTRATING
THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTERNAL PARASITIC DISEASES.

DELIVERED AT THE
Medical College of the Middlesex Hospital

By T. SPENCER COBBOLD, M.D., F.R.S., F.L.S.,
Lecturer at the College.

LECTURE VI.

GENTLEMEN,—Before concluding this section of my subject I have still a few more cases to bring under your notice, several of them being of remarkable interest.

Case 20.—B. D., a gentleman from the neighbourhood of Manchester, consulted me in the month of December, 1865. For a period of eighteen months he had been more or less troubled with fainting fits, accompanied by much general depression. The frequent passage of "joints" occasioned him great annoyance and disgust. He has been treated for tapeworm hitherto without success. After some slight preliminary treatment, I ordered him a male-fern mixture followed by a cathartic. One dose sufficed in this case to bring away a perfect *Tænia mediocanellata* with the head and neck attached.

In reference to this case I may remark that we have here an instance where the powdered male-fern had been employed ineffectually whilst the extract succeeded. In my small treatise on "Tapeworms and Threadworms" I have figured at page 33 the head of the tapeworm removed from this patient. It not only showed the so-called fifth sucker very distinctly, but also, as you see by these more highly magnified drawings, the vessels of the water-vascular system.

Case 21.—C. F., a lady residing at the east end of London, consulted me respecting a tapeworm which had annoyed her for more than a twelvemonth, and for which she had undergone some useless treatment. The only symptoms at the time (December 1866) were occasional nausea, lassitude, and loss of appetite. In this case also, with some preliminary steps, I advised and prescribed the male fern method. Here again a single exhibition of the drug brought away a very fine and broad specimen of the *Tænia mediocanellata*, the head of the parasite being dislodged at the same time, though separately.

Case 22.—S. S., a lady from Rochester, sought my advice and placed herself under my care in June, 1867. Her case was one of the severe kind, for throughout a period little short of a year she had been repeatedly subject to attacks of partial hemiplegia, accompanied by involuntary contractions of the muscles of the left cheek. She was also subject to spectral illusions, all the symptoms being attributed to the presence of a tapeworm. Here, again, perfect success followed the employment of the male fern remedy, which brought away a *Tænia mediocanellata* fourteen feet in length; the head, which was unusually well supplied with black pigment granules, being detached separately. Before this patient left London all the nervous symptoms had entirely disappeared.

Case 23.—H. H. J., a gentleman residing in the neighbourhood of Newcastle, had been treated for tapeworm homœopathically, without success. The parasite had, I understood, been contracted several years previously, during which period he had simply experienced a very gradual though sensible loss of health. In the treatment of this case I had another very obstinate parasite to deal with, repeated and powerful doses of male fern bringing away separately large portions of the worm, in all amounting to about twelve feet. With the fifth or final dose I succeeded not only in dislodging the isolated head, but in detecting its presence in the evacuations after a prolonged search.

In reference to this case which I think can only be characterised as a truly remarkable success, permit me to say that no person unfamiliar with the appearances presented by the so-called heads of tænia could possibly have discovered the head. Altogether I must have spent five or six hours in conducting the necessary examinations for the purpose, and was ultimately rewarded by securing this extremely minute body under circumstances of the utmost difficulty. To arrive at this result it was necessary to examine several quarts of fæcal matter ounce by ounce, the object sought being itself smaller than the head of a pin, and readily mistakeable for other foreign bodies liable to occur in the discoloured mucus and fæces. In this case, however, I was encouraged to persevere by the recollection of a previous experience, under even much greater difficulties, which occurred to me during my investigations of entozoa in the bodies of animals dying at the Zoological Society's menagerie, Regent's Park. This instance is, I think, worth recording separately. On January 16, 1858, I observed some partially disintegrated proglottides in the lower part of the intestine of a horned pheasant. These were the remains of a small tapeworm, evidently a solitary specimen (*Tænia infundibiliformis*). Being anxious to secure the head, which was far too small to be rendered visible to the naked eye, I subjected the entire contents of the alimentary canal to microscopic examination, drop by drop, and at length, after a tedious investigation, discovered the isolated head, measuring considerably less than the one-hundredth of an inch in diameter. Such an unexpected success as this has naturally given me great confidence in my searches after the heads of human tænia passed during the employment of remedies; and I may even venture to affirm that if, in all the cases of the beef-tapeworm coming under my care, I could have obtained the same facilities for examination that I secured in the last mentioned case of human tapeworm, I almost doubt if the "head" would in any instance have escaped my detection. As it is, I have no reason to believe that any case coming fully under my care in private practice has been treated unsuccessfully. Cases indeed, not here recorded, have come before me where I have had no opportunity of giving more than a word of preliminary advice; whilst in others, proper advice having been given, I have had no opportunity of ascertaining results. Instances of the former kind are particularly tantalising, especially when you have reason to believe that you would have to deal with a comparatively rare form of parasite. For example:—

Case 24.—P. H., a lady residing in the western suburbs of London, comes to consult me respecting a tapeworm, which she appears to have contracted some years since whilst resident in Germany. When I saw her (November, 1867) she was not passing tapeworm segments, or joints of the ordinary kind; but, occasionally, an entire foot or more of the body (strobile) came away with the ordinary movement of the bowels. I at once diagnosed the presence of a broad tapeworm, my suspicions being confirmed by the notions of the patient herself, who, on being shown a figure of *Bothriocephalus latus*, at once declared that the portion referred to exactly corresponded with the drawing I exhibited. Here, as my opinion only was sought, I had no opportunity of trying the effects, either of male fern or any other remedy.

The above happens to be the only case where this particular aberrant tapeworm species has come before me in actual practice; nevertheless, I need hardly say that I have examined and dissected many specimens of the worm procured from other sources. One of the examples thus obtained had been expelled from an Irish girl by a dose of male fern; and I entertain very little doubt, from the observations of Leuckart, Weinland, Küchenmeister, and others, that the ordinary treatment pursued in cases of tænia, will equally well suffice for those of Bothriocephalus. A case recently presented itself at St. Bartholomew's Hospital, and was successfully treated, as I understood, by the male fern method. To quote one excellent continental authority, I may refer you to Dr. Weinland, who has remarked in his "Essay on the Tapeworms of Man" that the remedies against this worm are the same as those employed in cases of *Tænia solium*; and, he might have added, as well as against all other forms of cestodes, liable to infest the human body *in their adult state*.

You will not have forgotten, perhaps, that when in a previous discourse, I was enumerating the various tapeworm remedies, I alluded to Dr. John Barclay's recorded experiences with betel-nut. Unquestionably it is possessed of true vermifuge properties, especially if administered in the form of powder. Why it is not admitted into the British Pharmacopœia I am at a loss to understand; unless it be that its efficiency is recognised as inferior to that of the many excellent remedies already in vogue. There may be some prejudice against the employment of a drug so frequently given by veterinarians to dogs; and it is not a little remarkable that comparatively small doses suffice to expel these parasites from the canine "bearers." Here is a case in which I recently used the powdered areca nut in combination with small doses of scammony. I should tell you that the male-fern extract had been unsuccessfully employed in this case, previously, but not by myself.

Case 25.—A. H., a young lady from Buckinghamshire, æt. 13, first sought my advice in the autumn of last year (Oct. 21, 1869). It appears that scarcely four months had elapsed since the presence of tapeworm had been placed beyond a doubt. For the cure of the disorder she had taken three separate doses of male fern, about a month previous to the time at which I first saw her. Unfortunately, the "oil" had been administered in unusually small doses, and consequently there was less chance of procuring an entirely satisfactory result. However, the patient's friends brought me no less than nine separate fragments of *Tænia mediocanellata;* and these collectively measured rather more than the same number of feet in length. Finding her general health to have suffered considerably, I ordered a tonic and alteratives, at the same time forbidding the re-employment of vermifuges for the present. At the expiration of three weeks there was a very decided improvement; but towards the close of the year her health began to fail again, and tape-worm segments reappeared in the stools. Coming to town to be finally placed under my care early in the present year, I found her in a weakly state, but not too low to undergo treatment. After a brief interval, I ordered three drachms of the powdered areca nut, which, though combined with a few grains of scammony, required to be followed by the exhibition of a brisk saline cathartic. These active agents eventually dislodged four feet of a remarkably broad tapeworm; but I was dissatisfied with the exceedingly tedious manner in which this still living moiety of the parasite had come away. Repeating the areca-nut without further effect, I returned to my favourite remedy, and, with an efficiently prescribed dose of male fern, followed by a powerful purgative, dislodged the remainder of the parasite quite dead. Here you see the superiority of a true worm-poison over a drug which is probably only obnoxious to the animal. Not only was the helminth dislodged with the head intact, but it was effectually killed, and in this instance the final moiety came away without the patient's being aware of the fact of its escape. The case is of further practical interest as showing the impropriety of timidly giving only ten minim doses, when larger quantities of the extract can be borne with impunity. It confirms the statements I have repeatedly made to you respecting the time to be allowed for the full development of the parasite; it also shows the expediency of employing the right remedy at the right time, and it demonstrates the advantage you may possess in knowing precisely the diagnostic characters of the parasite you have to deal with. A haphazard method of treatment may occasionally succeed; but the more you know of the surroundings of any form of helminthiasis, the more will you deserve the confidence reposed in you.

In concluding this brief course, gentlemen, let me say that I had originally intended to have laid before you some account of my experiences with that troublesome class of parasites commonly called ascarides; but the extent of the subject, especially when taken in connexion with the treatment of allied internal parasitic disorders, is such as to have induced me to defer my observations on this head to a "more convenient season." What I have already said will, I trust, be of service to you.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,

Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 435.)

Indirect relief by effecting the expansion of the pupil naturally and artificially. Assistance to sight can be obtained in central partial cataract, whether cortical or nuclear, by expansion of the pupil. This acts in two ways. There is exposed the transparent part of the lens at the circumference, the less dense portion of the cataract, by which more light enters the eye, and the retinal image is brightened.

For the natural expansion of the pupil, different kinds of eye-shades may be used, and, out of doors, broad-brimmed hats. When it is desired to produce the greatest effect, dark glasses in goggles must be employed, by which bright light and diffused is reduced.

Shading the eye has the additional advantages of lessening the illumination of the spectrum from the opaque portion of the lens.

For the artificial expansion of the pupil, atropine must be used, or an artificial pupil made.

The advantages of dilating by atropine are very great, being, when most marked, as from blindness to sight; but it is impossible to tell till the trial is made, how far the measure may serve, in consequence of the arrangement of the cataract, and its extent. Sometimes the dilatation confuses. The benefits are greatest in partial central opacity of the lens. In order to prevent the adjustment of the eye from being much interfered with from paralysing the ciliary muscle with the belladonna, this drug should be used in the highest admissible degree of dilution, and therefore of not greater strength than would be sufficient to dilate the pupil, just enough, and no more. As different persons are dissimilarly affected by belladonna, the desired strength can be got only by trial. A single grain of the sulphate of atropia in ten or twelve ounces of water may suffice. Dr. Garrod has tried several experiments on man with the atropine. He tells me, that in one instance, one-third millionth of a grain caused sensible dilatation. In several instances, half a millionth of a grain produced an effect; one hundred thousandth of a grain often causes free dilatation.

With the same view of not influencing adjustment more than is necessary, the atropine solution should not be applied unnecessarily often, and as some individuals are more or less tolerant to it, this also must be made a matter of experiment. Most persons are sufficiently affected by an application of a single drop of the solution to the conjunctiva every third day. These remarks apply, of course, only to the cases in which there is but very slight partial cataract, because with much lens atrophy adjustment is lost.

The effects of the belladonna do not wear out, the same quantity always producing the same result, at any interval, and for any prolonged period.

I saw a housemaid, eighteen years old, with partial capsulo-lenticular cataracts that almost blinded her when the pupils were in the natural state, but when diluted by a solution of extract of belladonna, applied three times a week, she executed her work so efficiently that her employer was unaware of her defect. The belladonna had been used since childhood.

I might mention other cases, in which, under the same assistance, the most minute work, as engraving and watch finishing, has been most efficiently executed. In the case of a lady, the sight might be called microscopic. Generally for minute sight the objects must be brought very close to the eye.

Indirect relief by an operation. Some Surgeons have preferred to make an artificial pupil, thereby drawing the pupil aside rather than to use the belladonna. It is beyond all doubt that this is the wrong practice in all cases, because it is less effectual, because it is exposing the eye to the risk of injury during the operations from wounding the capsule of the lens, and afterwards, to the risk inseparable from any Surgical operation on the eyeball. Besides, if the entire lens should become opaque, an event always probable, the eye is in a worse state for the removal of the cataract, by the most safe operation for solution, and if the cataract were well got rid of, there could never be the best attainable state of vision, on account of the absence of a well-formed central pupil.

Complications of cataract, with intra-ocular diseases, which interfere with treatment. It is necessary to repeat that opacity of the lens, and of the lens and its capsule, is often associated with disease of the eyeball, and is sometimes the consequence of it, and, too, is not unfrequently connected with disease of the optic nerve, so that it is a subject of Surgical importance to know how to detect the complication.

Several of the diseases are apparent externally, others such as retinitis, detachment of the retina, optic neuritis, and exudative choroiditis, may exist without outward symptoms.

When the cataract is the undoubted consequence of inflammation, by which the nutrition of the lens is interfered with, there may be external signs of it, or not.

All available modes of testing the quantity of the eye should be known and should be practised as occasion may seem to require.

In the early cataractous state, when the disease is partial, or the general opacity is but slight, if the pupil be dilated—the ophthalmoscope may be most advantageously used. Opacities in the vitreous human retinal extravasations, and alterations in the optic disc, may be detected through the yet transparent portions of the lens, or some degrees of general haze. The periphery of the choroid can also be scanned. Now too, it can tolerably well be told if the interruption to sight be due to the degree of the opacity.

When the lens is too opaque to allow of intra-ocular inspection, objective symptoms of the surface of the eyeball, and subjective, must be called to our aid.

Choroidal complications can generally be made out by the state of the iris. When they are present it loses colour and lustre, and ceases to be a freely acting diaphragm. It may became quite atrophied. A dark-coloured iris may undergo changes of structure that are not readily visible, certainly not as readily to be detected as in one of a light colour.

Modification of the pupillary functions are undoubtedly produced by the cataract itself, for it acts as a veil to the retina, rendering it less sensitive to light.

It is possible for a capsulo-lenticular cataract, especially if the capsule be very much thickened, or the lens much degenerated, to efface external impressions sufficiently to render the pupil nearly motionless under considerable variations of light and shade; but such instances are rather uncommon. If, after covering the eye and then exposing it to a moderately bright light, the pupil be motionless, suspicion is justly entertained of unsoundness. The eye not experimented on should, of course, be covered all the while.

As a rule, and in the absence of any adhesions of the iris, there should be contraction and dilatation according to the opacity of a cataract, whether capsulo-lenticular, or lenticular only; for except the cataract, while incipient, press on the iris, and so impair its movements, there should be a marked action of the iris, scarcely, if at all, differing from that of a healthy eye. In certain forms of complete amaurosis the pupil may act freely, but this complication cannot lead to error, as the total loss of the perception of any degree of light, which can never occur from cataract, would alone declare the disease.

The ordinary habitual size of the pupil in different individuals must not be lost sight of in these examinations. There is a relation, I do not say invariable, but sufficiently constant to be recognised, between its accustomed dimensions and certain temperaments, a fact too often overlooked; hence our guide should rather be the relative, or proportionate changes under different degrees of light, than the actual capacity; generally, the smaller the natural size, the more limited will be its movements. The various degrees of activity of the iris in different persons must be remembered, as well as the influence of age, it being more lively in the young. I examined the eyes of a lady, 81 years of age, with full-formed lenticular cataracts, at the window, on an autumnal day, when the pupils were contracted to a degree that at first induced suspicion of some co-existent ocular affection; but further examination with different degrees of light, shewed a variation in them that removed all doubt. She herself was well aware of the activity of her irides, and the disadvantage accruing from the pupillary contraction had induced her, since the commencement of the cataracts, to wear a large shade to shut out bright light.

When only one eye has cataract, unless some other disease exist in it, or the other eye be defective, there is not any disparity in the pupils.

Variation in the pupillary apertures may arise from imperfect development of the iris, but this will be readily recognised as a congenital defect.

A dilated and motionless pupil is a pretty sure indication of ocular disease; and if with the dilatation there be irregularity, all doubt is removed. The opposite condition—contraction—may proceed from a like cause, but it is very rare.

I believe that the use of belladonna may be made subservient to diagnosis, and the very slow, as well as imperfect dilatation, taken as an index of unhealthiness. Moreover, it might discover adhesions, and so show the true nature of the case, which may otherwise, perhaps, be overlooked.

The size of the anterior chamber may help in the investigation. If the cataract bulge, press the iris forwards, and reduce the anterior chamber, there is almost sufficient evidence of intra-ocular disease. There can be no doubt, if to it be added tension of the eyeball, or fulness of the vessels in the ciliary region.

If near-sightedness have existed and progressed, and if also there has been a rapid decrease of sight, accompanied with dull pain in the eye, or slight ciliary pains, there is present choreiditis. With this the nutrition of the eye is so damaged that there can scarcely be success from an operation.

Slight opacity of the lens is so common in choroidal degenerations, that when it is seen in adults before the age at which senile cataracts occurs, suspicion of such complication should be aroused.

(To be continued.)

ORIGINAL COMMUNICATIONS.

CLINICAL OBSERVATIONS ON THE TEMPERATURE OF DISEASE.

By EDWARD LONG FOX, M.D.,
Physician to the Bristol Royal Infirmary.

(With a coloured Diagram.)

VI.—TETANUS—CHOREA—CROUP—QUINSY—BRONCHITIS.

It is impossible to speak of the temperature of tetanus without saying something of the effect on the heat of the body of muscular action generally. The connexion of exercise with temperature is somewhat complex. Davy found that the temperature was decidedly increased after active exercise. After fly-fishing and riding seven hours he found the temperature under the tongue 99·4, after fishing five hours 99·3, after a ride of fourteen miles in the sun 99·5, and after an hour's walk in the sun 99·3. Dr. William Ogle found the temperature under the tongue, which was 98·6 at starting, increase to 99·4 after a sharp walk of five miles, and that even the slight exertion made in dressing after getting out of bed caused a rise. Lately, also, Obernier has contributed an experiment on the influence of body movements on the temperature. Walks of thirty to thirty-five minutes raised the temperature by half a degree or less, whilst the pulse, on the contrary, was increased by twenty to forty-four beats, except in one case, in which it remained unaltered. A quick walk of an hour and a half raised the temperature by a degree or a degree and a half.

It has been shown by Helmholtz that the contraction of muscles is accompanied by an elevation of temperature. More recently Solger, Meierstein, and others found that in the first moment of the excitation of a muscle it is somewhat cooled, but then becomes warmer, but that the rise is not thoroughly proportionate to the mechanical work; that, further, the muscle in its excitation develops more heat if it is opposed in its contraction than if this does not occur.

According to the doctrine of J. R. Mayer, we must assume that in rest the chemical elasticities which are released by the union of oxidisable substances with oxygen are completely transformed into heat, whilst during work a part of this sum of force is, by means of the arrangement of the muscles, changed into mechanical performance. According to this, if other things were equal during rest and work, the production of heat must be higher during rest, especially as during rest cooling through respiration and transpiration is less. In fact, Denville found in a negro who lay lazy and indolent in the sun a temperature of 40·2° C. (104·3° Fahr.), whilst when he was working in the sun his temperature was 39·75° C. (103·5° Fahr.).

Whilst, however, as Wünderlich says, in the working body a part of the force set free through the chemical process for the production of heat is lost as heat, and appears as mechanical work, bringing about motion, yet at the same time the exchange of matter in the working body is more rapid. Through the increase of respiration the admission of oxygen becomes greater, the motion of the blood quicker, and thus the number of blood corpuscles submitted in a given time to the influence of oxygen more considerable, and so the chemical action on which the production of heat depends is more rapid.

And the increase in the production is not compensated by part of the sum of force being spent in mechanical work, for the force that is developed in muscle activity through the enhanced chemical action is usually greater than is used in the exchange into work, and appears as an overproduction of heat. This *plus* of heat is removed out of the body in healthy people by a series of mechanisms which are excited by the very work itself, through quicker breathing, quicker circulation of the blood through the skin, and thence quicker cooling, increased perspiration, etc.; so that an equilibrium very nearly occurs between, on the one hand, the change into mechanical work of force that might have been heat, and the increased cooling, and, on the other, the greater production of heat through increased chemical action; and thus the difference of temperature in rest and during exercise is exceedingly small. According to Mayer's theory, then, the formation of heat in the change of matter only receives a loss through the contraction of muscle, when this brings about real mechanical work. Beclard has confirmed this by direct observation. He found that the quantity of heat produced in the contraction of muscle is larger, if

the muscle uses up a statical contraction—*i.e.*, not associated with mechanical work—than if the contraction produces mechanical work; further, that the quantity of heat, which disappears on a muscle in mechanical work, corresponds to the mechanical effect; and also he comes to the conclusion that the products of the muscular contraction, the heat and the mechanical work, are together the expression of the chemical action which occurs in the muscle.

This consideration, therefore, founded on observed facts, will serve to explain the slight elevation of temperature that occurs as a general rule, though not universally, in tetanus, chorea, and other diseases, in which tonic contraction, choreic convulsion, or jactitation, are the principal phenomena.

Tetanus.

In tetanus the temperature may persist at or very little above the normal point, until the fatal close of the disease approaches. At this period there is observed (and Wünderlich claims to have been the first to draw attention to this) an elevation of temperature to a very considerable height, even to 43° C. (109·4° Fahr.), 44° C. (111·2° Fahr.), or even 44·75° C. (112·5° Fahr.); and this elevation of temperature does not entirely cease post mortem. This can be accounted for by no anatomical lesion. Billroth and Fick, at Zurich, attribute this elevation of temperature to exaggerated muscular action, and Leyden to irritation of the nervous centres. This explanation is wholly opposed to all observation on the effects of muscular action. Erb, knowing that convulsions generally produce no heat, and that, where it is produced, it is in fatal cases, attributes it to paralytic exhaustion of the regulating action on temperature, the consequence of the injury carried to the central nervous system that presides over it.

Instances, however, occur, and case 38 is an example, in which the temperature is high through the greater part of the disease. In this case, the man, a subject of traumatic tetanus, recovered under the use of the Calabar bean.

To explain such cases it is necessary either to receive Erb's theory that the elevation of temperature is due to a paralysis of that portion of the nervous centre that regulates the temperature, or to consider it the result of, or rather as the index of, obstructed motion. It is easy to understand that chemical action may manifest itself wholly as motion, if there is no impediment to the full play and action of the muscles; but if the free action of the muscles meets with considerable obstruction, the effect will be shown in the form of heat, as is seen in machinery. How great the impediment to the free action of the muscles is in opisthotonos, is evidenced by the rupture of the recti abdominis, so frequently met with.

Chorea.

The very slight influence of muscular activity on temperature is seen more conclusively in acute chorea. Here, where the motion is not only very intense, but very incessant also, going on night and day in those in which sleeplessness is an important symptom, one would expect a high temperature if the mere action of the muscles had any great influence on the heat of the body. The rule, however, is the reverse. The thermometer in acute chorea seldom registers a height above 99° Fahr., and is often somewhat below the normal, and this, too, when the chemical action in the body, as manifested by waste of tissue, is considerable. Thus the temperature was never above 99° in a case in which, during the greater part of the disease, the amount of urinary phosphates was three times the average of health, although no excess of phosphates was taken in the food. In a case that lately died under my care, the temperature was 99⅕ on the ninth day before death, but, on every other day, varied between 98⅔ and 97⅓, whilst food was taken in sufficient quantity.

Clinical observation, therefore, necessitates the belief that the extreme muscular activity in chorea has no more effect on raising the temperature than in health.

Croup.

Case 39 was a boy, admitted into the Infirmary on the second day of croup. Tracheotomy was performed on the fourth day, and he sank in about twenty-four hours afterwards. The croupous condition was found post-mortem to occupy the whole course of the air-passages as far as the smallest bronchules. There is little to be said of the temperature in croup. The height of the thermometer is of very little value in prognosis, as the elevation may be of no great extent, whilst the disease is rapidly progressing to a fatal termination. It may be more useful in diagnosis in those rare cases, in which the absence of the peculiar croupous voice and cough admits an element of doubt as to the precise nature of the disease.

Wünderlich says that in no severe acute disease may the temperature be so insignificant as in croupous and diphtheritic affections—diphtheria of the pharynx, laryngeal croup, intestinal croup, dysentery, and the diphtheritic and croupous inflammations of the uterus in childbed. It is true, he says, we may see in these affections a very elevated temperature as a manifestation of further danger. But moderate and even normal temperatures do not give the least security as to recovery.

Quinsy.

The three examples of this disease tabulated here show the variations of temperature that may occur in quinsy. Two of these cases did not come under observation until the end of the first week. The ascending period may persist for four days or more, but is often over on the second or third evening. The thermometer registered a height of 103⅗° in case 40, a young woman aged 21. In the others the height was much more moderate.

In some instances the maximum point is as high as 104°, or even 105°, and when this high maximum has been reached, the defervescence is generally critical, may take place in the course of a single night, and is coincident with the giving way of the little abscess. Quite as frequently, however, the elevation of temperature is of far less extent, not reaching 101°, and in this form the subsidence is almost always by lysis, and takes a very variable number of days. In case 42, a man, aged 23, the gradual defervescence was protracted over seven days.

Bronchitis.

All the examples of this disease tabulated with this paper recovered. They show a certain similarity, although the age of the patients differed considerably. Thus case 43 was a woman, aged 21, who was so ill two days after admission that she asked to be sent home to die there. Case 44 was a woman, aged 34; case 45 a woman, aged 67, with capillary bronchitis; case 46, a boy, aged 7, also with capillary bronchitis. In this latter case only did the temperature reach so high a maximum as 102⅘°, though it is true none of these patients came very early under observation. Still, from having taken the temperature in private practice in a number of cases of acute bronchitis, I may say that this maximum is very seldom exceeded. Indeed, bronchitis is another example of an intense inflammatory condition over a large surface of a mucous membrane without much pyrexia. Is it not that the chemical action consequent on the vaso-motor condition manifests itself in two forms of force, one being heat, the other secretion? the latter not only taking the place of part of what would otherwise be heat, but also directly diminishing temperature by evaporation and expectoration.

The ascending period in bronchitis is of very variable extent. Most usually, I think, it takes about four days; but it is impossible in many cases to divide the disease thus into periods, as it has a tendency to involve fresh tubes, and synchronously with this to show slight exacerbations. In case 44, after the temperature had fallen below the normal point, the disease recommenced, with an ascending period of six days, a stationary of four days, and then a gradual defervescence. The relations of temperature in bronchitis with the pulse and respiration are very indefinite. The same temperature may coincide with a pulse of 132 and of 96; and in capillary bronchitis of old people the temperature may be 101° with a pulse of 78 or 84. As a rule, a high temperature in bronchitis will be accompanied with rapid respiration—32, 34, 36, or 40 per minute—but one is no guide to the other; we may meet with a temperature of 98° existing with a respiration of 32 per minute.

The comparatively low temperature in bronchitis is useful in distinguishing this disease from pneumonia—not always easy otherwise. It is also of some help in those cases of enteric fever, in which the symptoms during the first week are mainly pulmonary: if the temperature becomes high at the middle or end of the first week, the disease is more than bronchitis, and according to the extent of the elevation of temperature, the disease may be recognised as enteric fever. It is useful also in connection with tubercle. The physical signs of tubercle are often masked by the bronchitic râle. If the temperature reaches a higher point than 102°, and especially if the temperature keeps up, whilst the bronchial irritation manifestly declines, we may be pretty sure that the patient is tuberculous also.

Nearly £300 has been subscribed for a testimonial to Dr. Ward, of Huntingdon, of which not less than £250 is to be handed over in money, and the remainder expended in purchasing a suitable piece of plate, which is to be accompanied by an alphabetical list of the subscribers on vellum.

ON THE

REACTION OF AORTIC ANEURISMS ON THE HEART.

By Professor AXEL KEY, of Stockholm.

Translated from the "Nordiskt Medicinskt Arkiv," vol. i. part 4, 1869. By J. W. Moore, M.B., Ch.M. Dub.; Ex-schol. Trin. Col. Dub.

That aortic aneurisms induce hypertrophy, or hypertrophy with dilatation, of the heart, especially of its left ventricle, is a proposition which is advanced as one perfectly established in our handbooks and monographs (Rokitansky, Förster, Friedreich, Lebert, Niemeyer, Oppolzer, Hope, Fuller, and others(a)—and some authors hold besides, that the change is the greater the nearer the aneurisms are situated to the heart, and the larger they are. The explanation of this is sought for in the physical fact, that "the resistance which a fluid meets with in flowing through a tube increases if the tube undergoes a sudden narrowing or dilatation." It appears also, in accordance with this relation, to be a physical necessity that an aortic aneurism should increase the work of the left ventricle, and that hypertrophy of it should be the consequence, so much the more since the diminishing elasticity and contractility of the vessel's walls also present obstacles to the circulation of the blood.

Again, in the second place, aneurisms of the aorta should through a stagnation in the pulmonary circulation produce hypertrophy with dilatation of the right side of the heart likewise (Fuller, op. cit. page 212.) This all sounds so simple that one must *à priori* be inclined to regard all doubt on the subject as unjustifiable. It is, however, from actual observation alone, that in this case, as well as in others, we can draw a satisfactory conclusion, and this, I believe, will show that the above-mentioned proposition (that aortic aneurisms, as a rule, lead to hypertrophy of the left ventricle) is altogether false, although it seems to be founded on correct physiological grounds, and although it has been unanimously promulgated by persons of the most extended experience, and with the most abundant anatomical materials for investigations.

Some years back it attracted my attention that the heart in the case of some particularly large aneurisms of the aorta was in no wise increased in size, and that the muscular structure of the left ventricle was atrophied rather than hypertrophied ("Hygiea," 1865, *Proceedings of the Swedish Society of Physicians*, page 265). I have, subsequently, had my attention directed to the subject, and have not as yet met with a single case where an aneurism of the aorta produced hypertrophy of the ventricle in question. At the Swedish Society of Physicians I have repeatedly, when exhibiting new preparations, drawn attention to this point. The material I have now collected should be sufficiently extensive to found on it a reliable opinion. It is, however, only from exact measurements, not from arbitrary estimations, that trustworthy conclusions can be deduced. I have, therefore, measured the heart as accurately as possible in the case of all the aneurisms to which I have had access, and in the present paper I give a *résumé* of the results obtained. The thickness of the muscular structure I have measured, wherever it was practicable, by two longitudinal sections in each ventricle, one running close to the septum, the other along the outer border from the base to the apex. In this way we have an opportunity of far more accurately judging of the muscular structure, than if we were to measure it by a single section only. Remarkable differences frequently present themselves. In the longitudinal measurement of the ventricles I have, in order to obtain as fixed a point of termination as possible, made a measurement from the apex to the left border of the pulmonary artery at its springing from the heart, and another to the same place at the right border of the same vessel. This situation is particularly well-suited for the purpose, as the measurement must necessarily be made after the heart has already been opened in the above-mentioned manner. In the cases where nothing is said about the auricles these have not exhibited any pathological changes of note.

(a) Rokitansky, "Lehrbuch der pathologischen Anatomie," 2nd edition, vol ii. p. 258. Förster, "Handbuch der pathol. Anat.," 2nd edition, vol. ii. p. 722. Friedreich, "Krankheiten des Herzens," in Virchow's "Handbuch der speciellen Pathologie und Therapie," vol. v. part 2, p. 289. Lehert, "Krankheiten der Blut- und Lymphgefässe, *ib.* p. 17. Niemeyer, "Lehrbuch der speciellen Pathologie and Therapie," vol. i. p. 236 and 341. Oppolzer, "Vorlesungen über specielle Pathologie und Therapie," vol. i. p. 117. Hope, "A Treatise on Diseases of the Heart and Great Vessels," London, 1839, p. 428. Fuller, "Die Krankheiten des Herzens und der grossen Gefässe," translated into German by Schultzen, Berlin, 1864, p. 142 and 211.

1. A sacciform aneurism of the thoracic aorta, occurring in a man aged 40, and causing death through bursting into the left pleura ("Hygiea," 1866, *Proceedings of the Swedish Society of Physicians*, page 233). It is the size of a child's head, commences 15 centimetres below the point of departure of the left subclavian artery, proceeds chiefly from the posterior wall of the aorta, doubles back both above and below over the vessel's sides to the extent of some centimetres, has caused considerable erosion of the bodies of the four lower dorsal vertebræ, as well as of the eleventh and twelfth ribs on the left side, the latter being separated from the vertebræ. Tolerably abundant atheromatous deposit in the aorta, without bony plates. In the ascending and transverse portions of its arch, a slight dilatation. The atheromatous deposit is continuous down close to the sinuses of Valsalva, but is very slight in the latter. The orifice of the aorta is not dilated, and is 7 centimetres in diameter. The aortic valves are slightly thickened at the corpora Arantii without any retraction. The left and the posterior right flaps are united for the extent of 2 millimetres, and thereby an extremely slight contraction is produced. The valves, otherwise free from change, appear to be perfectly competent. The heart is of ordinary size, with a somewhat rounded apex, which is formed by the left ventricle alone. It measures from the left border of the pulmonary artery, at its origin, to the apex, 7 centimetres; from the right border of the same vessel to the apex, 10 centimetres; and in breadth at the base of the ventricles, 10 centimetres. The left ventricle is in no degree dilated, but is relatively rather wide at the apex. The muscular wall, of ordinary thickness, or somewhat under it, measures, in the section made near the septum ventriculorum, generally 10 millimetres; in the section carried along the left border, it measures, from the base to somewhat below the middle point, 10 to 11 millimetres; nearer the apex, 10 millimetres. The carneæ columnæ and musculi papillares are rather weaker than usual; mitral valve healthy; the right ventricle of ordinary size, its muscular wall measures, with tolerable uniformity, 2 millimetres in thickness; the valves healthy; the orifice of the pulmonary artery is 9·5 centimetres in circumference.

With this large aneurism in the descending aorta, as well as with hard atheromatous deposit in the vessel's walls above the aneurism, the heart was altered in no other respect than in this—that the left ventricle, not dilated, was somewhat rounded at the apex, that its muscular structure was not quite of ordinary thickness.

2. Spindle-shaped aneurism, bursting into the trachea. About 2 centimetres above the orifice of the aorta, the vessel widens gradually and almost equally throughout its entire circumference, yet chiefly at its convexity. Directly in front of the origin of the left subclavian artery it attains its greatest width in the arch, which at this place does not, however, measure more than 10·5 centimetres. Just after the origin of the left subclavian the vessel narrows to a circumference of 7 centimetres, but soon again dilates into an egg-shaped aneurism, engaging the descending aorta to a distance of 10 centimetres, and in its greatest circumference amounting to 15 centimetres. From this ovoid aneurism proceed in its upper portion two smaller, partial, sacciform dilatations, each of the size of an almond, the one pointing forward, the other backward and to the right. It was the latter that burst into the trachea, into which some small openings lead. Atheroma, which is abundant in the aneurism itself, gradually decreases in the descending portion of the aorta. In its ascending portion the deposit reaches down to the sinuses of Valsalva, but in these the inner coat is smooth and even. The aortic valves are quite healthy, thin, without any thickening. The aortic orifice does not appear dilated. The heart, moderately covered with fat, seems in its entirety rather diminished; is of a circular form, the rounded apex being composed in nearly equal proportions of both ventricles. The heart measures from the apex to the left border of the pulmonary artery scarcely 7·4 centimetres; to the right border of the same, 9·8 centimetres; in breadth, at the base, 10 centimetres. The cavity of the left ventricle is, on the whole, of ordinary size, but is relatively somewhat wide at the apex. The musculi papillares and carneæ columnæ are rather finer than usual. The muscular wall itself measures, at the incision made close to the septum in the conus arteriosus, 11 to 12 millimetres, but it rapidly and greatly lessens in thickness midway, and measures from this point down to the apex only 4 to 5 millimetres. At the left border of the ventricle the wall measures, in the neighbourhood of the base, 10 millimetres, midway to the apex, 9 millimetres, and close to the apex, 5 millimetres. The mitral valve is healthy. The right ventricle of ordinary size,

its wall measuring nowhere over 2 millimetres. Valves healthy. Pulmonary artery, at its origin, 9·5 centimetres in circumference.

The only alteration in the heart which is at all worthy of note in connexion with this aneurism is the thinning of the muscular structure in the lower half of the left ventricle, and a slight widening of the ventricle in breadth in the same situation, while otherwise it is in no degree increased in capacity, and the heart in its entirety is small; widening of the pulmonary artery.

3. The aneurism, occurring in a woman aged 47, is of the size of a newly-born child's head, arises from the arch, 7 centimetres above the orifice of the aorta, and extends nearly 9 centimetres to the other side round the left subclavian. It approaches the spherical form, and embraces the entire circumference of the vessel. The dilatation in the concavity of the arch breaks off more abruptly from the vessel, while the aneurism is less sharply defined at the convexity in consequence of the ascending portion being moderately dilated. The thoracic aorta below the aneurism is normal, and free from atheromatous degeneration. In the ascending portion of the arch, between the origin of the aorta and the aneurism, the internal surface is unevenly thickened here and there with striated contractions, but without bony plates. The degeneration terminates rather suddenly at the sinuses of Valsalva, in which the internal coat is perfectly smooth and even. The origin of the aorta seems not to be dilated; it closes comparatively tightly round the inserted thumb. The aortic valves quite healthy, without thickenings, either at the corpora Arautii or at the opposed or inserted edges. The heart is abundantly covered with fat, in consequence of which its volume is increased, particularly at the right ventricle, where the fat at the base measures as much as 2 centimetres in thickness. Leaving the fat out of consideration, the heart appears to be somewhat diminished rather than increased in size. It is of normal form, and the apex is made up of both ventricles equally. Including the fat, it measures from the apex to the left border of the pulmonary artery 8·5 centimetres; to the right border of the same 10·5 centimetres; in breadth at the base 11·5 centimetres. Left ventricle of ordinary size; carneæ columnæ and musculi papillares of normal thickness. The muscular wall measures in the neighbourhood of the septum, at the conus arteriosus, 8 to 9 millimetres, midway down 10 millimetres, and near the apex 3 to 4 millimetres. At the edge of the heart the incision fell so obliquely that it was impossible to make an exact measurement there. The mitral and aortic valves are perfectly healthy. The right ventricle is not hypertrophied; its muscular wall measures pretty uniformly 2 to 3 millimetres. Valves healthy. The orifice of the pulmonary artery is 8·4 centimetres in circumference.

With this large aneurism, then, engaging both the convexity and concavity of the arch of the aorta, no noteworthy alteration of the heart was found, as regards either size or shape, no dilatation, no hypertrophy, rather some thinning of the muscular wall in the left ventricle; moderate dilatation of the pulmonary artery.

4. A sacciform aneurism from a man aged 60, as large as the head of a child of one year, springs from the right wall of the ascending portion of the aorta, bursting into the right pleural cavity ("Hygiea," 1865, *Proceedings of the Swedish Society of Physicians*, p. 265). It begins 2 centimetres above the origin of the aorta, and ends 3 centimetres below the arteria innominata. The entire arch of the aorta is, however, also tolerably enlarged as far as the left subclavian artery, immediately to the left of which the vessel narrows to its normal calibre. The aneurism itself projects from the vessel with a somewhat contracted neck, having a circumference of 29 centimetres. It has a partially cylindrical shape, and measures from the concavity of the aorta over the apex about 45 centimetres. (The apex, which was firmly adherent to the chest-wall, has been cut off in removing it.) The aneurism lies with its neck in front of the right pulmonary artery, on which it must have exercised great pressure; besides, as a consequence of its low position in the ascending aorta, it pressed also on the trunk of the pulmonary artery. The atheromatous degeneration of the internal coat, which is continuous from the aneurism down to the sinuses of Valsalva, ceases at them, that coat here being smooth and even. The aortic valves are extremely slightly thickened throughout, without retraction. They are perfectly competent. The origin of the aorta seems to be little, or not at all, dilated. The heart is abundantly covered with fat, especially over the right ventricle and at the apex, where the fat, as in some other situations also, measures quite 9 millimetres in thickness. Not including this fat, the heart is in no respect larger than usual, and is of normal shape. The apex is formed equally of both ventricles. It measures from the apex to the left border of the pulmonary artery 9·5 centimetres, from which measurement fully one centimetre must be deducted for the fat. In breadth it measures 10 centimetres. The left ventricle is not hypertrophied. Carneæ columnæ and musculi papillares are rather thin. The muscular wall itself is, for the extent of about 2 centimetres just at the conus arteriosus, tolerably strong, 11 to 12 millimetres, but it rapidly becomes thin from this point downwards, and measures at one place, half-way to the apex, only 5 to 6 millimetres. Below this it measures but 7 to 8 millimetres. At the incision in the left edge of the ventricle the wall measures, with comparative uniformity, 7 to 8 millimetres. Mitral opening healthy. Right ventricle not dilated, but its muscular structure considerably thickened, measuring in general 6 to 8 millimetres. At the conus arteriosus the hypertrophy is rather less—5 to 6 millimetres. Valves healthy. Orifice of pulmonary artery 9 centimetres in circumference.

This unusually large aneurism, which arose so near the heart, has, as appears from the foregoing, not only not produced hypertrophy of the muscular structure of the left ventricle, but, instead, a considerable thinning of its wall, without the occurrence of any dilatation. The wall of the left ventricle is little thicker than that of the much hypertrophied right. The hypertrophy in the latter chamber must be attributed to the great pressure which the aneurism exercised on the pulmonary artery and its right branch. No change in the lungs capable of producing impediment to the circulation was discovered.

(*To be continued.*)

SELECTED CASES OF SEVERE STRICTURE OF THE URETHRA.

By T. VINCENT JACKSON, Esq.,
Senior Surgeon of the South Staffordshire General Hospital, Wolverhampton.

The two following cases have lately been under my care, and they illustrate so well the advantages of certain plans of treatment, that I have no hesitation in placing them on record. The relief of severe and complicated cases of urethral stricture is one of great Surgical interest, and I am sure that all practical Surgeons who are much employed in the management of these affections will readily admit that no one plan of treatment will answer for all cases; that, in fact, we must have more than one string to our bow. In ordinary examples of stricture simple dilatation is quite sufficient to effect all that is necessary, and in no way can this be so easily, effectively, and, as it were, painlessly obtained as by the use of some soft instrument—bougie or catheter—and in this manner a large number of the cases which present themselves either in the out-patient room or in private practice can be dealt with. For the more severe and complicated classes less simple measures are required, but mostly for their employment (excluding all cutting operations) it is a *sine qua non* that there should be such a continuity and sufficient patency of the urethra that an instrument can be carried into the bladder, and this, if the Surgeon wills it, can be tied in and retained at his discretion, then withdrawn and a larger one substituted, and the process repeated until the calibre, or near about, of the healthy urethra is reached. This plan has its advantages and its disadvantages. The advantages are the rapidity, ease, and the minimum amount of pain which it entails on the patient ordinarily; the disadvantages, that it necessitates keeping the sufferer in bed; and my experience leads me to the conclusion that a contraction of the stricture more quickly takes place after continuous dilatation than after other plans of treatment.

A modification of the above is very frequently employed, in fact we are compelled by our own fears to adopt it as far as the first step; for a Surgeon perhaps has spent an hour or more in getting through a stricture, succeeding at last, if the case is one of retention also, in emptying the bladder through the smallest metallic or non-metallic catheter. Who likes to withdraw it? The patient is well aware of this, and says "You won't take it out?" and so it is tied in and retained for such a time as will allow, upon its withdrawal, a dilator of some sort to be introduced, and "splitting" or "distension" terminates the proceedings. Splitting an urethral stricture is an operation of recent times, and its proposer, Mr. Holt, has in no way spoken

too highly of it; up to the present time I have used his dilator one hundred times. I have not picked my cases, and the very worst that have come before me have tested approvingly this method. The summary of my experience of it is the following:—The operation is one that can easily be borne without chloroform, but it is far from being anything like painless; the moment No. 10 or 12 tube enters the meatus, as it is pushed along the hollow conducting rod, flinching and a general involuntary muscular resistance commences, reaching its maximum when the stricture is split and frequently also at this moment extorting a lamentation. The pain certainly does not subside until the dilator is withdrawn, and as a rule it lasts for some time after. Hæmorrhage to some extent, frequently hardly noticeable, always takes place. The bladder should be evacuated after the withdrawal of the splitting instrument by the introduction of No. 11 or 12 silver catheter, but there is not the slightest clinical necessity to tie it in. Sequential to the operation, rest either in bed or on a couch is necessary, and I never omit ordering a draught of opium and quinine to be taken immediately, and I am convinced it has warded off many a shiver. In the course of two or three days a full-sized metal instrument should be passed into the bladder, and the introduction repeated twice a week for a fortnight. Finally, the patient is instructed how to pass an instrument for himself, the perpetuation of the cure being thus left in his own hands.

A favourite form of instrument with me is one which, a few years since, I devised,(a) and had a set of them made for the treatment of stricture by simple dilatation. Originally they were solid throughout, but lately I have had them constructed partly solid and partly hollow, combining all the advantages of the catheter and sound, permitting an evacuation of the bladder on each occasion of their employment; and I regard this as of some moment, especially after the operation of splitting, for necessarily the passage of an instrument, however well managed, must produce an irritation of the split portion, and I take it this will be intensified in the case of a catheter, the eyelets on its side catching mayhap a portion of the painful tissue, which by dipping in, becomes grazed, and more suffering than is desired consequently inflicted; therefore to reduce this to a minimum and obviate any reirritation by the urine afterwards, I always empty the bladder at the time of the instrumental introduction, and, for the reason named, I decline to use a catheter, but employ the "catheter conical sound" instead.

In considering the question of the applicability of conical sounds for the treatment of stricture of the urethra, it appeared to me that a slight alteration in their construction would be an advantage in many cases. What I mean is, that the form of the instrument instead of resembling simply an elongated cone, should be made so as to consist of two cones, their bases being conjoined, and the following plan is the one I have adopted in their formation:—The first cone commences at the extreme point of the instrument, and extends for a distance of 3 inches, its base here meeting with the base of the second cone, and this latter gradually and almost imperceptibly diminishing in size reaches the handle, a distance of 6 inches. From such a construction it is evident that the maximum cylindrical thickness is obtained at a certain known distance from the point, for up to this point the calibre of the instrument gradually increases, and from this point it gradually decreases; for instance, let us say that the point of the sound is equal to 8, 3 inches from the point it is equal to 12, and at the handle, a distance of about 6 inches, it equals 9; the first cone, therefore, is shorter and of a less circumference (except at the base) than the second.

Hitherto these sounds, their precise form and curve varying according to the whim of individual Surgeons, have been manufactured solid, but a few years since I altered my instrument in such a way that it became partly solid and partly hollow, solid for a short way from the point, and for the remaining distance channelled.

Rarely but still occasionally cases of neglected urethral stricture turn up, which are instrumentally impassable, the urine escaping by fistulous perineal tracts, a drop or two now and then leaking through the meatus urinarius.

External urethrotomy is the operation usually resorted to to restore the urethral conduit, but in one of the cases I record I adopted a milder treatment; the feebleness of the patient forbidding, I considered, a cutting operation. I relied therefore upon the potassa fusa to destroy the callous tissue, and fortunately not in vain. At the present time the employment of chemical causties in the treatment of stricture is not very fashionable. Nitrate of silver, proposed by John Hunter and almost universally employed by Sir E. Home for the treatment of every variety of stricture, is now better confined to those limited numbers of sensitive strictures, which bleeding at every touch, are rendered immediately amenable to dilatation by cauterising their face two or three times with a waxed bougie armed with a bit of lunar caustic. A few Surgeons systematically follow the practice of the late Mr. Whateley, of destroying the thickened tissue by the application of potassa fusa at regular intervals, and notably amongst these Surgeons stands Mr. Wade, whose experience has taught him that Mr. Whateley's fears upon one point are groundless, and that strictures which are instrumentally impassable are with proper precautions as safely and successfully to be treated by caustic potash as those which are instrumentally passable. "I commonly," says Mr. Wade, "adopt (potassa fusa) in impassable stricture from a conviction that it is, at all events, the safest, if not as I certainly believe to be the most effectual for the relief of the patient in the majority of such cases."

Case 1.—*Impassable Stricture of the Urethra—Perineal Abscess, followed by Perineal Fistula—Duration of Stricture uncertain—Treatment—Application of Potassa fusa, and splitting by Holt's Dilator.*

Emanuel C., aged 54, recommended to me by Mr. Gilbert, of Bilston, was admitted into the Hospital April 15, 1869.

For the last four days he suffered from retention of urine, and although attempts to pass a catheter have been made by more than one Surgeon, no relief has been obtained. A swelling formed beneath the scrotum, and on admission this was opened by the House-Surgeon, urine in large quantities soon finding its way out afterwards. Shortly after admission I saw the patient; he presented the appearance of a very feeble man, and looks much older than he confesses to be. Great pain is complained of in the perineum, but there is very little induration. The bladder apparently is quite empty. A No. 8 silver catheter is arrested 6½ inches from the meatus urinarius, and other instruments, gum elastic, and silver of the smallest size, failed to enter the stricture even.

Patient says the urinary stream has been very small for years, latterly almost guttatim. Presumably the stricture dates from an attack of gonorrhœa, but he is not much inclined to give precise answers to my queries, equivocating and pretending not to hear. Habits indifferent.

Linseed poultice to be applied to the perineum; meat diet; sherry ʒiv.

May 7.—Great improvement in general health since last report. All the urine passes by the opening in the perineum. Attempted again to penetrate stricture, but completely foiled.

26th.—Again unsuccessful to enter stricture with the smallest gum elastic or silver catheter. Applied with a wax bougie potassa fusa to the face of stricture, holding it in contact for one minute.

30th.—Reapplied potassa fusa.

June 7.—Urine passes occasionally through the penis. Fistulous opening smaller. Reapplied potassa fusa.

10th.—Nearly half the urine passes per urethram. Reapplied potassa fusa.

14th.—Nearly all the urine now passes by the penis. The perineal fistula almost closed. After some little time in making the attempt, and with great care guiding the instrument along the urethral tract, the forefinger of the left hand assisting it through the rectum, No. 2 silver catheter reached the bladder. A little urine was evacuated, and it was then tied in.

15th.—Considerable vesical irritation has been set up by the catheter; hypogastric tenderness, and the urine contains large quantities of mucus. Catheter withdrawn and Mr. Holt's dilator introduced, and the stricture immediately ruptured. The bladder was emptied by No. 12 silver catheter. Ordered barley water *ad libitum*, strong beef-tea, sherry ʒvj., milk diet; continuous fomentations over the bladder. ℞ Quinæ disulph. gr.ij., tinct. opii ♏xl. directly.

16th.—Passed a good night. No shiver nor any unpleasant symptom. Very little vesical and no renal pain. Urinary stream free; in twenty-four hours has passed two pints of urine, and there is much less deposit. Takes nourishment well. Allowed full diet.

17th.—Progressing well.

21st.—Passed catheter conical sound easily.

July 6.—Discharged. Since last report the catheter conical sound has been passed twice weekly.

Remarks.—In this case I had no hesitation in attempting the destruction of the stricture by causties, as the consequence, retention, which Mr. Whateley considered might follow, could not happen, the bladder emptying itself through the perinæum.

(a) *British Medical Journal*, 1861, vol. ii. p. 405.

The result, although gratifying, was not painlessly obtained, as the following description of the sensations perceived by the patient each time the potassa fusa was applied shows. As the armed bougie passed downwards, a sense of heat and smarting was perceived sufficient to make the man wince—a good confirmation this of the anatomical fact that the urethra is not a tube, but a passage, the walls of which are in contact, for the caustic, being entirely surrounded with wax, except in front, and being rapidly passed along it, could only affect the parts presented to it in this aspect, and not laterally. When the face of the stricture was reached, and the potash was well upon it, great discomfort was complained of, the feeling being described in forcible but not elegant language, as if "his seat was being burned away," and it continued throughout the sixty seconds during which it was applied, and for several hours after very severe pain of a somewhat less intense character was experienced.

Case 2.—*Severe Stricture of the Urethra of Seven Years' Standing —Frequent Attacks of Retention of Urine — Treatment by Dilatation of Stricture with Sea Tangle Bougie, and immediately afterwards splitting it with Holt's Dilator.*

At 2 a.m. on the morning of May 7, 1869, I was called out of my bed by a commercial traveller, who, on his way to Dublin, was obliged to alight from the train on account of an attack of retention of urine. He appeared a man in the prime of manhood, and gave me the following brief history:—About ten years since he contracted gonorrhœa more than once; each attack was cured without using any injection. Seven years since had his first attack of retention, and since has constantly suffered from it, sometimes several times each week, and he carries a No. 1 gum elastic catheter to relieve himself; but on this occasion no urine followed its introduction, but hæmorrhage occurred from the urethra after its withdrawal. Several times partial dilatation of the stricture has been effected, but his occupation never allowed him sufficient time to obtain a complete restoration of the urethral calibre. Habits free. No hardness nor tenderness to be felt in the perineum; bladder perceived to be distended above the pubes. After much trouble, and using both care and patience, I passed a No. ½ gum elastic catheter within the badder and drew off the urine, and soon after he returned to his hotel.

May 10.—Visited by patient. Urine voided in a small stream, almost guttatim. Exceedingly anxious to have his case treated promptly, and he hints if such is not done he must betake himself elsewhere. I passed Nos. ½ and 1 gum-elastic catheters, and appointed a day for his next attendance. Some of the urine examined showed an absence of albumen and of other morbid conditions.

14th.—I attempted to pass No. 2 gum-elastic catheter, but it did not even enter stricture. I now marked off eight inches on a sea tangle urethral bougie, the size of which I had previously scraped down to less than No. 1, and inserted it into the urethra as far as the bladder, allowing it to remain there for an hour and a half, and, upon its withdrawal, I was enabled immediately to pass Mr. Holt's dilator and split the stricture, which was a very tough one. The instrument being removed, the bladder was evacuated by the introduction of a No. 12 catheter. The patient was directed to return home and remain quiet, reclining occasionally on a couch.

16th.—No untoward symptom of any kind has happened. Is delighted with the size of the urinary stream. Conical catheter sound passed into bladder.

18th.—My patient is now very anxious to resume his journey, and he departs two days from this date, taking with him a No. 10 gum-elastic catheter, which he is to pass for himself every second day. He promises to call upon me as he returns.

June 1.—Patient passed Nos. 11 and 12 gum-elastic catheters easily along the urethra into the bladder in my presence, and he took his leave of me fully instructed as to his future conduct and the proper employment of his catheter.

Remarks.—The foregoing is a short summary of a case of severe and irritable urethral stricture complicated with repeatedly occurring attacks of retention of urine; and it is recorded that at the commencing of an hour and a half No. 2 catheter could not be passed through the stricture, yet at the termination of that period a No. 12 silver catheter emptied the bladder. I think I may say that in no other way except by employing the means I used could such an event have been so painlessly brought about. Since Dr. Sloan's introduction of the dried sea tangle to the notice of the Profession, it has been very frequently employed for Surgical purposes, it having been ascertained to be more cleanly and less risky than Sir J. Simpson's sponge tents, and which in a great measure it has superseded. On no previous occasion had I required its use for dilating a contracted urethra, but being pushed as it were into a corner by an impetuous patient, I had no option. I observed that the laminaria bougie doubled its diameter in an hour, commencing to swell a few seconds after introduction. There was not the slightest difficulty in its withdrawal, although the portion behind the stricture was more swollen than that anterior to it, and the piece grasped by the stricture was well seen, measuring ¾ of an inch, its accurate delineation being very gratifying, for we thus have in this material an infallible test of any abnormal lessening of the urethra, for after allowing it to reside in this passage for a given time we witness upon its removal the exact position and distance from the meatus urinarius, also the length and number of any stricture or strictures existing.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

COMPOUND FRACTURE OF THE LOWER JAW FROM GUNPOWDER.

(Under the care of A. W. NANKIVELL, F.R.C.S.)

R. H., aged 33, a labourer, was admitted January 20, 1870. Patient states that the injuries arose from the accidental discharge of a gun at a distance of only eighteen inches from his face. The gun was only loaded with powder; the charge, however, was stated to be a heavy one. The force of the concussion knocked him down; he was picked up, placed in a cart, and brought to the Hospital.

On admission, it was found that the cavity of the mouth was completely laid open on the left side. One wound extended upwards from the angle of the mouth to within 1 inch of the zygoma. A second extended from the angle downwards for 2½ inches towards the hyoid bone, and a third extended upwards from the angle to half an inch above the ala of the nose. The flaps thus formed had retracted greatly, exposing both the teeth and gums of the upper and lower jaws, the separation in its widest part being about three inches. The lower jaw was fractured about two inches to the left of the symphysis, and the gum at the seat of fracture much torn. One tooth at the seat of fracture was blown out of its alveolus and merely hung by the gum. In the upper jaw the crowns of three teeth were blown off, and the patient stated he had spat them out before arriving at the Hospital. There was some considerable hæmorrhage, chiefly from the fractured jaw. The left eye was also injured by several grains of powder having been driven into the sclerotic and cornea. The lower part of the face was much blackened, and the left whisker and eyebrow were singed.

Iron wire twisted round the teeth at each side of the fracture, the loose tooth having been removed, was employed to hold the jaw together. Interrupted silk sutures were passed through the mucous membrane of the mouth into the substance of the cheek. Four hare-lip pins with twisted sutures were used for the wound extending towards the zygoma, two for the descending one, and a like number for the ascending one, an interrupted suture being inserted here and there where there was any gaping. Water dressing was applied to the wound and a gutta-percha splint and bandage to the broken jaw.

January 22.—Considerable chemosis of left eye. Ordered warm belladonna lotion.

25th.—The upper and lower wounds—viz., the one to the ala and the one towards the hyoid bone—have healed by first intention. The one towards the zygoma has also healed at its upper part by first intention for about 1 inch. The rest of this wound suppurates freely. There is to-day considerable erysipelatous blush of the face and œdema of the eyelids. Ordered ℞ Tinct. ferri perchlor. ♏xx., aquæ ℥j., quart. horis.

February 7.—The wound is doing favourably. Patient is now allowed to get up. Erysipelas all gone.

20th.—Jaw is getting firm. Has hitherto been confined to slops, but is now able to eat fish.

March 1.—The wire connecting the two fragments of the broken jaw was cut away to day. Union all but perfect. Wound entirely healed.

13th.—Jaw quite firm. Able to eat meat. Gutta-percha splint left off. Discharged cured March 16.

Remarks.—This case fairly illustrates the severe injuries that may arise from gunpowder alone when exploded at a short distance from an individual. The wire was of great service in retaining the fragments of the jaw *in situ;* without this contrivance it would have been difficult to secure their perfect apposition. The disfigurement was inconsiderable, which is attributable to the absence of sloughing of the lacerated cheek and mucous membrane—a result which was scarcely expected on admission.

WEST HERTS INFIRMARY, HEMEL HEMPSTED.

CASE OF FOREIGN BODY IN LARYNX FOR UPWARDS OF TWELVE MONTHS—RECOVERY.

(Under the care of Mr. AMBLER.)

Mr. H. Case, House-Surgeon to the Infirmary, has kindly furnished us with the following notes.

D. S., aged 50, farm labourer, was admitted into the West Herts Infirmary in September last suffering from chronic laryngitis. He had been attacked twelve months before with hoarseness and difficulty of breathing, and this had continued till a week before the date of admission, when he suddenly became much worse, being, as he said, nearly choked two or three times a day, so he sought relief as an in-patient. From the history it was looked upon as specific, and he was treated with pot. iodid., hyd. bichlor., and frequent mercurial inhalations, but without avail. He continued to be seized from time to time with paroxysms, threatening suffocation, and several times tracheotomy was about to be performed, but he generally rallied after the attack had lasted about five minutes. He experienced great relief from frequent inhalations of steam and a draught containing liq. opii sed. at night. He went on much in the same way for a month, when one morning he was seized with a violent fit of coughing and brought up some substance which he luckily kept; this turned out to be a bit of bone the size of a small bean, carious, much worn away, and resembling a portion of a neck of mutton bone, and had evidently been swallowed twelve months before. He left the Infirmary a week afterwards quite well.

ROYAL INFIRMARY, ABERDEEN.

CASE OF EMBOLISM FROM MITRAL DISEASE.

(Under the care of Dr. BEVERIDGE.)

Robert H., a tall thin man, was admitted into the Royal Infirmary, March 18, 1869, complaining of great debility. He had a slight cough with little expectoration, but no pain, and no symptom except weakness. He states that he has been ill for five weeks, and that his illness began with rigors. Loud tubular breathing audible over all the front and sides of the chest, and small crepitation behind; these sounds being distinct quite down to the base of the chest. A distinct though low bruit audible with the first sound of the heart, loudest at the apex, hardly noticeable at the base. A low bruit audible along the line of the abdominal aorta, but none along the iliacs; no tumour perceptible; liver and spleen dulness natural in extent; urine scanty, with deposit of lithates; sp. gr. 1032; no albumen; no sugar. It was afterwards ascertained that he had had an attack of acute rheumatism fourteen years ago. He was treated with wine and quinine, under which he gradually improved.

On the 23rd he was able to be up a little.

On the 29th the bruit over the abdominal aorta was scarcely perceptible.

April 3.—Respiratory murmur feeble, but distinct over all its natural extent; distinct bruit with first sound of the heart; distinct but low bruit audible behind over the thoracic aorta between the lower angle of the scapula and the spine; complains of slight pain there.

12th.—Able to be out.

13th.—Systolic apex bruit very distinct; low bruit over abdominal aorta in front; sharp bruit over the descending aorta behind at the level of the fourth dorsal vertebra. He continued improving, able to be out daily, and on April 24 was discharged, the systolic bruit, and that over the aorta below the ensiform cartilage, being still distinct.

Two days after leaving, he went out for an airing, caught cold, and was re-admitted April 30 much worse, very weak, and complaining of cough and expectoration.

May 9.—Sputa mixed with a little blood. After this he was entirely confined to bed, becoming gradually weaker.

25th.—Complains of pain in abdomen; systolic bruit plain; that over abdominal aorta low but distinct.

27th.—Bruit over aorta very plain.

29th.—Had hemiplegia of the right side last night; right radial pulse hardly perceptible, left natural. After a few hours the hemiplegia passed away, but the difference in the pulse at the two wrists remained very distinct; heart's action sharp and occasionally intermittent. Besides the wine and quinine which he had been getting, he was now ordered carb. ammonia in 5 grain doses, under which he rallied somewhat.

June 1.—Less difference between the pulse at the two wrists.

5th.—Pulse in two wrists nearly alike; systolic bruit distinct; abdominal bruit still more so, and now with decided pulsation.

10th.—Very weak; lies supine; takes little but arrow-root and wine; right radial pulse again weak; pulsation over abdominal aorta so well marked as to be noticeable to the eye; a feeling of fulness there like an ill-defined tumour, a bruit being audible along its right margin, but not along its left or centre.

11th.—Right radial pulse very weak; pulsation in femorals hardly perceptible.

13th.—Right radial pulse not perceptible; right hand and fore-arm colder than left.

14th.—Right brachial pulse not perceptible; the artery felt as a firm cord; pulsation of subclavians in neck alike; systolic bruit audible over all the heart, loud and musical in tone. breathing very laboured, loud and bronchial. Died at 11.30 p.m.

Post-mortem Examination fourteen hours after Death.—Body much emaciated; right lung adherent throughout by old filamentous bands, weighing forty ounces, firm, loaded with fluid, very œdematous, especially behind; left lung free, weighing thirty-eight ounces, œdematous like the right; heart large, weighing fourteen ounces; cavities enlarged, especially the left auricle, and next to it the right ventricle; tricuspid, pulmonary, and aortic valves healthy; mitral valve with its segments enlarged, thickened, and united, so as to form a cone with an opening at the apex only large enough to admit a finger; within the cone—that is, on the side next the auricle—was a mass of fibrinous material, light-coloured, and but loosely adherent to the valve, filling to a great extent the auriculo-ventricular opening; left auricle filled with a dark-coloured voluminous clot; thoracic aorta clear; lower part of abdominal aorta down to its bifurcation filled with several pale fibrinous masses similar to that on the mitral valve, obstructing the vessel almost entirely—a clot extending along and filling the iliacs; right axillary, where it becomes brachial, filled by a small fibrinous mass, the brachial vessels below being empty; coats of vessels natural; kidneys (weighing seven ounces each) large, pale, flabby, and much loaded with white deposit; rest of viscera healthy.

The diagnosis in this case was at first very obscure. The only symptom complained of was weakness; even the history of previous rheumatism was not obtained till shortly before death, and then not from the patient himself. The persistent bruits over the lower part of the abdominal aorta, and the occasional loud bruit over different spots of the descending aorta, seem undoubtedly to have been caused by the passage down the vessel from time to time of fibrinous masses, and their accumulation immediately above its bifurcation. The absence of the presystolic sound of mitral obstruction, with the presence of the mitral regurgitant sound, which, though low, was distinct, may be considered due to the weak action of the heart allowing the ventricle to fill by such a slow current as to produce no sound—a condition which would facilitate the collection of fibrinous masses behind the thickened valve. It would have been interesting to have ascertained whether the presystolic sound had been present at a previous time, as might have been the case when the heart was acting strongly; but on this point no information was procurable. The absence of serous effusion from any part of the body except the lungs, in the face of the great mitral obstruction and of the extensive disease of the kidneys, and the entire absence of albumen from the urine, were peculiarities not readily intelligible, and increasing materially the difficulty of diagnosis.

CASE OF LARGE FIBROUS TUMOUR OF THE ABDOMEN.

(Under the care of Dr. R. BEVERIDGE.)

James F., aged 29, labourer, a tall thin-faced man, was admitted into the Royal Infirmary, March 22, 1869, labouring under swelling of the abdomen and of the right leg. Noticed the right leg and thigh begin to swell about five months ago,

and, about a month after, observed a swelling in the lower and right side of the abdomen, which has rapidly increased to its present dimensions. Used to be full and florid in the face, but is now sallow and emaciated. Abdomen very prominent, measuring thirty-eight inches round the umbilicus; this prominence caused by a firm, hard, and somewhat movable tumour, occupying the right lumbar and iliac, the umbilical and hypogastric regions. The right edge of the tumour corresponds with the right side of the abdomen; the upper border is very plainly felt, and extends horizontally across the abdomen, a little above the umbilicus. The left border is not absolutely vertical, but presents a deep bay or sinus, as if a portion or lobe of the tumour projected from near its lower part farther to the left than the main body of it. A distinct break is noticeable towards the right side of the tumour in the form of a hollow passing vertically up from the centre of Poupart's ligament. Nothing seems to be in the groove, as there is no break in the dulness, and no break in the upper border. Tumour dull on percussion all over, fringed above and on the left by a clear border; the dulness quite distinct from that of the liver, which does not descend below its natural limits. Right thigh and leg very much swollen, firm, hard; superficial veins gorged and projecting. The measurements around this extremity are—middle of thigh, 24⅞ inches; upper edge of patella, 21½ inches; calf, 17⅜ inches; the corresponding measurements of the other side being 18½, 16, and 15½ inches. The legs swell rapidly when walking or sitting. Testes beginning to swell. Bowels regular, their action in no way interfered with by the tumour. Bladder very irritable, requiring to be emptied every two hours or thereby; quantity of urine increased—about five pints in the twenty-four hours; pale straw colour; sp. gr., 1005; no albumen. Great thirst. Pulse 60; heart's action slow, the pause being prolonged. Lies on right side; cannot lie on back from a feeling of weight and oppression, nor on the left side from a feeling of dragging.

The further history of the case is that of steady progress of the tumour. On the 29th it had reached half way to the ensiform cartilage, and on the 30th nearly up to it. The abdominal walls now began to slacken with the weight and distension, and the measurement round the umbilicus rapidly increased. On April 3 it was 39¾ inches; on the 7th, 41¼; on the 15th, 43⅜, and on the 19th, 43½. The mass now began to settle down into the pelvis, and the abdominal measurement had decreased by April 29 to 41½ and by May 5 to 41 inches; it then began again to increase. On May 27 it was 43½, on June 10, 46⅛, and on June 17, 46½. By rest the œdema of the legs subsided somewhat but then began again to increase, the right mid-thigh attaining by April 19 the dimensions of 26½ inches. The subsidence of the tumour corresponded with a partial diminution of the limbs, but they soon again increased, and ultimately the right extremity — always the larger of the two, although both were œdematous—measured at mid-thigh 27½ inches, over the knee 26, and round the calf 20, and this in spite of repeated puncturing allowing a nearly constant oozing of serum. The penis and scrotum repeatedly swelled up by œdema and were relieved by puncturing. About the middle of April the appetite began to give way and the strength materially to fail, but the action of the bowels was never interfered with. On June 28 he was seized with a faint while at stool, and was with difficulty got into bed.

29th.—Very weak, pulse 120, dyspnœa. He then rapidly sank, and died on July 4, about seven months after the tumour was first noticed and eight after the symptoms set in.

Post-mortem Examination Forty hours after Death.—Thoracic cavity considerably diminished in longitudinal diameter by the pressure upwards of the diaphragm and abdominal viscera. Lungs small, considerably congested and œdematous, but otherwise healthy. Heart healthy. The greater part of the abdominal cavity was occupied by a large tumour of an irregularly conical form, the base being above, flattened, and lying midway between the umbilicus and the ribs, the mass filling the whole of the lower part of the abdomen and pelvis, and confining the intestines almost entirely to the three upper regions of the abdomen. On each side of the posterior aspect of the base were two projecting lobes, but otherwise the whole mass was smooth, rounded, regular on the surface, and covered with peritoneum. Below it was adherent firmly to the posterior surface of the bladder, and partially in front by freshly effused lymph to the anterior wall of the abdomen, but the rest of the viscera were entirely free from it. An irregular pedicle attached it to the brim of the pelvis on the right side, extending from the point of emergence of the femoral artery, backwards almost to the centre of the sacrum; the posterior part of the pedicle passing down into the hollow of the sacrum, and upwards by the right side of the bodies of the two last lumbar vertebræ. On dissecting it from its connexion with the bones, the latter did not seem to be involved in the tumour, nor altered in their normal structure. The dimensions of the tumour were—vertical circumference 37 inches, horizontal circumference 28½ in., extreme length from above downwards 15 in., weight 25 lbs. Between the tumour and the brim of the pelvis, there was just room to carry the points of the fingers round in front and on the left side; the rectum entering the pelvis in its usual situation, and entirely unattached. Both ureters were involved in the mass, the left running along the side of it, the right imbedded about half an inch deep in its substance, each running behind one of the prominent lobes projecting from the posterior and upper part of the tumour. The upper parts of the ureters, above their point of attachment to the mass, were dilated to the size of an egg, and filled with urine; both kidneys were atrophied, especially the right, which was diminished to nearly half its usual size. The right iliac vessels were completely involved in the tumour, and their canals in a great measure obliterated; the left iliacs though pressed upon were not adherent. The right anterior crural nerve and all the upper branches of the lumbar plexus were free, but the genito-crural, obdurator, lumbo-sacral and anterior roots of the three upper sacral nerves, were all involved in the tumour. The right spermatic cord passed upwards in a groove on the fore part of the mass to its upper margin, where the spermatic vessels separated from it, while the vas deferens passed into its substance, where it could be traced for some distance, but finally became lost. The tumour externally was hard and fibrous; when cut into no juice exuded; in the centre was a soft yellowish gelatinous mass about the size of a hen's egg; the whole consisted of a thick compact fibrous stroma with a very few rounded and oval free nuclei, but no nucleated cells. The rest of the abdominal viscera, except in being displaced upwards, were natural. The rapid growth, large size attained, and quick action in lowering the system, of the fibrous tumour in this case, resembles more the action of a malignant growth than one of the simple fibrous structure presented here. But a consideration of the question of malignancy or non-malignancy renders it probable that the action on the system of any tumour (apart from local mischief which it may do by interfering with the function of important organs) depends more on the rapidity of its growth and the consequent serious drain upon the system, than on its intimate structure; and while the cellular or fibro-cellular growths of cancer as from their structure they grow most rapidly and extend most readily, so are usually the most certainly fatal, yet the above case shows that any tumour if it grow with sufficient rapidity to establish a serious drain on the system, may so interfere with the general nutrition of the body as to prove speedily and inevitably fatal.

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Medical Times and Gazette.

SATURDAY, JUNE 4, 1870.

THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH ON MEDICAL REFORM.

We have before us a petition addressed by the Royal College of Surgeons of Edinburgh to the Lords Spiritual and Temporal

in Parliament assembled, which embodies the views of the College on the subject of the Lord President's Medical Act Amendment Bill. The importance that attaches to an expression of opinion on the questions just now agitating the Medical Profession from a body holding the position of the Royal College of Surgeons of Edinburgh is at least sufficient to warrant our devoting some space to its consideration. As will appear in the sequel, the views held by the Edinburgh College of Surgeons are only in part those which we entertain, and which we believe to be for the benefit of the Profession. Nevertheless, we do not less appreciate the value of this petition because the genuine metal it contains is mixed with alloy. Thus far, at least, the College deserves the thanks of the Profession. As a public body it has the merit of speaking out, and of emphatically protesting against those alterations in the Bill which have made it no longer a measure embodying the "one portal to the Profession" principle.

The petition commences with the statement that the Edinburgh College of Surgeons have always advocated a Medical Reform which might tend by improving Medical education and examinations, to elevate the Profession, and benefit the public. The College believes that the Act of 1858 has done much towards the accomplishment of these ends, but they think that the time has come when it is necessary to amend the Medical Act of 1858 in various respects, and in an especial manner to render compulsory that which was only made permissory in section 19 of that Act—viz., the reduction of the large number of Boards by which licences to practise are conferred. Thus far, few will be found to disagree with the petitioners, who then go on to state:—

"That your petitioners are of opinion that the establishment of three examining boards — viz., one in each division of the kingdom, by the combination of the present licensing boards in some such way as that proposed by the Medical Act (1858) Amendment Bill, recently introduced into your Lordships' House, *if so arranged as to ensure that all without exception entering the Medical Profession shall in the first instance pass through the examination by one or other of these boards;* so arranged also as not to cripple, much less destroy, existing institutions; would effect every useful purpose."

We believe that the above paragraph of the petition embodies the only principle which can make a measure of the character of the Government Medical Act Amendment Bill desirable. We take to ourselves the credit of being the first to expose the fatal mistake of omitting from the Amended Bill clause 18 of the Bill as originally drawn. That omission, it will be remembered, leaves it open for all the existing universities and corporations to grant Medical degrees and diplomas to persons who have not passed the examinations prescribed in the Bill. The Profession seems now to be fully aware that by this omission the Bill is rendered valueless as a measure for producing union and uniformity; whilst, failing this benefit, many of its other provisions will prove simply injurious to the freedom and independence of Medicine. We know that remonstrances on this subject from other quarters besides the Edinburgh College of Surgeons will reach the Government. We entirely acquit Lord De Grey and his advisers of any desire to depart from the great principle which the Bill as originally drawn embodied. Their mistake has been in yielding to a pressure which has extracted the very marrow of their measure. A Bill which professes to enact that there shall be one legal examination and licence to practise, but which leaves it open to nineteen bodies to grant any Medical degrees and diplomas they like, as long as they are not called licences to practise, is of the quintessence of legislative feebleness — discreditable enough to any Government, but simply disgraceful to a strong one such as the present. The play of Hamlet with the character of the Prince of Denmark omitted is the only production to which the Bill as amended can be likened. The line of conduct, however, hitherto pursued by the Lord President suggests a hope. The fact that his lordship has yielded to the pressure put on him to spoil his Bill, seems to indicate that he may again yield to pressure from an opposite direction, and either restore its original principle or abandon Medical legislation for this session. Such pressure the College of Surgeons of Edinburgh have begun to exert, and we hope that their efforts will be strongly aided before the Bill leaves the House of Lords. Should, however, the "amended" Bill survive the Lords and emerge into the keener air of the Commons, the entire Medical Profession will have themselves to blame if it reach a second reading.

The history of the pressure which has been so unfortunately but successfully brought to bear on the Lord President of the Privy Council is already known to our readers. It was begun on the part of the universities, and especially on that of the governing body of the University of London, who complained that their privilege of granting Medical distinctions, which, as far as they were concerned, might be purely honorary, was interfered with. We believe that, were the Government concession to stop with the universities, although the principle of the Bill would be in a measure infringed, no great harm would really be effected. On the other hand, it may be fairly urged that it would have been far better that the principle of the Bill should not have been departed from, but that an arrangement should have been made whereby the sacrifice required from the universities might have been reduced to a minimum. The hardship of making each university graduate in Medicine pass a minimum examination before, and pay a nominal fee to a national examining board would have been infinitesimal. Were this done, the plea from certain corporations that they might retain the power of granting diplomas to unlicensed persons, could never have been maintained. This is the view of the case taken by the Edinburgh College of Surgeons. The petitioners "protest against the proposed exemption of graduates of universities from the examination by one of these combined boards, as inconsistent with the unity and impartiality of the Bill, and also as unnecessary, if intended as a means of keeping up university degrees at a higher standard than simple licences to practice, because it lies in the power of the universities to superadd to the minimum essential examinations of the conjoined board such additional subjects of examination, or such higher standards of examination in all or any of the subjects included in a Medical curriculum as they may think fit—additions which are clearly called for as distinctive of university degrees."

It is difficult to reply to this argument, and although as we have said, we should not have greatly objected to see the right of granting honorary Medical degrees under careful restrictions reserved to the universities, we think it would have been far better had their claims only been pressed so far as to secure for their graduates the compulsory national licence upon the easiest possible terms. The Bill, it will be remembered, has no provision for the mode in which the conjoint boards of examiners are to be formed, and, therefore, the universities as Medical authorities, have a perfect right if they please to claim to participate in their formation. This, at least, is a valid reason why the universities should not be exempt from all sacrifice of their existing privileges. If indeed the obnoxious majority clause—clause 30 in the Bill as originally drawn—should be allowed to become law, in two of the three kingdoms at least, the influence of the universities will outweigh that of the corporations in everything that relates to Medical education and examination. It is difficult, therefore, to see on what principle the universities claim special privileges over the corporations whilst they have a place in the list of the Medical authorities. Still, we believe that a carefully worded clause might secure to them the right of granting honorary Medical degrees without that entire abandonment of the main principle of the Bill, which the Government has been induced to permit.

With the concluding part of the petition of the Edinburgh

College we confess we cannot sympathise. The petitioners think that it is desirable, in order to secure for the General Medical Council the confidence of the Profession, and to increase their interest in its proceedings, that a certain proportion of the members of the Council—say four for England, one for Scotland, and one for Ireland—should be elected by the direct votes of registered Practitioners. They go on to show that this might be done without any material addition to the number of members of the Medical Council by the expedient of reducing the number of Crown nominees from six to two, and by providing that the president should be elected from among the members of the Council. By this means the petitioners suggest that the Council would only be increased in number from twenty-four to twenty-five. As to the proposal of electing members of the Council by the direct votes of the Professiou we have so repeatedly urged the arguments which, in our opinion, should conclusively negative it that we shall not now repeat them. But, putting aside the question of the propriety of direct representation, we would observe that the means by which the College proposes to fit the elected representatives into the already too large Council seem to us most objectionable. If there are any members of the General Medical Council who deserve and possess the confidence of all classes of the Profession, they are the members nominated by the Crown. It is proposed to discard two-thirds of these in order to introduce a class of persons whose want of other Professional employment, personal vanity, and love of notoriety, would lead them to offer themselves as candidates for the suffrages of the Profession. We are, forsooth, to expel from the Council-chamber such men as Sharpey and Stokes, Christison and Quain, Parkes and Rumsey, in order to put in their places the stump orators and busybodies of Medicine. It is to be regretted that the Royal College of Surgeons of Edinburgh should have weakened the effect of its weighty remonstrance on the amendments which have been introduced into the Bill by this most ill-advised suggestion. We know that the representative of the College in the Medical Council has heretofore been the advocate of the direct representation agitation, but we should have thought his experience of the Council would have led him to represent to his constituents the true worth to that body of a set of members who have no class interests to serve, and whose independent position has enabled them on more than one occasion to give support to measures of great value, which would certainly have been lost but for their unbiassed advocacy.

ADULTERATION OF FOOD AND DRUGS.

Lord E. Cecil has done good service to the country in the exposure of a sham, that sham being the Adulteration of Food Act of 1860. At the time of its receiving the Royal assent, it was obvious to all who had any acquaintance with the subject that Parliament might have been usefully spared the expenditure of time occupied in passing so lame a measure. It was at once pronounced unworkable, and, although some few local authorities went so far as to appoint analysts under the statute, they did so only as an experiment, paying no salary and expecting no result. We can scarcely blame them for this: the issue has proved that the predictions about it were true enough. The Act, from the day it was passed, has been a dead letter; not a single conviction under it has been obtained in the metropolis during the whole nine years that it has encumbered the statute-book. This is not because tradesmen have been frightened into honesty, for adulteration is as rampant amongst us as ever—nay, as competition has become fiercer, there is every probability that it is more rampant than in 1860, when the case was so bad that Parliament was compelled to notice it. Nor is it because chemists and microscopists have any difficulty in distinguishing between pure and adulterated articles, nor yet because Medical men hesitate in declaring the poisonous nature of some adulterations and the noxious character of others. They may differ occasionally as to the degree of noxiousness; but all agree in this, that to sell an article which, from admixture with ingredients other than those it is supposed by the purchaser to contain, is reduced in its normal nutritious quality, is a fraud not only upon the pocket of the purchaser, but a wrong to the stomach of the consumer, and an injury to his system. It is no excuse to say that, because the adulteration is made with a non-poisonous substance, the adulteration is a "harmless" one, and, as Mr. Bright is reported to have held, that the loss in quality of the article is compensated to the buyer by a reduction in the cost. This may be very well were the question whether a piece of woollen fabric might fairly be sold as woollen, at a reduced price, on account of its containing an admixture of cotton; but we have here to do not with that which has merely to keep in the warmth of the body, but with that which has to generate it, and to make the blood, flesh, and bones of Englishmen. In the two articles bread and milk, for example, surely it cannot be contended that injury of the most serious character is not inflicted by the reduction of their nutritive qualities from the adulteration which they systematically undergo at the hands of bakers and dairymen in London. It is impossible fully to estimate the mischief inflicted upon the children in the metropolis by the adulteration of these two articles alone. And the poor are the greatest sufferers. No elaborate proof is necessary to maintain the position that the lower classes, not to say the wealthier classes too, ought to be protected against evil practices which they are too ignorant to discover and utterly helpless to check. There is an abundance of cant uttered now-a-days, both in Parliament and out of it, about the "working man." Both of the great parties in the State are bidding for his support, yet Whigs and Tories alike have allowed him to be deluded for nine years with the notion that his food is looked after, and that provision is made that he and his children shall not be cheated by their baker, their grocer, their butterman, and their milkman. The Whigs have been loudest in their protestations, and have had the longest innings of power, so that they are the greater sinners; and now that a Liberal Ministry has a majority by which it can carry anything, it will be a disgrace to the party if they fail to construct and carry a Bill which shall make amends at last for the shortcomings of Parliament in this respect. There ought to be no difficulty in drawing a Bill that will meet the case. We know the rocks on which the existent Act has been shipwrecked, and if the Ministry is in earnest it will be easy enough to avoid them. First and foremost, the Adulteration of Food Act is what is called a "permissive" Act. Local authorities *may* appoint analysts, and *may* pay them a salary. It is very doubtful whether petty boards of tradesmen, such as many of these boards mainly consist of, are the proper authorities to be entrusted with the administration of such a statute; but, if they be retained, they should have no option as to whether they will or will not appoint and pay, and there should be a provision that they shall pay a salary such as may induce competent persons to undertake the office. A second fault in the Act is that it puts the initiative in the hands of the purchaser, who must go through certain elaborate forms, devised for the protection of the seller, before the article can arrive at the laboratory of the analyst. This should be amended by making it the duty of sanitary authorities to undertake independent inquisition, and by empowering them to take samples for analysis of any article of food or drink offered for sale. And further, it should not be placed upon the purchaser to prosecute as the individual injured. The principle should be established that the sale of adulterated food is an offence and injury committed upon the whole community, and the fact of such food being offered for sale ought to suffice for the action either of the sanitary authority or of a public prosecutor. Thirdly, the seller may now shield himself by denying a guilty knowledge; the only way of getting over this would be to assume the guilty knowledge,

and leave the onus of disproof upon the tradesman. A retail tradesman may, it is true, be imposed upon by the wholesale dealer; but then the law should be such as will allow of the crime being traced back to the really guilty person. Fourthly, the punishment on conviction should be such as a fraudulent tradesman shall feel, and desire to avoid in future. Few care for a fine, which, moreover, is rarely inflicted to the full amount on a first conviction. Publicity is above all things that which a seller of adulterated food would dread, and the publicity given to the conviction should be as perfect and complete as it can be made. And above all it should be a *local* publicity. The shop should be placarded with notices of the conviction such as all who run may read, and for a period to be specified in the sentence. This is the nineteenth century equivalent for nailing a man's ear to his doorpost. Its adoption would lead to one good result at any rate, that the penalty in pocket and in reputation would be commensurate with the offence. We have said nothing about drugs. The adulteration of drugs is specifically excluded from the purview of the present statute. Yet it is difficult to see why. For next to keeping people strong and healthy comes the importance of curing them when they are sick. Competition between wholesale houses should not for an instant be permitted to stand between the sick man and the life and health that he demands. Surely the State should provide that the Physician's office be not made a mockery. Here is no mere question of cost; the sick man has a right to expect that what is ordered for him he shall have. With him it may be a question of life or death.

THE ORGANIC MATTERS IN BREATHED AIR.

The May number of the *Journal of Anatomy and Physiology* contains a valuable and interesting paper on the organic matters contained in breathed air by Dr. Ransome, of Manchester. Notes on the researches of Dr. Angus Smith, and that gentleman's paper read the other week before the Medical Officers of Health Association, already published in these columns, have given our readers some inkling of this most important subject. Inasmuch as the sensational lecture delivered by Professor Tyndall at the Royal Institution has made the general public alarmed and anxious about the so-called atmospheric germs, it may not be amiss to lay before our readers how much and how little of such doctrines they are to believe and teach.

It really does not greatly matter who first called attention to the existence of organic matter in the atmosphere. We suspect the olfactory organs in the neighbourhood of decaying animal or vegetable matter must have in all ages taught man that these gave something to the air it did not naturally possess. So also, that human breath contained something of the same kind was only too evident in advanced phthisis or cancerous or other ulceration of the mouth, or, indeed, whenever there was decaying organic matter in the respiratory tract. It was not, however, till Dr. Angus Smith hit upon the ingenious plan of washing the air to be examined, and then analysing the washings, that anything like a certain knowledge was obtained of the amount of nitrogenous matter in the air. His results were certainly very extraordinary, showing that in Manchester there were as much as 7 parts of ammonia in a million of air, as evinced by the rain-water examined. Part of this ammonia was free or capable of being formed by such a weak oxidising agent as sodic carbonate, but there was, over and above this, a certain quantity capable of development by means of potassic permanganate. This is called the ammonia of albumen, but, whilst demurring to such a title, we are quite ready to admit that its presence indicates organic matter of some kind.

The question arises, What is this organic matter, and what are its effects? Every one is familiar with the overpowering sensations felt on entering a densely crowded building when one comes straight from the fresh air, but, as has been repeatedly shown, this could scarcely arise from the amount of carbonic acid present in excess over that in the openest space, for that is but small, and we are fain, therefore, to attribute them to this organic matter. It will, however, be understood that organic matter and germs are two totally different things. Organic matter being present in fluid and germs being deposited in this, the former will constitute an admirable nidus for the latter, and will promote their speedy development. We have, however, been taught that for organic matter to assume life some special and subtle influence is needed, but unfortunately the nature of this has hitherto remained undiscovered. One great question of the present day is whether specific germs are necessary to give this life, or whether the ordinary forces of nature, especially light and heat, are not capable of infusing this life-giving force. One thing is certain, to talk of all organic matters in the atmosphere as germs is absurd. Thus Dr. Ransome has proved, especially in cases of albuminuria, the existence of urea in air exhaled from the lung. Are we to hold that because urea is capable of being converted into ammonia, or of being destroyed by heat, that it is a living germinal matter? We should think not.

Dr. Ransome's experiments were conducted in a two-fold way—the breath exhaled was collected in a glass jar, surrounded by a freezing mixture, whereby its vapour was condensed, and its organic matter precipitated with the vapour. This was next analysed chemically and by the microscope; for our own part, we are inclined to place most importance on the latter line of research. Still, the other is undoubtedly useful as regards public buildings and large assemblies of men. By it he also found that in certain diseases the ammonia of the breath was diminished, by others increased. It was most abundant in Bright's disease and ozæna. Examined microscopically, the air, or rather its washings, was seen to contain in every instance epithelial scales in various stages of degeneration; in one case of kidney disease they were quite granular. Few spores were found in any fresh specimen, but after standing a short time they became exceedingly abundant, especially in alkaline fluid.

THE WEEK.

TOPICS OF THE DAY.

Mr. Candlish's Bill for amending the Vaccination Act of 1867, which is now before the House of Commons, is a very short one. Its principal clause is its third one, which provides that "no more than two orders shall be made under the thirty-first section of the Vaccination Act, 1867, for the vaccination of any one child." The effect of this clause is simply to limit the penalties for the neglect of vaccination to two fines, after the payment of which, in any given case, the law will have no further power to enforce vaccination. Whether this will pacify the anti-vaccination agitators we cannot say, but it appears to us a very illogical attempt to get out of a difficulty. If it be a right thing for the protection of the public, as well as the protection of the child, that the State should order its vaccination, and in case of disobedience on the part of the parent impose a fine, the State certainly ought to have the power of repeating the punishment until the law is obeyed. As it is, supposing Mr. Candlish's Bill to become law, a magistrate levying the two fines will be in the same position as a priest who sells indulgences. If it be only the intention to obtain a revenue out of the anti-vaccinationists, it would be a more logical proceeding to pass a law that every parent who refuses to have his child vaccinated should pay once and for all a certain sum to the State. If, on the contrary, it is held, as we believe, that vaccination is for the good of the population, and if also it be held to be the duty of the State to compel all to be vaccinated, there can be no question that this clause is wrong in principle. It simply permits a certain sum of money to be paid for the privilege of breaking the law—a sum of money which to a rich man would be nothing

but to a poor a very considerable fine, and in default of payment there is imprisonment. We cannot believe that the House of Commons would accept such a solution of the difficulty. The fourth clause provides a new form of certificate of unfitness for vaccination, in which the certifier must state the particulars of the condition of the child which unfits it for undergoing the operation. The fifth clause provides that the prosecutor in a case of infringement of the Vaccination Act shall be entitled to examine any certificate produced by the defendant, and to require that a certified copy may be taken of it, which at any future time may be produced as evidence of the contents of the certificate and of the name of the person making it. For our own part, we have always maintained that a Government have at their command other and better means of inducing the great mass of a population to submit to vaccination than by fines and imprisonment. The epidemic which is now experienced in Paris is a proof of how dangerous it is to shake the confidence of a population in vaccination; but the very way to foster a sect of anti-vaccination fanatics and agitators is to visit the neglect of vaccination with punishments which may be construed into persecution.

At the next meeting of the Council of the Royal College of Surgeons, which takes place on Thursday, June 9, Mr. Gay's motion in favour of the direct representation of the Fellows and Members of the Royal College of Surgeons in the General Medical Council will come on for discussion. We need scarcely say that its chances of being accepted are very doubtful. For ourselves, we should gladly see the Fellows and a certain proportion at least of the Members represented through the representative of their college. Mr. Gay, however, proposes that the Council of the College of Surgeons should forward to the Privy Council an expression of their opinion that provision should be made in the Medical Act (1858) Amendment Bill for the direct representation of the Fellows and Members of the College in the General Medical Council. We think that, were such a resolution carried, the obvious reply of their lordships would be that the College was already represented in the General Medical Council, and that it was therefore only necessary for the Council to grant the franchise to the Fellows and senior Members to give effect to their opinion. If this cannot be done without an alteration in the charter of the College, we presume that if the governing body of the College wished it, such an alteration might be obtained without any great difficulty.

At the same meeting of the Council, the Examiners in Medicine and Midwifery, the two Hunterian Professors, the Professor of Dermatology, and the Lecturer on Anatomy and Physiology, will be nominated for the ensuing year. The resignations of their examinerships by Sir William Fergusson and Mr. Quain will be received, and a day will be fixed for the election of their successors. Mr. Hilton's term of office as an examiner expires on July 4. He is eligible for re-election.

A case was heard on Monday last at the Guildhall, before Sir Robert Carden, in which one Matthew Allison Orr preferred a charge of assault against one John Philpotts. The details of the case are of no interest, but it appeared that Orr carries on the business of an advertising agent, and that he is employed in procuring the insertion of indecent quack advertisements in newspapers. In the course of hearing the case, Sir Robert said "he wished it to be distinctly understood that the prosecutor (Orr) asserted the *Daily Telegraph* would insert for 30s. an advertisement of the kind read, whereas an ordinary advertisement would cost 5s. They would charge 30s. in consequence of its filthy nature. He did not believe it, nor did he believe they would let it go in at all, and he hoped that the matter would not rest here." Mr. Orr replied that he had put such advertisements into the *Daily Telegraph* over and over again for 30s., and that he could get them into any paper in England. On the following day, Mr. Montagu Williams appeared at the Guildhall on behalf of the proprietors of the *Daily Telegraph*, and said he was instructed by the head of the advertisement department to state that, as far as the *Daily Telegraph* is concerned, the advertisements referred to have never appeared in its columns, and on no account whatever would they be admitted; that all advertisements which could be traced to Mr. Matthew Orr had for many years been rigorously excluded, and that no advertisement involving the inclosure of stamps for reply is ever received in the office of the *Daily Telegraph*. On Wednesday, however, the *Times* reports that Orr attended again at the Guildhall and handed to the magistrate a receipt of 20s. for the insertion in the *Daily Telegraph* of the following advertisement:—"To Ladies only.—Dr. Bruce, late of the United States, is now in England. His pamphlet on all delicate or doubtful cases sent, post free, for eight stamps. Address, Dorking, Surrey." We must wait to hear what explanation the proprietors of the *Daily Telegraph* have to offer of Mr. Orr's receipt. We can only hope that the receipt may have been taken many years back, and that a journal which is constantly boasting its large circulation no longer opens for gain its columns to this kind of pestilential filth.

A preliminary meeting has been held in Edinburgh for the purpose of inaugurating a movement for a national monument to Sir James Simpson. The Earl of Dalhousie presided. If a monument be erected in Edinburgh we trust that the proposal for at least a bust in Westminster Abbey will not be abandoned. Simpson, although a Scotsman, was a man of whom Englishmen were justly proud. As was said of another great northern light, if only each person whom he has benefited by the discovery of chloroform gave sixpence to his monument he would have a memorial which would be eclipsed by no royal mausoleum.

We hear that an inspectorship of vaccination is vacant. The gift is in the hands of the Lord President of the Privy Council.

The candidates for the vacant post of Assistant Medical Officer at Bethlehem Hospital, are Dr. Rayner, who was at one time House-Surgeon at St. Thomas's Hospital, and has since been at the head of a private lunatic asylum, Mr. Eager, M.B. Lond., a distinguished student of Guy's Hospital, and Mr. Walter Hood, son of the late Treasurer. Of course the last gentleman enters the lists with peculiar advantages.

There is another candidate for the Obstetric Chair in Edinburgh. Dr. Coghill, who was at one time demonstrator in the University of Glasgow, and has since been engaged in practice at Shanghai, has sent us a printed address to the curators.

THE EPIDEMIC OF SMALL-POX IN PARIS.

The fearful extent to which this epidemic has prevailed may be seen from the following figures, exhibiting its undeviating progress since November, when the great number of deaths from small-pox began to excite attention. It may be observed that our knowledge of the number of deaths occurring from week to week from this, as well as from the other zymotic diseases, is due to the publication of weekly excerpts from the registration returns by the Paris municipality. Such publication had been long resisted and would probably have been yet deferred had the occurrence of the epidemic been anticipated. No such returns were obtainable during the prevalence of the last epidemic of cholera, nor indeed were they made until quite recently in any other form than that of a monthly bulletin published long after date. The plea upon which the publication was resisted was the fear of causing public alarm and panic; and in a city depending so much on the influx of foreigners from all parts as Paris, the production of a panic would be naturally avoided. But we are glad to find that the authorities have at last taken a bolder and juster view of the matter, for although the figures officially published naturally

cause great alarm, their concealment in mystery would only increase this tenfold and give rise to the grossest exaggeration.

The deaths by variola registered in a population estimated at about half that of London were as follows:—November, 90; December, 104; January, 183; February, 302; March, 411; April, 518; May, 725. Total for the seven months, 2333. The three former epidemics which have occurred in Paris since the introduction of vaccination persisted for six or seven months, as M. Vacher shows in an interesting article quoted in our number for April 23, and were attended with even a higher mortality than the present one. This, at all events, shows no signs of decline, the highest number of deaths—218—having been registered for the week ending May 28. M. Vacher also states that young infants are the greatest sufferers in the present epidemic, furnishing $\frac{1}{6}$th of the mortality from this cause, while they contribute but $\frac{1}{130}$th of the entire population. This he attributes to the great delay that takes place in their vaccination; and there can be no doubt that the defective organisation for the practice of vaccination, and the neglect of the preservation and propagation of the Jennerian virus, lie at the bottom of this reproduction of a scourge, which can only be looked upon as a disgrace to the sanitary provisions of the nineteenth century, in a country whose admirable organisations are always being held up for our imitation. Much responsibility attaches to those official personages, who, intrusted with the direction of the vaccine establishment under the supervision of the Academy, in place of endeavouring to augment and perfect the insufficient means of supplying the Jennerian virus at their disposal, have opened their ears to the wildest tales concerning its impurity, and have given such encouragement to its supercession by the heifer virus, that it is now rarely to be had, and has become so commingled with the new virus, that Practitioners know not what they are using, and have to record the most unsatisfactory results of the employment of that which they can gain access to. The mass of the French Practitioners retain a lively faith in the efficacy of the Jennerian virus; and it is to be hoped that when the present panic has subsided, they will insist upon an efficient organisation for its due and plentiful supply, such as we now have in this country. Otherwise, the same scenes which now prevail will be certain to recur, and general confusion and panic, vaccine congresses, and tumultuous and insufficient revaccinations, will again be the order of the day.

MR. NUNNELEY, OF LEEDS.

The death of this distinguished Surgeon and Medical jurist is announced. Mr. Nunneley was only in his 62nd year, and when in London on a recent public occasion seemed in his usual health. Mr. Nunneley died on June 1. We shall take an early opportunity of furnishing our readers with some particulars of his life.

THE LATE DR. PRICE.

We regret to announce the death of Dr. Price, of Margate, one of the best known and most respected of provincial Medical Practitioners, and the senior Fellow of the Medical Society of London. Dr. Price died on May 30; he was in his 83rd year. We hope in an early number to give a memoir of one who was so well known and highly valued.

THE EASTBOURNE COLLEGE.

The President of this College, the Duke of Devonshire, has determined to take steps for the immediate erection of the permanent buildings. The site selected is the pretty spot known as Larkfield, on the slope of the South Downs, and near the sea. The land immediately surrounding it has been assigned to the College for cricket fields, etc. We are glad to find that Dr. Hayman, of Eastbourne, who was the chief originator of the College established in 1867, has proposed and carried in Council that the sons of clergy and Medical men should be educated at the College on reduced terms.

THE DIFFUSION OF SCARLET FEVER.

We have heard, on good authority, that, on the reassembling of the pupils of Marlborough College after the Easter recess, seven of the boys were found to be passing through the desquamative stage of convalescence from scarlet fever. Such utter carelessness or selfishness on the part of parents ought not to be allowed to pass unnoticed. The plea of ignorance can hardly be advanced on behalf of persons in the social position which enables them to send their boys to such a school. It is gratifying, however, to state that, in the present instance, from the precautions taken, no cases of scarlet fever have occurred since the return of the boys.

RELAPSING FEVER IN ST. GILES'S.

Dr. Ross, the Medical Officer of Health for St. Giles's district, in a very elaborate report on relapsing fever, in his district, analyses with great minuteness all the facts and circumstances connected with the disease, and draws the following inferences:—

"1st. That there is a specific poison that induces relapsing fever.

"2nd. That among personal and domestic influences, privation and overcrowding are the most powerful causes that call the virus into activity.

"3rd. That the epidemic character of the fever is chiefly determined by

"*a*, Infection both by personal contact and fomites.

"*b*, Meteorological phenomena, among which the most important are, a temperature ranging between 26·3° and 54·2°, a deficiency of ozone in the atmosphere, high winds blowing from West and South, and heavy rainfall.

"These inferences are offered as the result of inquiry into the facts recorded; and are open to question. The collocation of a larger number of facts may justify the correction or qualification of the inductions I have arrived at; yet, I cannot but believe that this investigation of the phenomena of the epidemic as observed in St. Giles's district will prove useful to sanitary science."

CRIMINAL ABORTION?—RUPTURE OF THE UTERUS.

An inquest held in Islington upon the body of a woman who had been attended by two Surgeons, one of whom is said to be a homœopath, has resulted in the verdict that "deceased died from an operation performed on her, and that that operation was to procure abortion; but how or by whom that operation was performed there is not sufficient evidence to show." The Surgeon on whom the suspicion rested did not make his appearance. He is said to be an old Practitioner who has virtually retired from his profession, and there does not appear to have been any pecuniary motive for the performance of a criminal act. All that came out was that he performed some operation on the Monday, which he himself said was for piles. The woman died on the Thursday, after exhibiting symptoms of peritonitis, and after death the uterus was found to be ruptured posteriorly, while a four months' fœtus and the placenta were found lying in the abdominal cavity. There was no laceration of the vagina, nor any sign of injury to the mouth of the uterus. Dr. Popham, who made the post-mortem examination, declined to give a definite opinion as to whether the rupture had occurred naturally, or whether it had been produced by an instrument tearing through the organ. His hesitancy arose from the fact of cases being on record in which rupture of the uterus had occurred during the early months of pregnancy. He stated, however, that no operation for piles had been performed. The result of the inquiry is not satisfactory, inasmuch as a good deal has not been explained. The tissue of the uterus was said to be healthy. The same is said to have been the case in an instance of spontaneous rupture at the fourth month recorded in the *Glasgow Medical Journal*

for October, 1861. If this rupture had been really caused directly by any instrument, as suggested, the force used must be believed to be such as it is difficult to imagine any educated Surgeon would use with the object of procuring the expulsion of the fœtus. On the other hand, a rupture of a healthy uterus at the fourth month resulting from efforts at expulsion criminally induced would be a curious event. The woman was a married woman living apart from her husband, and she is said to have had a child before.

A HEALTHY WORKHOUSE THE WAY TO ARREST AN EPIDEMIC.

Mr. Francis Godrich, the Medical Officer of the Workhouse of St. George's, Hanover-square, at Little Chelsea, has just issued a very satisfactory report to the guardians on the parish being united with that of St. John and St. Margaret, Westminster. We quote from the report to show how, with unity of action on the part of the officials, and liberality on the part of the guardians, immense benefit can be conferred on the poor, and that, too, in the long run, at no increase of expenditure on a loose and niggardly system. The mortality is exceedingly low, considering that the house contains a great number of aged persons and young children. Here is the way an epidemic of measles was met and conquered:—

"You are aware that in November last a severe epidemic of measles broke out, and in a very few days we had sixty cases, which subsequently increased to seventy.

"Immediately on the appearance of this disease, I took the fullest advantage of your generous permission—viz., to meet all sudden emergencies in the most prompt and efficient manner, regardless of expense, and without waiting for your formal sanction.

"I broke up the general educational routine, and directed that all the children not affected should be taken out twice a day from the building. I hired, for the time, a nurse, kept away all persons likely to spread the infection, and isolated all the sick in the upper floor.

"For the cordial assistance of the master and matron, I beg to express my deep thanks. They had room after room placed at my disposal, every possible care with regard to cleanliness being taken, and the sanitary condition of the rooms most assiduously attended to; all the floors, passages, and paint were thoroughly scoured and treated with disinfectants, as were also all the beds and bedding.

"Under these favourable circumstances every child passed through the disease favourably, and in about a month all had returned to their usual occupations.

"At the same period, a serious attack of the same disorder broke out in the adjoining parish, and ont of 19 cases 10 died.

"I ought to mention the extreme care taken by your officials to eradicate this disease. Each child had a bed to itself, and no child slept in a bed for more than one week, when it was taken away and purified. Four times the flock was taken out of the 70 beds, thoroughly picked, sifted, and exposed to a temperature of nearly 200 degrees for many hours; all the bedding was soaked for a length of time in a solution of carbolic acid, then scoured, and exposed to the atmosphere.

"This involved the labour of purifying 280 beds and bedsteads, 1920 blankets, 280 quilts, 560 sheets, and also of picking and disinfecting 7000 lbs. of flock.

"The fact of every child passing through the epidemic of measles without one dangerous symptom, I attribute to their sound health, to the free and extensive use of disinfectants, good ventilation, extreme cleanliness of every part of the building, and to careful nursing. The weather (beginning of December, 1869) was boisterous, wet, and cold, conditions very unfavourable to disease.

"Number of children attacked from 2 to 6 years of age, 30; ditto, ditto, 6 to 15 ditto, 40.

THE MUTINY ACT *versus* MARRIAGE.

The condition of the families of our soldiers, whether married with or without leave, exerts such a powerful reaction upon the hygienic and moral welfare of our whole army, that every measure suggested for its improvement is of national importance. Whatever may be the hardships endured by a soldier's wife "married with leave"—and they are universally admitted to be very great—they sink into insignificance when contrasted with the lot of her who has been enticed into marriage with a soldier who is not one of the 10 per cent. who enjoy the small privileges dependent upon being on the married strength of the regiment. Not only have such unfortunate women no regimental *status*, but, according to the present provisions of the Mutiny Act, they are actually deprived of all the claims to maintenance for themselves and their children which in civil life the law exacts from husbands according to their means. A worthless and dissipated husband, as matters now stand, can, by the simple act of enlisting as an unmarried man and putting himself under the demoralising ægis of the present Mutiny Act, shake himself free from all the unpleasant responsibilities of wife and children. Soldiers, also, by the same authority, are, if so disposed, endowed with a like immunity. No marriage, whether by clergyman or registrar, gives a woman any claim upon a soldier unless he belong to the few who can marry "with leave." The "Queen's shilling" can thus be turned to the unworthy and immoral use of obliterating the most sacred ties which can exist between human beings.

To none are the painful and heartrending results of such a system more obvious than to the Medical officers of the army. Hardly a day passes on which the sympathies, Professional and personal, of the regimental Surgeon are not aroused by the piteous appeal of the pale, emaciated woman—the lawful but, by the Mutiny Act, unrecognised wife of a British soldier—on behalf of herself or her anæmic, ill-nourished child. Regimental funds and—to their credit be it said—the private benevolence of the officers and ladies of the regiment have thus many heavy demands to meet. This matter has, we believe, lately occupied a large share of the attention of Mr. Cardwell, who, we hear, proposes, by an alteration of the Mutiny Act, to render the soldier who marries without leave liable to a certain deduction from his pay for the support of his wife and family. Such a measure would no doubt be most beneficial, not only in removing the irresponsibility of the soldiers who contract such marriages, and thereby to a great extent preventing them, but in rendering the position of the poor women and their children less intolerable. Fines for drunkenness, short enlistments, a more judicious system of payment of bounty, prize money, and working pay, and the rendering the soldier married without leave liable, within his means, for the support of his wife and family, are all measures in the right direction, and will tend to render memorable the administration of army affairs by Mr. Cardwell.

FROM ABROAD.—THE FRENCH ANTI-TOBACCO SOCIETY—TREATMENT OF RANULA.

The prize system is an agent in the efficacy of which much more confidence is placed by the French than by ourselves. Not only is it extensively used by them as a means of stimulating scientific research, and of encouraging and directing the energies of the laborious worker, but it is brought into play in the repression of social abuses, the development of benevolent action, and the reward of meritorious conduct. However beneficial some of its results, it not infrequently—as, for example, in regard to some of the Monthyon prizes—gives rise to factitious sentimentality and a mischievous love of publicity. However that may be, the confidence in it seems as strong as ever, so that all new societies at once turn to it as one of their most promising engines of operation. The Infant Protection Society have extensively used it as a means of teaching mothers duties that ought to have been instinctive, and of rewarding hireling nurses for the effectual discharge of engagements which the absence of parental supervision had left with them as a matter of conscience. And now we have the French Association against the Abuse of Tobacco coming into the field, under the experienced generalship of M. Jules Guérin, with its battery of prize questions, directed against the habit of smoking, ever on the increase. In an eloquent discourse at a recent meeting of the society, he set forth the three questions first to be taken in

hand. First of all, it is sought to enlist the sympathies and active co-operation of non-smokers by an appeal to their fears as well as to their tastes. Hitherto what they have endured has been regarded as a simple nuisance or infringement of their personal liberty, but they are now reminded that the air they are compelled to inhale when laden with these noxious fumes contains a virulent poison, in however infinitesimal a quantity, that cannot be introduced into the system with impunity. These are therefore taken into consideration in the prize question, "What are the Effects of Tobacco on those who do and those who do not smoke?" The second question, "What are the Limits assignable to the Use and Abuse of Tobacco?" we fear stands little chance of being impartially judged by an anti-tobacco committee; and we would certainly advise competitors disposed to allow a tolerably broad margin to a practice that has secured the sympathies of so many millions to withhold their pens. The third question shows an appreciation of the limits of practical action. M. Guérin throws the old, inveterate smoker overboard entirely as an irreclaimable not worth wasting powder and shot upon, just as our social reformers are obliged to give up the adult criminal as a bad job. It is the young the society especially has in view, and even these it apparently means to deal with in detail when it asks, "What are the means of preventing or opposing the use of tobacco by young operatives in workshops?" The collegians, "gents," and rising generation in general will no doubt afford ample subjects for specialised questions hereafter. In the meantime, M. Guérin calls for a more active co-operation on the parts of the members of the association in their own spheres. Parents must recompense with suitable rewards those good lads who have known how to resist the contagion of bad example, or have found out the means of concealing the odour of the pestiferous weed. Ladies are besought to ward off from the pure breath of their daughters the poisonous fumes of the smoking aspirants; while their *salons* should be open to those only who prefer the charms of their society to the brutalising torpor of the pipe. Lastly, masters in search of servants and *employés* are requested to give the preference to those who have not yet contracted this abominable habit. The whole programme breathes an air of confident simplicity that is quite refreshing, though not very reassuring.

The treatment of ranula, which seems to be one of those subjects ever open to discussion, was brought before the Paris Surgical Society at its last meeting in the shape of a case of congenital ranula occurring in an infant, related by M. Blot. The tumour, which was perfectly transparent, and large as a hazel nut, pushed the tongue upwards and impeded its movements, especially during sucking. After hesitating as to which of the different procedures he should adopt, M. Blot traversed the tumour with a tenaculum, and, drawing it out, excised it; and at the end of three weeks the infant remained cured of its malady. M. Marjolin, at the commencement of his practice, was an advocate of excision, but he had renounced it in consequence of the more or less serious hæmorrhage he had in several cases seen it give rise to, requiring in some of these the actual cautery for its arrest. Since then he has employed a seton of one or more threads, which is allowed to remain *in situ* for a fortnight, a month, or even longer. Suppurative inflammation is set up, which leads to obliteration and a radical cure. When the children are some years old, he renders the seton more irritating by soaking the threads in tincture of iodine. M. Marjolin states that his practice is unattended with any inconvenience, impeding neither sucking nor feeding, and has never needed to be repeated. M. Chassaignac, however, does not approve of the seton, as it sometimes gives rise to extremely violent inflammation, tumefaction of the tissues, and excessive suppuration—inconveniences, indeed, which may attend the seton applied in any part of the body. He prefers the application of a small drainage tube, which traversing the tumour may be secured to it, and which gives rise to only a very moderate degree of inflammation. As to excision, he has never had resort to it in consequence of his fear of the hæmorrhage it might give rise to. M. Blot observed that the bleeding was not to be feared in the case of transparent tumours like the one in question, and in which he has never found it attended with this or other inconvenience. M. Forget remarked that the procedure employed should vary according to the nature of the case and the age of the patient; and in transparent congenital ranula he agrees with M. Blot in regarding excision as the best procedure. M. Giraldès also advocates it in the case of new-born infants as the most simple, rapid, and efficacious means of treatment, and prefers it much to the seton, which is very inconvenient. As a general rule, it does not give rise to any serious bleeding, especially when this is arterial, which usually stops of its own accord through the retraction of the walls of the artery. It is the venous hæmorrhage which is most to be feared and difficult to arrest, because its source is not discoverable. In his own practice, M. Giraldès has found excision the best operation for children under two years of age, drawing out the tumour to be removed by means of a claw-forceps, or, in the absence of this, a tenaculum or a thread passed through the tumour by means of a curved needle. M. Guéniot has cured a ranula the size of a hazel nut, occurring in a child a few weeks old, without excision, or, so to say, without an operation at all. While about to perform excision, which he, too, regards as the best procedure, he burst the thin walls of the little sac and discharged all the fluid. It was reproduced, but, after having been discharged again in a similar manner, the cyst never recurred. As to hæmorrhage following excision, he believes that we should make the same distinction as we do with regard to the frænum linguæ, the incision of which is sometimes attended by hæmorrhage. The frænum is sometimes extremely delicate and transparent, and then no effusion of blood attends its incision; but at others it is thick and fleshy, and then even a dangerous hæmorrhage may occur. It is precisely the same with ranula. M. Guyon drew attention to the fact that suppurative inflammation set up for treatment of ranula might extend by the dilated Warthon's duct to the salivary gland and give rise to very mischievous consequences; excision should therefore be preferred.

PARLIAMENTARY.—SALE OF POISONS (IRELAND) BILL—A HALFPENNY CARD POSTAGE—FALSE WEIGHTS AND MEASURES, AND ADULTERATION OF FOOD, ETC.—VACCINATION ACT (1867) AMENDMENT BILL.

On Thursday, May 26, in the House of Commons, the Sale of Poisons (Ireland) Bill was read a second time.

On Friday, Dr. Playfair asked the Postmaster-General whether the Government had come to any resolution in regard to the establishment of a halfpenny card postage, a memorial in its favour having been some time since presented to the Postmaster-General, supported by the signatures of members of Parliament, of mayors and merchants of many towns in the United Kingdom, of members of learned societies, and of a large number of officers of volunteers.

The Marquis of Hartington: I am very glad to say that the Government have decided in conjunction with the reduction of postage on newspapers and printed matter to adopt a halfpenny card postage (hear, hear); that is to say, cards will be issued bearing a halfpenny card stamp, on one side of which an address will be written, and on the other any communication, whether in writing or in print. We believe that this will be a great accommodation to the public (hear, hear), and on account of their uniform size, light weight, and small bulk, be extremely convenient to the Post Office, which will be able to deal with them with much greater ease than ordinary letters. At the same time, as they will afford a means of very brief communication, they will not materially interfere with the revenue of the Post Office.

Lord E. Cecil moved a resolution calling on the Government to deal as early as possible with the defective state of the law for punishing the use of false weights and measures and the adulteration of food and drink. By way of supplement to his speech of last year, he gave some additional details of these practices, and in answer to Mr. Bright's suggestion that they

were merely a form of competition, he showed that these frauds fell with great force on the poor, who could not protect themselves. The evil could only be dealt with by the Government, which had hitherto thrown cold water on the efforts of private members, but no legislation could be successful which was not compulsory. He suggested, also, that inspectors and analysts should be appointed by the local authorities, with an appeal to a central analyst, and, above all, though he would not revert to the strict letter of the sharp and severe punishments of our ancestors, of which he read some striking examples from the *Liber Albus*, he was for giving the fullest effect to the spirit of them—publicity.

Mr. T. Hughes seconded the motion.

Mr. Bruce admitted that the law, both as to adulteration and short weights, was full of defects capable of removal by legislation. But he was not very sanguine about the power of even the strongest Government to deal with them, for "independent memberdom" would assert itself at once if a proposal were made to cover the country with an army of inspectors and analysts. The subject of weights and measures was under the consideration of the Standards Commission, and must necessarily be dealt with next year; and, with regard to adulteration, he would go no further than to promise it his fullest consideration with the admission that mere permissive legislation would be useless.

After a debate in which Mr. Cave, Mr. Muntz, and others took part, Lord E. Cecil withdrew his motion.

On Monday the Sale of Poisons (Ireland) Bill was passed through Committee.

On Tuesday, on the order of the day for the second reading of the Vaccination Act (1867) Amendment Bill,

Mr. Monk said this was a Bill which enabled persons who had broken the law and had been fined twice to break the law for ever afterwards with impunity. The House required more time to consider a Bill of this importance, and he therefore moved that the debate be adjourned.

Mr. Gilpin said a large and increasing number of persons believed that the Act requiring compulsory vaccination should be modified.

Mr. Cross agreed that there was a large amount of dissatisfaction with the present law, but the Bill could not be discussed that night.

Mr. W. E. Forster hoped his hon. friend (Mr. Candlish) would assent to the adjournment of the debate. The Government were prepared to assent to the principle of the Bill, feeling that the Vaccination Act would be strengthened in its operation by the Bill; but the House was hardly prepared to discuss so important a matter at that time.

Mr. Candlish consented to the postponement of the debate.

The debate was then adjourned till Thursday week.

ROYAL UNITED SERVICE INSTITUTION.

The lecture on military hygiene delivered by Staff-Surgeon Dr. de Chaumont in the Royal United Service Institution on the afternoon of Friday, the 27th ult. was well attended by both Medical and military officers. Sir T. Galbraith Logan, M.D., K.C.B., Director-General of the Army Medical Department, occupied the chair. From the immense variety of subjects embraced by it—every condition and circumstance, in fact, by which bodily health is influenced—hygiene, or the application of the rules of health, must be considered rather as an art than as an exact science. In the civilisation of the Greeks and Romans it held a place much higher than that which it now occupies among ourselves. The athletic games, the baths, the aqueducts of ancient Greece and Rome, indicate how highly prized the *mens sana in corpore sano* was in those days. The decline of the study and application of hygienic rules, and the contempt for the welfare of the body, extolled into an actual virtue by the gloomy asceticism which marked the priestcraft of the middle ages, and which canonised the hideous mass of filth and fanaticism known as Simeon Stylites, was followed, as a natural result, by epidemics of an extent and virulence such as have been unknown for many generations. The revival of public attention to the subject of hygiene has no doubt resulted in a very marked improvement in public health, although it cannot yet be said that the average of human life has been prolonged, or that the ideal stage of perfection has been reached, in which death results only from accident or natural decay.

With special reference to the results of the application of sanitary science in the army, the lecturer remarked upon the reduction of the mortality of soldiers within the last fifteen years to about one-half of what it had previously been. This reduction had taken place in two diseases—namely, pulmonary consumption and typhoid fever; the former traceable in many instances to the breathing of the impure atmosphere which results from overcrowding and defective ventilation; the latter to the drinking of water contaminated by sewage.

On the subject of ventilation of barracks and Hospitals, the Sanitary Commission, presided over by Lord Herbert, in 1858, had made many important recommendations, which, however, have as yet been only so partially carried out, that in no Hospital or barrack in the United Kingdom, except at Netley and Hilsea, has the standard of ventilation as regards the number of times during which the atmosphere of a barrack room should be changed during the hour—namely three—been attained. Dr. de Chaumont illustrated this by a table, which we hope to reproduce on the publication of his lecture.

The importance of diet and the influence of a due amount of nutritive material in the proportions best calculated to maintain the health of both body and mind were next fully noticed. In the case of our soldiers the lecturer demonstrated the points in which their present ration is deficient, as compared with the standard daily diet of a healthy adult man doing an ordinary amount of work—namely, in nitrogenous material and salts, in the latter the chief deficiency being in the salts of potash, which exist both in animal and vegetable substances, but some of which he thinks might be advantageously added from without. The views of Liebig and Lyon Playfair as to the relative properties of the carbo-hydrate and nitrogenous materials of food, particularly as to the supposed effects of the former in the causation of animal heat, and of the latter in the repair of the muscular tissue, whose waste supplies the physical force manifested by the individual, were contrasted with those of Pettenkofer, Parkes, Haughton, and others, which tend to show that excessive waste of tissue does not result in increased elimination of nitrogenous matter, which would be the case if the Liebig views were correct. The best preparation for the maintenance of health and efficiency during the exigencies of war being a high standard of health and muscular vigour among our soldiers during peace, Dr. de Chaumont proposes a new scale of war ration, which seems to fulfil all dietetic requirements, and which we hope soon to publish *in extenso*. There may be some comfort in observing that the dietaries of all Continental armies are deficient as well as that of our own. The respective histories of our own and of the French armies during the Crimean war—particularly during the second winter—of the Chinese Expedition in 1860, and of the Abyssinian campaign, afforded ample illustrations of the disastrous results of defective administration, and of an ill-fed army, as also of the advantages to be derived from judiciously liberal treatment of troops both before and during a campaign, and we hope with Dr. de Chaumont that the lessons may not be lost, and that, should the occasion again arise for putting our dear-bought experience to the test, we may not be found trying "how not to do it." The lecture, of which we have merely given an outline, was listened to with great attention, and on the motion of Sir T. Galbraith Logan, who highly complimented Dr. de Chaumont, a vote of thanks to that gentleman was carried with loud applause.

KRYPTOPHANIC ACID A CONSTITUENT OF NORMAL URINE.

At a recent meeting of the Chemical Society, Dr. Thudichum described a new organic acid—kryptophanic acid—which he had extracted from urine, wherein it appears to exist in considerable quantities, and to which it imparts the acid reaction recognised as the normal condition of that fluid.

Kryptophanic acid is a nitrogenous substance, and has the following formula :—

$$C_{10}H_{18}N_2O_{10}.$$

Three kinds of salts have been observed, viz. :—

$$C_{10}H_{14}M_4N_2O_{10},$$
$$C_{10}H_{15}M_3N_2O_{10},$$
$$C_{10}H_{16}M_2N_2O_{10}.$$

Thus, when fully saturated with base, it appears to be a quadribasic acid; when, however, the quadribasic baryta salt is exposed to the action of carbonic acid, one half of the base is removed as carbonate, and there remains the bibasic salt.

Nearly all of the salts are soluble in water. Exceptions are

to be found in the lead, silver, and mercury salts, which are white precipitates. All of the salts, with the exception of those of the alkalies, are insoluble in strong alcohol. The acid itself forms a gummy mass, very soluble in water, and very acid, and endowed with great stability.

The following is the process for its extraction from urine:—

Fresh urine is mixed with some milk of lime, and filtered to remove the sulphate and phosphate of lime. The filtrate is next evaporated down to a syrup, rendered slightly acid with acetic acid, and set aside, in order that common salt may crystallise out. It is next drained from the salt, and mixed with about four times its volume of alcohol of 90 per cent. By this means a precipitate of impure kryptophanate of lime is obtained. This precipitate is dissolved in a small quantity of water, and re-precipitated by means of strong alcohol.

A further purification may be effected by transforming the lime-salt into lead-salt. For this purpose the aqueous solution of lime-salt is mixed with great excess of saturated aqueous solution of acetate of lead. The lead-salt is thereby produced and re-dissolved in the excess of acetate of lead. The solution is filtered, and to the filtrate strong alcohol is added, which throws down a white precipitate of lead-salt. From the lead-salt the acid may be obtained by decomposition, by an equivalent of sulphuric acid. A point of interest in connection with kryptophanic acid is the fact that the urea-determination by Liebig's process is to some extent vitiated by it. Inasmuch as kryptophanate of mercury is insoluble, some slight allowance must be made for it.

DETECTION AND QUANTITATIVE ESTIMATION OF ARSENIC IN COMMERCIAL ROSANILINE (FUCHSINE).

By Dr. RIECKHER, of Marburg (Prussia).

The pigment known by the name of fuchsine on the Continent, the magenta, rosaniline, or aniline red of this country has become largely used for the purpose of imparting a beautiful colour to alcoholic liquors (especially the *liqueurs*), sweetmeats, bonbons, and various syrups, and is actually employed to impart colour to a counterfeit syrup and vinegar of raspberries. The question has arisen whether a substance, manufactured, as rosaniline is on the large scale, with the aid of enormous quantities of arsenic acid, did or did not retain any arsenic after it has been purified and rendered fit for use for the dyers. The author, therefore, obtained two samples of fuchsine (magenta), and, on careful qualitative testing, discovered that both the samples contained arsenic, and, as far as could be judged, rather in large quantity. A series of very carefully instituted quantitative analyses led to the result that a sample of fuchsine, directly obtained from a manufacturer of good standing, contained, on an average of several experiments, 2·073 per cent. of arsenious acid and 7·593 per cent. of arsenic acid; another sample, obtained from a wholesale drysaltery at Stüttgardt (Wurtemberg), yielded on an average 1·008 per cent. of arsenious acid and 4·4705 of arsenic acid. We quote these figures, leaving out here the details of the description of the mode of analysis applied, which, although of scientific interest to chemists, is of less importance to most of our readers. What we have to deal with is the patent fact that a substance manufactured on the large scale, and for the production of which very large quantities of arsenic acid are used, retains, notwithstanding the purifying processes applied to render that substance suitable for dyeing purposes, a sufficient quantity of a most active poison to forbid its use for the purpose of imparting a fine colour to substances intended for consumption. We have on purpose looked very carefully over the details of the manufacture of the aniline red colours, as described by the most competent British and foreign authors on the subject, and cannot wonder that (unless, indeed, a very great deal of extraordinary care is taken) the substances in the preparation of which arsenic acid is largely used should retain more or less of that acid and also of arsenious acid—the latter as the result of the complex reaction which attends the manufacture of these colours from aniline. Aniline red, fuchsine, magenta (there a large number of various names in use for red or scarlet-purplish aniline colours), is characterised by the following particulars:—As hydrate it is a dark red mass, but may be obtained as a beautifully crystalline material, exhibiting a metallic lustre; difficultly soluble in cold water, ether, benzine, and sulphide of carbon; readily soluble in hot water, alcohol, wood-spirit (methylic alcohol), and aceton, exhibiting beautifully red-coloured solutions. When boiled with concentrated sulphuric acid, fuchsine gives off hydrochloric acid, and the liquid becomes yellow-coloured (if chlorides were applied in its production; magenta is, in fact, the hydrochlorate of rosaniline, roseine is the acetate, and azaleine the nitrate of that base). Moderately strong nitric acid dissolves the pigment, yielding a yellow-coloured solution, but addition of a large quantity of water restores the colour; excess of ammonia liquida, and solution of caustic potassa, discolour the substance and its solutions; but addition of a large quantity of water, and also addition of any dilute acid, restores the original colour. Sulphurous acid discharges the colour of the solutions of the aniline red, but when the acid is volatilised by boiling, the colour is restored. The testing of this substance for the presence of arsenical compounds requires some care, and is best left to the skill of practised analytical chemists, who will do well to read Dr. Rieckher's valuable paper on this subject, which is of greater importance because the aniline reds are reputed to be innocuous substances, and for their beauty of colour, cheapness, and durability, are rather largely, it appears, applied for the purposes of imparting a pleasing appearance to articles of dress or of food that ought not to be infected with any arsenical compounds at all.

REVIEWS.

On the Law which Regulates the Relative Magnitude of the Areas of the Four Orifices of the Heart. By HERBERT DAVIES, M.D., F.R.C.P., Senior Physician to, and Lecturer upon the Theory and Practice of Medicine at, the Loudon Hospital, and formerly Fellow of Queen's College, Cambridge. (From the *Proceedings of the Royal Society*, No. 118, 1870.)

This paper is one of the most valuable contributions to an exact knowledge of the Physiology of the Circulation that we have seen for some time. We must content ourselves by giving a very brief account of the author's researches, although the whole paper deserves very careful study by every one engaged in the investigation of diseases of the heart. The author acknowledges the work done by Bizot, Peacock, and Reid in determining the *circumferences* of the four orifices of the heart. He thinks, however, that the results these able investigators arrived at have their real value as data for the calculation of the *areas* of these orifices. He calculates these areas both in males and females, and the following are the results:—

	Males.	Females.
Tricuspid	1·78 sq. in.	1·6 sq. in.
Pulmonic	1 „	·97 „
Mitral	1·27 „	1·27 „
Aortic	·78 „	·67 „

This, however, is but a statement of the facts in another, although, as we think, in a much more methodical manner; for this further investigation still only discloses how much the orifices of the right side are larger than the corresponding orifices of the left side. But next, Dr. Davies shows us that there is order in these differences of size. He finds that *the area of the pulmonic orifice bears the same ratio to the area of the aortic orifice as the area of the tricuspid does to the area of the mitral.*

$$\frac{\text{Area of tricuspid } 1{\cdot}78}{\text{Area of mitral } 1{\cdot}27} = \frac{}{} = 1{\cdot}4, \text{ nearly};$$

$$\frac{\text{Area of pulmonic } 1}{\text{Area of aortic } {\cdot}78} = \frac{}{} = 1{\cdot}3, \text{ nearly};$$

As the author is warranted in remarking, the impossibility of measuring the circumference of the orifices with strict exactitude will account for the discrepancy of a tenth in the calculation of the ratios. Moreover, when the measurements of Dr. Reid are taken as the basis of calculation, the discrepancy almost disappears.

Next, the author gives observations of his own by which he shows that the law he has deduced from the facts supplied by the independent observations of such able men as Reid and Peacock on the human heart applies to the hearts of lower animals. Measurements and calculations respecting the hearts

of the horse, donkey, ox and calf, sheep, pig and dog, are given. We choose one of his tabular statements at random.

Sheep.

	Circumference.	Area.
Tricuspid	3·7 in.	1·09 sq. in.
Pulmonic	2·5 „	·49 „
Mitral	3·2 „	·81 „
Aortic	2·1 „	·35 „

Tricuspid 1·09 / Mitral ·81 = 1·34

Pulmonic ·49 / Aortic ·35 = 1·40

Difference of the ratios = ·06

In order to test his conclusions, the author, having *measured* the pulmonic, aortic, and mitral orifices of a healthy human heart (taken from a strong man who was accidentally killed by fracture of the spine), *calculated* the area of the tricuspid orifice. He found that the area of the tricuspid orifice calculated on the principle already mentioned differed from its measured area by only ·098; practically we may say there was no difference.

The author does not leave us here. He next tries to show how these principles bear on the differences of the "two hearts," right and left. The two ventricles are alike, and they are unlike. They are alike in that they act synchronously, and in that they expel equal quantities of blood in equal times. If this were all the orifices of the two sides should be equal in area, and the ventricles should be equal in power. But now for their unlikenesses. The right ventricle has the larger orifices and the weaker muscular power, and has the less resistance to overcome; the left ventricle has the smaller orifices, the stronger muscular power, and has the more resistance to overcome. It is only by keeping in mind that all physiological actions, however simple their manifestations, result from a complex combination of factors, that we can hope to arrive at conclusions of permanent value. And here it is well to remark that the simplicity of the author's conclusions is not the result of the time-serving expedient of "making things easy to understand" by considering the most superficial and striking phenomena as the essential phenomena, and explaining their relations, as it were, bit by bit. It is due to him to say that he faces the problem he takes up in its fullest complexity, and endeavours to trace relations in what is *fundamental* in the *whole* of the phenomena really concerned. Let us see how the author simplifies our knowledge of the heart's structure and function—how he shows that the marvellous exactness and uniformity of cardiac action is the outcome of a seemingly confused heap of different factors. The factors so far given are these—(1) A weak ventricle—the right—forces (2) three ounces of blood through (3) a large orifice, (4) a short distance, (5) overcomes a slight resistance in *the same time*, that (1) a strong ventricle—the left—forces (2) three ounces of blood through (3) a small orifice (4) a great distance, and (5) overcomes a great resistance. We have to add, as Dr. Davies goes on to show, another important factor which gives completeness to the list. It is that (6) the *velocity* of the stream of blood forced by the weak ventricle through its large opening is less than the (6) velocity of the blood forced by the strong ventricle through its smaller orifice. Here, however, we will let the author speak for himself.

"As the two ventricles contracting with *unequal forces* have to expel *equal quantities* of blood in *equal and the same time* to *unequal distances* and to overcome *unequal resistances*, the perfect synchronism of the ventricular contractions can be only obtained by an exact graduation of the areas of the orifices of the aortic and pulmonary artery to the muscular forces respectively impressed upon the contents of the two ventricles in systole, and consequently to the velocities of the streams issuing from those chambers. The area of the aortic must be therefore smaller than the area of the pulmonic, and *in such proportion* that the normal average contents (say, three ounces) of the left ventricle shall occupy exactly the same time in passing through the aortic as is required by the three ounces of the right ventricle in passing through the pulmonic opening. The greater muscular power of the left, as compared with that of the right ventricle, causes a corresponding greater velocity and force of the column of blood issuing from its outlet, while the smaller area of the aortic, as compared with that of the pulmonic opening, exactly equalises the times occupied by the contractions of the two chambers. . . Mathematically expressed, the velocities of the streams through the orifices are inversely as the areas of those orifices, or

$$\frac{\text{velocity through aortic opening}}{\text{velocity through pulmonic opening}} = \frac{\text{area of pulmonic opening}}{\text{area of aortic opening}}$$

And if we assume the mean measurements of the orifices found in the former part of this paper to be correct,

$$\left.\begin{array}{l}\text{the velocity through}\\ \text{aortic opening}\end{array}\right\} = \frac{1 \text{ sq. inch}}{\cdot 75 \text{ sq. inch}} \times \left\{\begin{array}{l}\text{velocity through}\\ \text{pulmonic opening}\end{array}\right.$$

$= 1{\cdot}3$ time the velocity through pulmonic opening

$= 1\frac{1}{3}$ time the velocity through pulmonic opening,

or, in other words, the velocities of the currents through the aortic and pulmonic orifices are in the ratio of 4 to 3."

The author then shows the same of the tricuspid and mitral orifices. Finally, he gives a few instances of pulmonary disease to show how the "law of the orifices" bears on the abnormal conditions these diseases place the heart under.

NEW BOOKS, WITH SHORT CRITIQUES.

A Pharmacopœia, including the Outlines of Materia Medica and Therapeutics, for the Use of Practitioners and Students of Veterinary Medicine. By Richard V. Tuson, F.C.S., Professor of Chemistry and Materia Medica at the Royal Veterinary College. London: John Churchill and Sons. Pp. 311.

*** Although not a Professional book, this work is very likely to be of much use to many Professional men. We are apt to forget that the principles which govern disease and which guide our treatment apply equally to animals with men; and that our knowledge of Medicine and Surgery as applied to man may easily be rendered available for animals. Some acquaintance with the anatomy of our domestic animals, and the same sound sense which guides him to the correct treatment of human disease, may stand the Medical Practitioner in good stead when his horses or cattle fall ill. We have often been surprised at the rough methods adopted by Veterinary Surgeons when we compared them with the more exact modes employed by Medical Practitioners, and there is no reason why the latter should not be utilised, to the exclusion of the former. When, however, a Medical man undertakes the management of his own diseased or injured animals, there is a difficulty to be surmounted which this book will enable him to overcome. The remedies he will have to use are exactly those he every day handles, as the list given by Mr. Tuson shows, but how about the appropriate dose? It is well known that the lower animals differ greatly from man, and from each other, in their susceptibility to various remedies; but the principles of therapeutics will guide us to the appropriate remedy, and Mr. Tuson's book to the correct dose.

Reports of the Medical and Surgical Registrars (Middlesex Hospital) for the Year 1869.

*** We are exceedingly pleased with these reports. Such collections of figures are generally of the driest and least instructive kind, but we have in these much valuable material systematised and so arranged as to be easy of reference. The post-mortem appearances are briefly recorded in nearly all instances, and so arranged in tabular form as to be easily available. Three interesting cases of pyæmia are recorded at length by Dr. Murray, the Medical Registrar; but the most instructive and valuable portion of his report are the tables referring to rheumatism, giving the length of the attack, the complications, and the results of eighty-eight cases. Tabulated cases of cancer and chorea are also given. Turning to the report of Mr. Henry Arnott—the Surgical reporter—we cannot help being struck with the importance of a table giving the results of 157 cases of cancer treated in the Surgical wards during the past year. One old lady, we note, having the cervical glands affected, was ill eight years before admission, and has now been over twenty years in the Hospital. The results of compound fractures, and of the cases of strangulated hernia admitted, are also given. Finally, the results of ninety-eight Surgical post-mortem examinations are stated at some length. We wish other Hospitals would adopt a similar plan.

We are sorry to hear that Mr. Syme, of Edinburgh, is again suffering from severe illness.

FOREIGN CORRESPONDENCE.

FRANCE.

LETTERS ON THE SOUTH OF FRANCE.—VIII.

Pau.

THE season of Pau is at an end. So we can make up our balance. At the beginning of October we travelled from Toulouse to Pau. In the neighbourhood of the former town a Frenchman, who shared our waggon, started into conversation. "Vous aurez froid," he said, as soon as he heard where we were going to. I answered that he probably did not know Pau, that this place was a winter station, and that people went there in order to warm themselves. "N'importe," the Frenchman replied, "the more you go that way"—he pointed to the west—"the more cold you will be; if here you want one overcoat, at Pau you will want two."

We laughed at the "stupid Frenchman." But experience justified him. The more, indeed, we came to the west the lower was the temperature. The road from Montréjour to Pau is far from being dull. We crossed part of the Basses Pyrénées, a wild landscape with a foaming river, bordered by fresh-looking trees and mosses. But after this our way led though a plain of meadows and cabbage plantations.

At last we reached a spot where the trees (I must add that they were poplars, a kind of tree which loses its leaves very soon in the autumn) had shaken off their leaves and Winter seemed to have chosen his residence. "That must be Pau," we exclaimed. A few moments afterwards the train stopped and we heard the calling of—PAU, MESSIEURS! PAU, MESSIEURS! Pau, Messieurs! *Pau, ... eurs!* It was quite cold. A stout boy of the country was wrapped up in a *eachenez*, etc.

This cold, however, lasted only a few days. Then Summer made his last effort. It got so hot that walking was nearly an impossibility. About a week afterwards we sat around the *poêle.*

Such are the changes of temperature in this climate. Five or six times this winter it happened that in the course of a few days the thermometer fell 30 degrees, or even more. So rapid changes I do not remember having ever observed on the Mediterrancan coast. Stating these facts is a duty towards the public. We can add, however, that they do not constitute a contraindication against Pau. In the first place, this winter was very severe. Besides, these changes of temperature are able to be foreseen,(a) and strangers can take proper precautions. And however important these changes may be, they are not accompanied by those heavy catarrhs and pernicious inflammations which at the Mediterranean coast are so often induced by even very slight changes, and make that region so dangerous for many invalids.

If we compare this climate with the types of Nice, Cannes, etc., we shall find that it is really in some way the reverse of these. In saying this I do not allude to the relation expressed by the stereotyped expressions, "exciting" and "relaxing." What I mean is this: at Nice rain is brought on by *east*, in Pau by *west* winds. This fact seems to me worthy of observation, and it may account for many differences between the two climates.

As to the reputation of "exciting" and "relaxing," the following may be observed. Generally there is much truth in this classification; it is not, however, absolute. In Nice at some periods the air is "relaxing," and in Pau at some periods the air is "exciting." The chief cause of this difference has not yet been sufficiently examined. Perhaps it is the state of the barometer; better, the atmospheric pressure. At all events, in Nice the "exciting" element decidedly predominates.

One ought to be careful besides not to take the terms "exciting" and "relaxing" in the sense of "strengthening" and "weakening." The Mediterranean coast has the reputation of being more salutary than Pau in states of anæmia and atony. In some cases this may be right, for anæmia and atony can be caused by want of proper assimilation and of proper reproduction of blood corpuscles. Now these processes may be influenced by the air of Nice, etc. But, on the other hand, it is possible that too rapid consumption and excessive excretion is the cause of debility; and in such cases—so common among chest invalids—Pau would be useful and Nice fatal.

Here we touch the chief therapeutical character of Pau. Pau is a gigantic anodyne. It is, so to speak, a natural bath of morphia and chlorodyne. There is, however, this difference—the anodyne drugs are noxious for digestion; Pau has not this inconvenience, and may at the utmost cause constipation. The anodyne effect of Pau manifests itself in the following points: It produces a sound sleep, it lessens the change of tissue (Stoffwechsel), calms fever and restlessness, stops colics, and diminishes the excretion of urine, etc.

Now, as is too well known, absence of sleep, fever, restlessness, irritability, emaciation, diarrhœa, etc.—are the very torturers in the last stage of consumption. I, therefore, venture to say that when the chief object is prolonging life in hopeless cases, and the patient wishes to sacrifice his home for this, Pau, and by no means the Mediterranean coast, should be his residence.

Here we must always keep in mind that prolonging life *quand même* is not always the first consideration. If it is urgent to keep the patient in merry spirits, it may be that the blue sky and the rich vegetation of Provence is preferable to the cloudy sky of Pau.

Before we go on, let us repeat this most important fact—Pau is a very paradise to many people in the latter stages of chest complaint. In the first place, because it diminishes those processes which seem destined by Nature to consume the last remains of vital strength; secondly, because the vulnerable body is at this place not so much menaced by acute inflammations as is the case in Provence.

Here the cold of Pau may be taken into consideration. At Pau it can be much colder than at Nice. Snow and ice in the former place are nothing extraordinary. Happily we know by this time that cold in itself is not pernicious to tuberculous lungs, but rather the reverse. At all events, cold air has the advantage of containing in the same volume more oxygen than warm air. For people in very bad health, it is true, all excesses are pernicious; but in Pau cold is never excessive, and never lasts long. Even in this really very severe winter, snow lasted at the utmost five or six days. Besides, at Pau everything is better organised against the cold than at the Mediterranean coast. Chimneys, if they are not all of a first-rate construction, nevertheless draw better here in consequence of the quietness of the air, etc., etc.

We have alluded to the cloudy sky of this country. This is by no means an edifying circumstance. It does not, however, prevent nature at Pau from being favoured by many charms. If this region does not sparkle with the evergreen vegetation of its rivals, it exhibits, for example, the transitions of spring and autumn in all their magnificence. In this respect the rarity of strong winds has a very striking effect. I mean this; the leaves in the autumn cling to the trees until they (leaves) are quite dead. So in October and November the trees go through a complete series of colours from green through yellow and red to brown.

Besides, nature has quite a northern aspect, and the English stranger will feel less far from home than at the Riviera. The tree-vegetation consists chiefly of oaks, many of them crooked and bulky. A great number of them are faithfully accompanied by and elegantly draped with ivy. The chesnut tree is common too.

In the *Hautes Plantes* you walk "*sub tegmine fagi*," a tree quite unknown at Cannes—splendid specimens! In the shade of the beeches several trees and plants of a smaller size—*Cornus, Lonicera, Prunus, Bryonia*—protected by the police, lead a luxuriant and peaceful life. At the beginning of the *Hautes Plantes*, the beech is replaced by *Æsculus, Ulmus*, and *Acer* of a high stature. Spring vegetation is by no means so rich as at Cannes. It is nevertheless very charming. In February, already *Ficaria ranunculoides, F. calthæfolia*, and *Potentilla Fragariastrum, Helleborus viridis*, and *H. fœtidus*, make their appearance. In March and April the forests are illustrated by lovely precocious plants, such as *Anemone nemorosa, Pulmonaria, Stellaria holostea, Violæ* sp. sp., *Isopyrum Thalictroides*, etc. A very interesting Béarnese plant of this region is *Clandestina rectiflora, Lathræa rectiflora* L., which is not rare on the margins of the brooks. This is a parasite growing on the roots of *Populus* and *Salix* (?). Its pink flowers arise in large clusters, and spread a strong, sweet odour far around. In the autumn the forests are illustrated by *Crocus multifidus*, which, like *Colchicum autumnale*, produces leafless flowers in the autumn, and fruit in the spring. In the winter, a rich vegetation of mosses and hepaticas are the visible representatives of never-resting life. So the naturalist—and what Englishman is not more or less so?—will always find distraction.

A very precious circumstance at Pau is that shut carriages are to be had at a low price (one franc and a half the hour);

(a) Dr. Latrillonne gives himself much trouble in order to find the laws on which they depend. See his interesting brochure, "Le Climate de Pau," etc., and the meteorological tables.

so without great expense invalids are able to go out and to visit their friends even in bad weather.

(To be continued.)

GENERAL CORRESPONDENCE.

THE LIFE WORK OF GENERAL PRACTITIONERS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The editor of the *Lancet* last week stated that the bulk of the actual work in life of the lowest ranks of the Medical Profession is "selling tooth-brushes and quack medicines and attending five-shilling midwifery cases." I believe that the minimum diplomas granted to Medical Practitioners are those which confer the memberships and licences of our corporations—in other words, the qualifications of the great mass of General Practitioners. I would ask the General Practitioners who are readers of that journal what they think of the terms in which their Professional avocations are described by the editor?

I am, &c. One of the Libelled.

STAFF-SURGEON JAMESON, M.D., AND THE YELLOW FEVER EPIDEMIC AT TRINIDAD.

Letter from Dr. R. H. Bakewell.

[To the Editor of the Medical Times and Gazette.]

Sir,—The well-deserved promotion of Dr. Jameson for what the *Gazette* justly calls "his highly meritorious services during the recent epidemic of yellow fever at Trinidad" will give great pleasure to all those who know what those services were. As Medical officer of health for the colony, I have good reason for knowing that to his exertions, together with those of his senior officer, Dr. Johnstone, the Staff-Surgeon, was owing the extremely small mortality that took place among the troops. The most constant and devoted attention and care were given by these two Medical officers to the troops under their charge, and everything that modern sanitary science could do to prevent the spread of the epidemic and to lessen its mortality was done. The result was most gratifying.

I must also take this opportunity of acknowledging the courtesy and kindness of Dr. Johnstone in favouring me with some statistics which enabled me to render more complete some tables I was drawing up for my report on the fever.

It is much to be regretted that the civil governments of the colonies will not take a lesson from the experience of the military authorities, and carry out vigorously those sanitary measures which alone can stop the ravages of the epidemics that now periodically desolate the West Indies. It is always the old story—filth, overcrowding, and want of ventilation.

I am, &c. R. H. Bakewell, M.D.

16, Redcliffe-road, West Brompton, S.W.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, April 19, 1870.

Richard Quain, M.D., President, in the Chair.

Reports by Mr. Arnott and Dr. Fagge were read on Dr. Payne's and Mr. Morris's Specimens of Syphilitic Liver.

A report was also read by Mr. Barwell on Mr. William Adams's cases of United Tendons after Operation for Talipes.

A report on Dr. Morell-Mackenzie's case of Tumour of the Cricoid Cartilage was presented by Mr. Marsh, with drawings by Dr. Moxon. The case was considered one of papilloma.

Mr. Maunder exhibited a Myeloid Tumour of the Lower Jaw of two years' growth which he had removed, together with the portion of the jaw to which it was adherent, from a girl 10 years of age.

Dr. Kelly showed a specimen of Congenital Mitral Disease from a female, aged 33, who had died of cardiac dropsy in King's College Hospital. There was a narrowing of the orifice, and during life a pre-systolic murmur was present.

Dr. Fagge had generally found that in cases of pre-systolic mitral murmur there was no history of acute rheumatism.

Dr. Kelly also brought forward a specimen of Congenital Malformation of the Heart.

Dr. Theodore Williams exhibited Diseased Aortic and Mitral Valves, with extensive vegetations in both. There were distinct evidences of friction caused by the aortic vegetations. The mitral valve showed a small aneurismal sac, the size of a pea, connected with vegetations on the mitral. The specimens were from a female, 34 years of age, under the care of Dr. Quain, who had enjoyed good health until her last confinement, eleven months previously.

Dr. C. J. B. Williams considered the case one of acute aortic valvular disease; and that the broken-down valve had produced abrasions in the interior laminæ of the mitral valve where vegetations had formed.

Dr. Hilton Fagge brought forward a case of Hepatic Abscess from ulceration and sloughing of the large intestine, taken from a man who had never been abroad, and who was supposed by his Medical attendant to have had typhoid fever.

Dr. Fagge also shewed a specimen of Cancer of the Left Kidney from a child four and a half years old. It weighed four and a half pounds, was rounded and elastic, and bulged out on the left side. The pelvis and calyces of the kidney were dilated. Microscopically the tumour was found to consist of large round oval cells, with nuclei nearly filling up their cavities. The history extended over a period of four or five months.

Dr. Fagge next exhibited a Cyst in the Lung at the edge of the lower lobe, which contained a clot of blood in its interior, and opened into a vein the size of a goose-quill, which after passing through the pulmonary tissue, opened into the left auricle.

Dr. Thompson Dickson presented some Rickety Bones from an Insane Patient, aged 40, who died after an epileptiform seizure in St. Luke's Hospital with general paralysis. The bones were all loaded with fat, and were soft and exceedingly fragile. The brain was somewhat atrophied. All the cases of broken ribs in lunatic asylums which had lately engaged attention had occurred in patients with general paralysis; and he brought these specimens forward to show how easily bones in such patients may be fractured, and that cases of broken ribs must occur occasionally in keeping general paralytics quiet.

Dr. Morell-Mackenzie exhibited two cases of Aneurism of the Aorta causing pressure on the left recurrent laryngeal nerve, with consequent paralysis of the muscles of the left side of the larynx. The symptoms in the first case (Frederick B., aged 37), had existed for eighteen months, but he had suffered from palpitation for several years. The laryngoscope showed paralysis of the adductors and abductor of the left vocal cord. The stridor in the breathing was so loud that no satisfactory stethoscopic examination could be made, but the existence of an aneurism was from the first suspected. The man died very suddenly, and though tracheotomy was instantly performed no recovery took place. After death an aneurism as large as a hen's egg was found at the descending portion of the arch of the aorta. It lay between the trachea and œsophagus, and formed a slight projection on the posterior wall of the trachea, about an inch above its bifurcation, so that the antero-posterior diameter was slightly diminished. The left recurrent nerve had to wind round the aneurism, and was much smaller than the right. The muscles on the left side of the larynx were markedly atrophied. The second case (Mr. George F., aged 40) was a more recent one, the symptoms having only existed for four months. The laryngoscopic signs of paralysis of the muscles on the left side were exactly similar to the last case. On auscultation a loud systolic bruit was heard over the second costal cartilage at its junction with the sternum. The patient died ten days after he was first seen. An aneurism, about the same size as in the former case, was found about an inch above the arch of the aorta and to the right of the innominate artery. It abutted on the trachea near its bifurcation, but did not diminish its canal. In this case, so much more recent, there was no atrophy of the muscles affected. Dr. Morell-Mackenzie observed that the important practical question often arose in cases of intra-thoracic tumours, accompanied with dyspnœa, whether tracheotomy should or should not be performed. He considered that the laryngoscope afforded crucial evidence on this point, for if the pressure was due to implication of the recurrent nerve, the immobile vocal cord was at once seen. In these cases, tracheotomy would be of the greatest advantage, but where the tumour caused direct pressure on the lower part of the trachea, opening of the windpipe was of course useless.

Dr. C. J. B. Williams thought that the information gained by the laryngoscope may be derived by other means. Tempo-

rary benefit is derived by tracheotomy when there is pressure on the recurrent laryngeal nerve and when there is no direct pressure on the trachea. In the case of the late Earl St. Maur both were present. The sound from pressure on the trachea is of a stridulous character. He had been able to make a diagnosis from this alone; it does not extinguish, but accompanies the voice. Where the paroxysms in the intervals are not accompanied by this stridulous breathing, tracheotomy may afford relief; but where the recurrent laryngeal alone is pressed upon, relief may be obtained. The laryngoscope was of use in chronic cases of tumour.

Dr. SIBSON stated that in a case of his, one of aneurism of the descending aorta, published in the Society's *Transactions*, the adductor muscle was atrophied.

Dr. MORELL-MACKENZIE replied that, though Physicians of great experience in diseases of the chest might be able to discriminate the kind of pressure without the laryngoscope, he thought that to the large mass of the Profession this instrument would prove a most important aid to diagnosis of these very difficult cases.

Mr. CHRISTOPHER HEATH exhibited the parts from a case in which he had tied the Right Subclavian Artery in the third part of its course, and also the Carotid, in 1865, for what was supposed to be innominate aneurism, and which caused dysphagia. The patient was a woman. She left the Hospital convalescent within three months after the operation. She was in the habit of getting drunk, and had attacks of syncope. In one of these fits of intoxication emetics were administered, and the tumour of the sternum became active again. After death the aneurism was found to be aortic, and the root of the innominate was dilated. There were symptoms of repair, laminated fibrine having been deposited in the sac. With reference to the possibility of treating aneurisms of the aorta Surgically, he thought relief could, and has been, often given. Mr. Heath referred to several cases on record which made perfect recoveries. Both arteries must be tied, the subclavian and the carotid on the right side, and the carotid on the left.

Mr. MAUNDER remarked that if Physicians could tell us that the size of the orifice between the sac and the artery was not larger say than a shilling, Surgeons might do good. In the case in which he had operated, the clot had passed downwards.

Dr. SIBSON had seen Mr. Heath's case. It was a sacculated aneurism of the arch of the aorta. If the ligature be between the sac and the heart in these cases then good may be done, but if the reverse, then a greater stream of blood will result.

Dr. C. J. B. WILLIAMS considered these cases very unfavourable; but he knew of one case, that of a gentleman, who had an aneurism thirty years before, who was now living. He lived a quiet regular life, and now the existence of the aneurism can hardly be discovered. There is merely slight impulse.

Mr. HOLMES thought dyspnœa and dysphagia had been relieved by distal ligature, but without much relief to the aneurism. He would take the symptom of much dyspnœa as the rule for operation.

Mr. DE MORGAN showed a fibrous tumour of the breast, from a lady, which grew rapidly to the size of a fœtal head, returning to its original size, that of an orange, after the disappearance of an attack of gout.

Mr. DE MORGAN showed, also, a calculus, of a very large size, from a man of advanced age, at Canterbury, who died without symptoms of a stone, which had been present for years. He had been supposed to be a malingerer.

CLINICAL SOCIETY.

FRIDAY, APRIL 22.

Mr. PAGET, President, in the Chair.

DR. ANSTIE exhibited three patients in whom Electrical Treatment had been applied for the Cure of Local Paralysis. Case 1 was an extreme instance of paralysis of the extensors of the right forearm and hand, and also of the shoulder muscles, for which the only assignable cause was lead-poisoning. The affected muscles were greatly wasted, and the case seemed hopeless; but by the use of the constant current from Weiss's (Smee's) battery daily for about two months, and then subsequently of Faradisation (which at first had had no effect) for another month, the power of all the muscles was almost entirely restored, and the man enabled to resume work. Case 2 was an instance of paralysis of all the muscles of the forearm, the sequel of acute rheumatism. It was rapidly cured by the application of the interrupted current from Gaiffe's apparatus. Case 3 was an example of a very rare and curious affection—complete anæsthesia of all the sensory nerves springing from the right brachial plexus, and of a few branches (supra-clavicular) from the cervical plexus. It had existed for six years. The patient (a young man now 21 years old) could only trace its occurrence to a severe attack of scarlet fever, immediately after which he first noticed it. There was no loss of muscular power, and but little, if any, affection of the muscular sense. Faradisation (with Stöhrer's one-celled apparatus) was commenced in December last, and perseveringly applied every day for five weeks, without the slightest effect. The constant current from Weiss's battery was then tried, and in a very short time a marked improvement commenced. After a time the whole sensibility of the limb was much changed, and now the use of Faradisation was found to be effective. At the present moment, after four months' treatment, the patient may be said to have twice the amount of sensibility (to pricking, etc.) in the hand, and three times the amount in the forearm and arm, which he had at the commencement of treatment. He has also regained sensibility to heat and cold, which had been entirely lost. In all probability, however, he will never be completely cured. It should be mentioned that in all these three cases the electric current, whether constant or interrupted, was purposely applied in a local manner only—*i.e.*, to the nerves and muscles of the affected parts.

Dr. BUZZARD remarked that in the paper there was no mention of galvanisation of the sympathetic. Benedikt had specially insisted on this in lead poisoning. He also held that it was difficult to get diplegic contractions in atrophy, they were rather connected with cerebral mischief.

Dr. ANSTIE thought there was nothing less satisfactory than the diplegic theory. He had used local electricity only. In many instances the local use of electricity will cure if it be properly persevered in, but this was difficult.

Mr. PAGET asked if there was any ultimate response to the induced current, supposing there was not at first.

Dr. ANSTIE said in his first case that he had persevered with the induced current for five weeks with no result, whereas the continuous current produced contractions at once. As a general rule if one kind of current did not suit they should try another.

Dr. SANDERSON read a report on Mr. Barwell's solution of strychnine stating that the substance soluble in chloroform amounted in percentage rate to the quantity of strychnine stated to exist in the solution. He thought they ought to go further in the investigation.

Dr. ANSTIE thought the facts amazing. He could not believe that one-twelfth of a grain of strychnine could be given with safety, and he had been accustomed to use it freely subcutaneously in certain nervous affections.

Mr. BARWELL began with small doses. He thought the stronger the solution was the more local was its effect.

Dr. SILVER suggested that the explanation of the phenomenon might rest in the presence of the chloride of magnesium, which would be formed in preparing the solution according to Mr. Barwell's process. The two chlorides of magnesium and strychnine might act less powerfully than the hydrochlorate of strychnine alone, or might even modify its action as had been proved to be the case with the iodide of ethyl by Crum-Brown and Fraser.

Dr. BUZZARD thought that as the solution required a certain temperature to make it fluid, it was possible that some of the solids would be deposited in the syringe.

Mr. BARWELL had used the same solution with children, and had sometimes given even a larger dose.

The PRESIDENT appointed the same committee to report further. He could not think it safe to commit the Society to such a statement. He could not help thinking there was some fallacy. The subcutaneous absorption must be at least as strong as in the rectum. The report was not to be final.

Dr. BUZZARD showed a female patient affected, as he supposed, with Leprosy. She had stunted fingers, of which two had lost the terminal phalanges, shrivelled nails, anæsthesia, especially of dorsal aspect of hands, with muscular atrophy of forearm, and "griffin hand." The history gave no clue to the nature of her disorder. It was suggested that leprosy, in a modified form, still existed in the United Kingdom to a larger extent than was generally supposed.

Dr. HILTON FAGGE read a report by himself and Mr. Callender upon this case. They confirmed the general accuracy of Dr. Buzzard's description of the case, but pointed out some particulars in which it seemed to them that the symptoms

differed from those of leprosy, and more nearly approached those of wasting palsy. Hence, whilst fully recognising the difficulty of referring the case to any affection belonging to the ordinary categories, they considered the history and symptoms insufficiently conclusive to allow of their reporting it as a case of modified leprosy.

Dr. Farquhar could not help at the first glance of the case saying it was leprosy, many cases of which he had seen. The paralysis of the larynx was very interesting. As to the cause of leprosy, as it occurred in the Punjaub, where he had seen it, he had formed certain theories. A patient came to him, who, although a dealer in corn, was accustomed to live on bad grain. So again, above Peshawur, where it was common, the natives lived on corn which was badly cultivated, and he was inclined to connect the two.

Mr. Thomas Smith showed a girl, aged 9, from whom a piece of the whole thickness of the vault of the skull had spontaneously separated. The dead bone measured two inches and a half by three inches, and included two inches of the bony groove of the longitudinal sinus. To the outer surface of the sequestrum the scalp was firmly adherent, being covered by an abundant growth of hair.

NEW INVENTIONS.

NEW POISON BOTTLE.

Messrs. Lynch and Co., 171a, Aldersgate-street, have brought out a new poison bottle, which seems to us to be quite satisfactory. In appearance it does not differ from ordinary bottles except that it is studded with perpendicular rows of knobs, so closely set that it would be impossible to seize the bottle in the dark without at once becoming aware of the fact. They are supplied in all sizes.

NEW REMEDIES.

FOX'S PALATABLE COD LIVER AND CASTOR OILS.

In these preparations the patentees have succeeded in making the oils not only palatable, but easily retained upon the stomach without rising. We have tried them in several cases, with marked benefit, and in some instances in which the oil in its natural state could not be retained. The mode of preparation is such that the medicinal properties of the oils are unimpaired. To children in particular the oils as prepared by Fox and Co. will be highly advantageous.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 28th inst.:—

Hyde, William Derby, L.S.A., Hemel Hempstead, of Charing-cross Hospital.
Phillips, John, L.S.A., Whitland, Carmarthenshire, of Guy's Hospital.

On the same day the examinations for the Fellowship of the College, which had occupied the Court of Examiners all the week, were brought to a close, when, out of the twenty-one candidates who underwent the final examination for this distinction, only two were referred to their Professional studies for the usual period of twelve months. The names of the successful candidates cannot be published until after the meeting of the Council on Thursday next.

Apothecaries' Hall.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, May 26, 1870:—

Atkinson, Alfred James, Bessborough-gardens, S.W.
Boddy, Hugh Walter, Salford Hospital.
Hyde, William Derby, Hemel Hempstead.
Lawton, Joseph, Torquay.
Phillips, John, Whitland, Carmarthen.
Osborn, Samuel, Gresham-park, Brixton.
Wayman, Clement Page Scott, Great Thurlow, Suffolk.

As an Assistant in Compounding and Dispensing Medicines:—

Gill, Joseph William, Pendleton.

NAVAL AND MILITARY APPOINTMENTS.

Admiralty.—Under the provisions of her Majesty's Order in Council of February 22, 1870, the following retirements of Medical officers have taken place:—Staff Surgeons Dr. Robert Grahame, Dr. John Thomson, and Dr. James Davidson; Assistant-Surgeon Dr. Thomas B. Forster. The following appointments have been made:—W. Crawford, Surgeon to the *Repulse;* John Fisher, Surgeon to the *Egmont*, additional, for service at the Falkland Islands.

Dr. James Rae, Deputy Inspector-General of Hospitals and Fleets in her Majesty's Fleet, has been placed on the retired list of his rank from May 20.

Medical Department.—Surgeon William Arthur Thomson, M.B., from the 76th Foot, to be Staff Surgeon, *vice* Henry Kelsall, appointed to the 76th Foot; Assistant-Surgeon George Abraham Davidge, from the Royal Artillery, to be Staff Assistant-Surgeon, *vice* James M'Creery, appointed to the Royal Artillery.

Royal Artillery.—Staff Assistant-Surgeon James M'Creery to be Assistant-Surgeon, *vice* George Abraham Davidge, appointed to the Staff.

76th Foot.—Staff Surgeon Henry Kelsall to be Surgeon, *vice* William Arthur Thomson, M.B., appointed to the Staff.

BIRTHS.

Hill.—On May 30, at Lymington, Hants, the wife of Wm. Robinson Hill, M.D., of a daughter.

Ireland.—On May 29, at The Limes, Linton, Cambs., the wife of Edward Ireland, M.R.C.S.E., etc., of a daughter, stillborn.

Macnamara.—On May 25, at St. Andrews, N.B., the wife of F. N. Macnamara, M.D., Indian Army, of a son.

Milson.—On May 29, at 13, College-crescent, Belsize-park, the wife of R. Henry Milson, M.R.C.S. Eng., of a son.

Read.—On May 29, at 11, Petersham-terrace, Queen's-gate, the wife of Thomas Laurence Read, Surgeon, of a daughter.

Smith.—On May 25, at Tunbridge, the wife of Cleveland Smith, M.R.C.S., of a daughter.

MARRIAGES.

Barber—Goodricke.—On May 28, at St. Cuthbert's, Darlington, Robert Barker, M.R.C.S., Sunderland, to Elizabeth Thomasine, only daughter of the late Wm. Goodricke, Esq., of Nesham-hall, Honghton-le-Spring, Durham.

Eaton—Weston.—On May 14, at the Unitarian Chapel, Leicester, John Chamberlain Eaton, Surgeon, Loughborough, to Emma, daughter of the late Wm. Weston, of Leicester.

Fox—Murray.—On April 28, by special licence, at the residence of the bride's father, Dublin, J. J. Patterson Fox, Captain 56th Regiment (Pompadours), eldest son of the late Matthew Fox, Esq., barrister-at-law, Dublin, and nephew of the late General Paterson (full Colonel of the 60th Royal Rifles), to Kate Crofton, youngest and only surviving child of Sir James Murray, M.D., of Dublin, Inspector of Anatomy, and late State Physician, by Mary, his second wife.

Hanson—Oldham.—On May 24, at St. George's Church, Bickley, William Wellesley Hanson, Esq., of Constantinople, to Mary Grace, youngest daughter of Henry Oldham, M.D., of Finsbury-square, London, and of Southborough, Bromley, Kent.

Ridge—Williams.—On May 25, John James Ridge, M.D., B.A. Lond., of Grafton-square, Clapham, to Harriet Newsom, eldest daughter of Walter Williams, of Fenchurch-street, City, and Penton-house, Newington, Surrey.

Robertson—Goodeve.—On May 24, at St. George's Church, Hanover-square, the Rev. Gordon Robertson, M.A., curate of Sherfield-on-Loddon, second son of W. H. Robertson, M.D., J.P., of Buxton, to Louisa Helen, third daughter of the late Joseph Goodeve, Esq., barrister-at-law, Calcutta.

Templeton—Risdon.—On May 31, at the parish church, Dolton, North Devon, James Templeton, eldest son of the late James Templeton, Esq., Justice of the Peace for the City of Exeter, to Barbara Lucy, daughter of William Risdon, Surgeon, Dolton.

DEATHS.

Boulger, Edward, M.D., formerly of Blechingley, Surrey, at Clapton, on May 26, aged 53.

Buat, Thomas William, M.D., at 2, Chère-promenade, Homburg, près Frankfort-on-the-Maine, after a long illness, on May 19, deeply lamented.

Collins, Ann, the beloved wife of John C. Collins, M.D., Surgeon-Major Bengal Medical Service, at 14, Priory-street, Cheltenham, on May 23, aged 45.

Goodeve, Isabella, the beloved wife of H. H. Goodeve, M.D., at Cook's Folly, near Bristol, on May 29, aged 61.

Harley, Sophia Ellen, wife of John Harley, M.D., and youngest daughter of the late G. J. Hadow, Esq., Sussex-gardens, Hyde-park, at 78, Upper Berkeley-street, Portman-square, on May 25.

Paice, David, M.D., F.R.C.S., J.P., at his residence, Margate, on May 30, in his 83rd year.

Rolfe, William, M.D., M.R.C.S., of Edinburgh, at Bocking, on May 21, aged 78.

Sutter, James B. Fraser, M.B., M.C., second son of the Right Rev. the Bishop of Aberdeen, at Patea, New Zealand, on March 10, aged 29.

Tuttiett, Ann, widow of the late John Tuttiett, M.R.C.S.E., late of Newport, Isle of Wight, at Carisbrooke, on May 28, aged 78.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Birmingham and Midland Free Hospital for Sick Children.—Resident Medical Officer; must be qualified and registered. Applications and testimonials to the Medical Committee, Children's Hospital, Steelhouse-lane, Birmingham, on or before the 13th inst. Election on the 20th.

Bucks County Lunatic Asylum.—Assistant Medical Officer; must be duly qualified. Applications and testimonials to Mr. A. Tendal, County Hall, Aylesbury, on or before the 10th inst.

East Sussex, Hastings, and St. Leonard's Infirmary.—Assistant-Surgeon. Applications and testimonials to the Secretary on or before the 25th inst.

Hamadryad Hospital Ship for Seamen of all Nations, Port of Cardiff.—Resident Assistant Medical Officer; must possess a Surgical qualification and be registered. Applications and testimonials to the Secretary, 17, Church-street, Cardiff, on or before the 16th inst.

Infirmary for Consumption and Diseases of the Chest, 26, Margaret-street, Cavendish-square.—Visiting Physician; must be M.R.C.P.L. Applications and testimonials to the Secretary on or before June 9.

London Fever Hospital.—Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, Liverpool-road, N., on or before June 7. Election on June 10.

Nottingham Dispensary.—Assistant Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before June 13. Election the same day at 12 o'clock.

Strand Union.—Dispenser; candidates must be properly qualified. Applications and testimonials to the guardians, at 6, Bow-street, W.C., on or before June 13.

Sunderland Infirmary.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATIONS.

Cockermouth Union.—Mr. Wm. P. Murphy has resigned the Second Cockermouth District; area 25,618; population 5197; salary £30 per annum.

Halstead Union.—Mr. Gramshaw has resigned the First Division of the First District; salary £50 per annum. And the Workhouse; salary £40 per annum.

Hunslet Union.—Mr. George Handcock has resigned the Second District; area 2397; population 16,500; salary £60.

Stamford Union.—Dr. George M. Ashforth has resigned the Clipsham District; area 1645; population 213; salary £5 per annum.

APPOINTMENTS.

Chard Union.—Edward Stephens, M.R.C.S., L.R.C.P., L.M., to the First Ilminster District.

East Grinstead Union.—Wm. Bowes, M.R.C.S. Eng., L.S.A., to the Fifth District.

Horsham Union.—Wm. Henry Hubert, M.R.C.S. Eng., L.S.A., to the Rudgwick District.

Poplar Union.—Robert Webb, M.R.C.S.E., L.S.A., to the Bow District.

We remind our readers that the special meeting of the Pathological Society for the consideration of the scheme for amalgamating the Medical societies will be held on Tuesday next, the 7th inst.

Dr. Lyon Playfair, M.P. for the Universities of Edinburgh and St. Andrews, on Tuesday last presided at the distribution of prizes at St. Mary's Hospital, and on the occasion delivered an admirable address.

The College Lectures.—On Monday last Professor John Birkett, F.R.C.S., commenced his course of six lectures in the theatre of the Royal College of Surgeons "On the Nature and Treatment of New Growths," on the conclusion of which Mr. J. W. Hulke, F.R.S., will deliver three lectures "On the Minute Anatomy of the Eye." These lectures are delivered on Mondays, Wednesdays, and Fridays at 4 o'clock.

Fellowship Examinations.—In continuation of the questions submitted to the candidates for the Fellowship of the Royal College of Surgeons, and published in the *Medical Times and Gazette* last week, the following on Medicine were placed before the candidates on Friday, viz.:—1. In what diseases may albumen and blood in the urine occur together or separately? How do you treat the respective cases? 2. Describe the appearance of a lad who is the subject of well-marked inherited syphilis; also mention some of the complaints amenable to treatment to which he is liable. 3. Mention the various agents employed to produce anæsthesia by inhalation, and their mode of administration.

British Medical Benevolent Fund.—At the last meeting of the committee of this fund, £125 were distributed among thirteen applicants, and one annuitant of £20 was elected. He was an old Medical man upwards of eighty years of age. The receipt of the following sums was also announced:—Dr. Haviland, Cheltenham, £10 10s. annually; Dr. Brabant, Havant, £5 5s. annually; Dr. Habershon, £5 5s.; Thomas Bryant, Esq., £5 5s.; Mrs. Briscoe, £5; and H. Sterry, Esq., £5 annually. We would call the attention of our readers to an appeal which is now being circulated by the committee of this fund, in the hope that every member of the Medical Profession will aid in supporting a work which relieves so much misery and distress amongst Medical men, their widows, and their orphans.

It is proposed to erect a Cottage Infirmary at Petersfield.

Scholarship for Natural Science at St. Peter's College, Cambridge.—An examination in natural science (chemistry, comparative anatomy, physiology, and botany), for a scholarship of the value of £60 per annum, will be held at St. Peter's College, on June 14, open to all students who may desire to enter at the University. Names of candidates must be sent to Rev. J. Porter, tutor of the College, a week previously.

Westminster Hospital.—The annual distribution of prizes to the students of the Westminster Hospital took place on May 12, in the board-room of that institution; Lord Charles J. F. Russell in the chair. The following were the prizemen for the Summer Session 1869:—*Practical Chemistry.*—Mr. Henry Parkhouse, prize; Mr. Walter Arthur, certificate. *Botany.*—Mr. Henry Parkhouse, prize; Mr. John Riley Hacking, certificate. *Materia Medica.*—Mr. Henry Parkhouse, prize; Mr. Frank W. Butler, certificate. *Forensic Medicine.*—Mr. Thomas Pennington Lucas, prize; Mr. Ferdinand Wallis, certificate. *Midwifery.*—Mr. Ferdinand Wallis, prize; Mr. Thomas Harvey, certificate; Mr. Thomas P. Lucas, certificate. Winter Session 1869-70.—*Anatomy.*—Mr. John James Johnson, prize; Mr. Thomas Edward Dakeyne, certificate. *Physiology.*—Mr. Thomas Edward Dakeyne, prize; Mr. John James Johnson, certificate. *Medicine.*—Mr. Thomas Harvey, prize; Mr. Ferdinand Wallis and Thomas P. Lucas (equal), certificates. *Surgery.*—Mr. Thomas Harvey, prize; Mr. Ferdinand Wallis and Mr. Thomas P. Lucas (equal) certificates. *Chemistry.*—Mr. Thomas E. Dakeyne, prize; Mr. John James Johnson, certificate. *Bruce Prize.*—Mr. Thomas E. Dakeyne. *Chadwick Prize.*—Mr. Ferdinand Wallis. *Clabon Prize.*—Mr. Thomas Edward Dakeyne. *Clinical Surgery.*—Mr. Thomas P. Lucas, prize; Mr. Ferdinand Wallis, certificate. *Clinical Medicine.*—Mr. Thomas P. Lucas, prize. *Prosector's Certificates.*—Mr. Thomas Cawley Eager and Mr. Ferdinand Wallis.

The Napoleon Hospital at Berck sur Mer.—This Hospital for scrofulous children, near Boulogne, of which we have formerly given an account, continues in a very flourishing state. During the late rigorous winter, the children have had their daily salt-water bath in a covered pond, containing 100 cubic metres of water, renewed at each tide, and suitably warmed. The Hospital administration has resolved to devote 100 beds to patients whose parents are able to pay enough to cover their expenses, and which at present are charged at eighteenpence per diem.

Liniment in Fissure of the Anus.—Dr. Van Holsbeck recommends the following liniment as one of great utility:—It is made by dissolving one part of tannic acid in sixteen of glycerine, and, in this solution, a tent of greater or less size is to be soaked and introduced into the rectum morning and evening. The bowels are to be kept opened.—*Union Méd.*

Composition and Quality of the Metropolitan Waters in May, 1870.—The following are the returns of the Association of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, &c.	Nitrogen.		Hardness.	
			As Nitrates &c.	As Ammonia.	Before Boiling.	After Boiling.
Thames Water Companies.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction .	18·73	0·054	0·075	0·001	14·6	3·8
West Middlesex .	17·37	0·033	0·109	0·000	13·7	3·8
Southwark & Vauxhall . . .	17·13	0·054	0·080	0·002	13·5	3·6
Chelsea . . .	18·57	0·050	0·066	0·001	14·2	3·8
Lambeth . . .	18·27	0·063	0·075	0·003	13·9	3·1
Other Companies.						
Kent	28·00	0·011	0·129	0·000	20·0	5·9
New River . .	16·09	0·011	0·111	0·000	13·1	3·1
East London . .	16·11	0·020	0·091	0·002	13·2	3·2

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Lambeth Company.

The average quantity of water supplied daily to the metropolis during the preceding month was, according to the returns of the Water Companies to the Association of Medical Officers of Health, 101,498,883 gallons; and the number of houses supplied was 477,996. This is at the rate of 31·6 gals. per head of the population daily. The last official return from Paris stated that the average daily supply per head of the population was 25·7 gallons; but this includes the water used for the public fountains, and for the ornamental waters in the Bois de Vincennes and the Bois de Boulogne.

H. Letheby, M.B.

But there has been offered to us a way for escape from the contradictions into which we are led by this manner of handling the ordinary atomic theory It is open to conjecture, that matter may be continuous—of a homogeneous, not heterogeneous texture—elastic, not composed of hard particles, and, being continuous, consequently subdivisible without limit. According to this notion there may be masses of any conceivable smallness, but so long as they possess magnitude these are not atoms, *i.e.* indivisibles. The two theories differ in this respect: the one teaches the existence of particles which are very small, but still composed of parts, and possessing a determinate and not difficultly imaginable magnitude. They may be compared to a heap of cannon balls, or any other symbol selected from ordinary objects. The other theory disregards the shell of the imaginary spheres, and treats only of their centres. These points are presumed to be the centres of action of radiant forces, under some conditions attractive, under others repulsive. Are these two theories altogether incompatible with each other? It certainly seems as difficult to dispense with the assumption of atoms as it is to manage them in their assumed combinations. But would it not be allowable to figure these atoms not as weighing fractions of ordinary units of weight; may we not say that they hold the place of the "centres" of force just referred to, that they are, in fact, infinitely small?—*William A. Tilden, "On the Constitution of Matter," in the Pharmaceutical Journal.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Corrigendum.—In our last, Dr. Thurnam's name was printed Dr. Shuman, through a clerical error.

Mr. T. C. J. is thanked for his information respecting Mr. Cline. It will be used in the next sketch.

Lunacy.—The usual fee is two guineas.

A. G., Pantheon.—The subject will be treated at the proper time. The letters of the late Mr. W. Wadd are most interesting, and one of them, at least, will be published.

Mater.—The authoress is well-known. Her initials are M. A. B.

Vaccinator is required by law to fill up the certificate and deliver it to the parent of the child. The public vaccinator is required to forward the certificate to the Registrar.

Alienist.—We have received several communications on the subject of the appointments at Broadmoor and at Bedlam. In both instances the authorities may be very safely left to make their own selection. At Broadmoor the claims of Dr. Orange are not likely to be overlooked. As for Bedlam, we do not think that long and important service on the part of the father are *cæteris paribus* disqualifications on the part of the son. As to the "mature years and sound experience," that is all moonshine. The appointment is a junior one, and should be held by a junior Practitioner.

A Practitioner on the Medical Acts Amendment Bill.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Perhaps it would not be amiss if the members of the Medical Profession were to give an expression of opinion relative to the Medical Acts Amendment Bill now before Parliament. I think it is generally good. The point that appears to me most particularly otherwise is the power given to the Privy Council: that seems to me to be an indignity to the Profession. There is, I fancy, quite sense and discretion enough among us to exercise the laws that are made for our guidance and governance without supervision. I am, &c.

May, 1870. One of Them.

In Rure.—One qualification is, under certain circumstances, accepted by the Poor-law Board, but a gentleman holding the double qualification would be preferred.

R. will find some reference to the subject in Copland's Dictionary.

An Apothecary.—It is doubtful whether the Act of 1815 was repealed by the Medical Act. The question has not been brought before the higher legal tribunals. Under the present Act, the Practitioner is enabled to recover at law "according to his qualifications." Now, it is very questionable, indeed, if, not being an apothecary, he could recover for "attending, prescribing, and dispensing medicine for a Medical case." The by-laws of the College of Physicians have not the force of statute law.

Nitrous Oxide Gas.—Mr. Coxeter's instrument for administering this agent as an anæsthetic consists of a strong iron bottle, in which the nitrous oxide previously condensed into the liquid form is kept, and from which it is allowed gradually to escape as a gas by a flexible tube into a bag, and inhaled therefrom by the patient through a face-piece, accurately adjusted to cover the mouth and nostrils. Mr. Finlayson demonstrated the efficacy of the apparatus and the agent last week on several cases of teeth extraction at the Leith Hospital in presence of the Medical staff.

A. Z.—The chairman of the Association was the father of the present Dr. George Burrows.

Mr. J. S. Smith.—If the certificates are received, he can go up for examination at once.

*** We have been requested to publish the following petition:—

To the Lords Spiritual and Temporal assembled in Parliament of the United Kingdom of Great Britain and Ireland,

The humble Petition of the President and Members of the Ulster Medical Society in Ireland

Sheweth: That a Bill has been brought into your Honourable House intituled an Act to amend the Law relating to the Qualification of Practitioners in Medicine and Surgery, and otherwise to amend the Medical Act of 1858.

Your petitioners humbly pray your Honourable House may not proceed further with the said Bill without full inquiry.

Your petitioners deem it most desirable that, in addition to the possession of a licence or degree from one of the universities or Medical corporations of the United Kingdom, all candidates for registrations, as Practitioners in Medicine and Surgery, should undergo a uniform State examination.

Your petitioners humbly object to the proposed Bill on the following amongst other grounds:—

1. Your petitioners disapprove of the too absolute power of rejecting any scheme proposed by the Medical Council conferred upon the Privy Council by clause 7.

2. Your petitioners pray that the diploma of Licentiate in Medicine and Surgery, to be granted by the examining boards, be an imperial diploma, and that the register shall not show in what part of the United Kingdom the licence referred to was granted, as it does in clause 14.

3. Your petitioners further pray that the Lord President of the Council may introduce into the Bill a clause providing for the reconstruction of the Medical Council. They believe that much good would be likely to follow from extending the franchise in the universities and corporations, or otherwise providing a more direct representation of the Profession in the General Medical Council.

4. Your petitioners are strongly of opinion that, for the satisfactory working of the new Act in this part of the United Kingdom, it is necessary that the Apothecaries' Hall of Ireland should not be constituted one of the Medical authorities under the Act, and that it should no longer send a representative to the General Medical Council. Your petitioners submit that the apothecaries should be restricted to their proper sphere, the science and practice of pharmacy, and that their functions as a body competent to license Medical Practitioners should be annulled by the Act.

Your petitioners humbly pray your Honourable House to consider favourably the prayer of this petition, and your petitioners will ever pray.

(Signed on behalf of the Ulster Medical Society),
William MacCormac, M.A., M.D., F.R.C.S.I., President.
John Walton Browne, B.A., M.D., Honorary Secretary.

A Student.—Your application to be admitted to the forthcoming examination in arts, etc., at the College of Surgeons will be in time if made at once.

A Fellow.—The Secretary of the College has just posted letters to all the Fellows in the United Kingdom whose addresses are known to him, giving full particulars of the annual election of Fellows into the Council of the College on July 7 next.

Poor-law Pensions.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I have been struggling for many years in practice. I have a small private one and a union appointment, which I have held for upwards of twenty years. I am now above 50, and, although I do not feel myself equal to the parochial work, yet, like many other Medical men, I am too poor to give it up, though I feel that both the pauper patients and myself would be benefited by a separation. Will not some Member of Parliament come forward and help us by introducing a Bill or recommending the Government to do so this present session, enabling the Poor-law Board to grant us a pension for our previous but ill-paid service? I trust you will use your influence to obtain this boon for us without any delay, for I am quite certain that no man who is above 50 and has worked conscientiously for twenty years is able to do his duty as it ought to be done, both to his private patients and also to the parish ones. I am, &c.

May 31. Hope Deferred.

The editor of the *Nashville Journal of Medicine and Surgery* is exceedingly angry with us for an article which we wrote some six months ago dealing with American Medical periodicals. Nor have we only fallen under his lash; but it is applied with still more unsparing hand to a journal we took the opportunity of praising—praise which we reiterate—the *New York Medical Journal*. *Apropos* of this journal, the Nashville editor writes:—

"The editor need be merely a myth, having but little more to do in guiding the creation than the driver of a street car has in shaping the course of the machine over which he presides. Having nothing to do, he would of course soon become a nonentity, and his machine, exhibiting fitful signs of life here and there, as accidental and trivial obstructions interposed to shake and jostle it, would stick to its ruts, and make its twelve cycles within the year as well without as with an outrider. Its tendency would be to become a dead sea of dignity and self-contentment, with a rag in the horizon marking the whereabouts of the craft of its editorial Sinbad."

This confusion of metaphor would be delightful were it intelligible; but here, as in many other passages, the writer is beyond us, and we are fain to confess we do not understand the American language, but are obliged to content ourselves with plain English. By the way, in the same number of this journal, we read of a famous man who lived down South, and who is described as "the lithotomist of the nineteenth century." Among other wonderful traits of character it is said of him that "when at home he never omitted the towel bath every morning at all seasons of the year."

THE LAST THING IN QUACK ADVERTISEMENTS.

To all the women around about the Continent of America, Greeting! I have brought peace and happiness unto thousands.

By my works have I been tried.

I have cured rheumatism and neuralgia of the back and womb. Yea, time and again have I cured them.

I have cured the pains and aches peculiar to the "monthly period," and the women of the multitude testify.

I have roused the torpid womb from its slumber, and established the regular functions. Verily have I given strength to the uterus, for I am the handmaid of nature.

I have restored the catamenia unto many, yea, even when the snows of winter had "suppressed" them.

The cheek that was pale, I have caused to bloom like unto the rose, and the women of the land have blessed me.

I have checked the "flow" that was excessive, and made her "courses" regular.

I have raised her from the abyss of prostration, and made her couch the abode of peace.

I have cured the woes of Leucorrhœa; the "whites" have I slayed by thousands. Yea, like chaff before the wind have they been scattered.

I have heard the lamentations of the insane; out of the depths of an asylum mine ear hath heard them. These have I lifted from the gulf of despair, and to their friends have they been restored.

I have given aid and comfort unto women without number; from the mountains to the seaboard have my benefits been established.

O, ye ladies of America! I bring you peace: I am that without which ye are ill and full of trouble. Yea, even woman's best friend.

I hide not my light under a bushel-tub; my works speak out like unto the tongues of many trumpets, and the voice of the people sustaineth me.

Behold, I say unto you, give me but a part of your faith, and your hopes will not be disappointed.

Bradfield's Female Regulator.

P.S.—I cost only $1.50 per bottle, and am to be found in all respectable drug stores. B. F. R.

—*New York Medical Gazette.*

COMMUNICATIONS have been received from—

Mr. W. B. WHITMORE; Dr. LONG FOX; Dr. THURNAM; Professor HUMPHRY; Mr. W. W. REEVES; Dr. SANDERSON; Dr. SANSOM; Dr. J. RUSSELL; Mr. GODRICH; Dr. THORNE THORNE; Dr. FREDERIC BATEMAN; Professor ERASMUS WILSON; Dr. BUZZARD; Mr. J. CHATTO; Dr. PLAYFAIR; Dr. LIONEL S. BEALE; Dr. HUGHLINGS-JACKSON; HOPE DEFEARED; Mr. E. IRELAND; Dr. MACCORMACK; Dr. J. W. BROWNE; Dr. LETHEBY; Mr. C. VERRAL; Dr. T. S. COBBOLD.

BOOKS RECEIVED—

Family Friend, part ii.—Ambition's Dream, a poem—Madame Brenner's Gymnastics for Ladies—Weightman's Medical Practitioner's Legal Guide—Wilson on Extraction of Cataract—Journal of Anatomy and Physiology, May—Report of the Earlswood Asylum for Idiots—New Orleans Journal of Medicine—Pharmaceutical Journal, No. 132—Report of the Managers of the State Lunatic Asylum, Albany, 1869—Edinburgh Medical Journal—Report of the Nottingham Dispensary—Dr. Ross's Report on Relapsing Fever in St. Giles District, 1869-70—Food Journal, June—Ivory on Pauperism and the Poor Laws—Hardwicke's Science Gossip.

NEWSPAPERS RECEIVED—

Edinburgh Evening Courant—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

June 4. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

ROYAL INSTITUTION, 3 p.m. Prof. Grant, "Comets."

6. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

7. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Seeley, "Present English History."

8. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

EPIDEMIOLOGICAL SOCIETY, 8 p.m. Dr. Jelly (formerly of Chili), "An Account of the National System of Vaccination in Chili."

ROYAL MICROSCOPICAL SOCIETY (King's College), 8 p.m. Mr. John Bell, "Experiments on Fermentation and Parasitic Fungi." John W. Stephenson, F.R.A.S., "A New Form of Binocular Microscope."

9. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "Electricity."

10. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

ROYAL INSTITUTION, 8 p.m. Prof. Odling, "The Ammonia Compounds of Platinum."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 28, 1870.

BIRTHS.

Births of Boys, 1134; Girls, 1085; Total, 2219.
Average of 10 corresponding weeks, 1860-69, 1915·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	653	586	1239
Average of the ten years 1860-69	649·2	595·7	1244·9
Average corrected to increased population	...	...	1370
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	1	6	28	...	4	1	3	3	...
North ...	618210	5	12	26	...	9	4	1	2	6
Central ...	383321	...	7	4	2	1	...	1	2	1
East	571158	5	5	13	...	5	1	3	1	1
South	773175	...	1	19	1	9	2	5	3	5
Total	2803989	11	31	90	3	28	8	13	11	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·091 in.
Mean temperature	56·6
Highest point of thermometer	82·1
Lowest point of thermometer	37·9
Mean dew-point temperature	46·1
General direction of wind	Variable.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 28, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending May 28.	Deaths Registered during the week ending May 28.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2219	1239	82·1	37·9	56·6	13·66	0·00	0·00
Portsmouth ...	122084	12·8	78	50	78·6	41·6	56·0	13·33	0·00	0·00
Norwich	81087	1·09	56	20	76·5	40·0	55·1	12·83	0·00	0·00
Bristol	171382	36·6	121	89	70·8	40·0	53·3	11·84	0·00	0·00
Wolverhampton ...	72990	21·5	53	32	73·3	43·2	54·7	12·61	0·00	0·00
Birmingham ...	369604	47·2	238	141	70·0	43·0	54·9	12·72	0·00	0·00
Leicester	97427	30·4	69	46	...	...	...	...	...	...
Nottingham ...	88888	44·5	41	20	77·6	38·5	55·2	12·89	0·00	0·00
Liverpool	517567	101·3	387	224	70·7	44·5	54·2	12·33	0·00	0·00
Manchester ...	374993	83·6	252	176	...	...	...	...	...	...
Salford	121580	23·5	85	49	71·6	37·9	53·1	11·73	0·00	0·00
Bradford	143197	21·7	111	70	75·7	44·0	55·4	13·00	0·00	0·00
Leeds	259527	12·0	204	128	77·0	42·0	55·6	13·11	0·00	0·00
Sheffield	247378	10·8	173	109	72·5	41·0	53·6	12·00	0·00	0·00
Hull	130869	36·7	80	46	69·0	33·0	51·6	10·89	0·00	0·00
Sunderland ...	94257	30·5	46	34	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	81	52	64·0	44·0	51·0	10·56	0·00	0·00
Edinburgh	178970	40·4	137	89	...	...	...	...	...	...
Glasgow	468189	92·5	374	241	72·2	40·0	52·8	11·56	0·05	0·13
Dublin (City, etc.*)	321540	33·0	194	141	71·4	36·0	54·4	12·44	0·00	0·00
Total of 20 Towns in United Kingd'm	7209603	33·8	5002	2996	82·1	33·0	54·2	12·33	0·00	0·00
Paris—Week ending May 28	1889842	242	...	1254	...	...	...	...	...	...
Vienna—Week ending May 21 ...	605200	167	...	496	...	...	67·1	19·50	...	...
Berlin—Week ending May 26 ...	702437	128	663	431	...	...	50·7	10·38	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·091 in. The highest barometrical reading was 30·28 in. on Wednesday, and the lowest was 29·82 in. on Sunday.

The general direction of the wind was variable.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

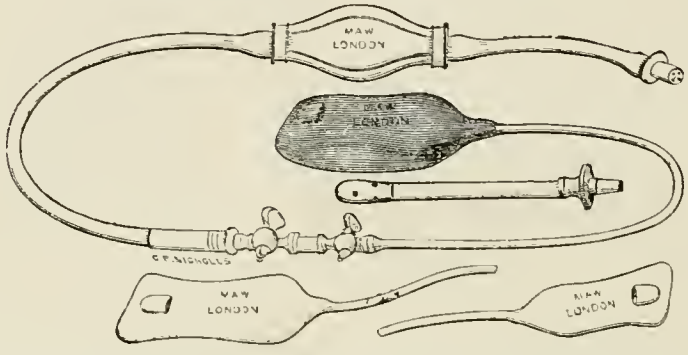
* Inclusive of some suburbs.

DR. BARNES'S

APPARATUS FOR DILATING THE OS UTERI

AND INJECTING PERCHLORIDE OF IRON.

(*See Dr. Barnes's Work, pages* 8 *and* 9.)



The Set of Three India-rubber Bags, fitted with screw stop-cocks, adapted to a Higginson's Syringe, with elastic gum tube, and 8 oz. capped stoppered bottle, in morocco case, price **21s.**

S. MAW, SON, & THOMPSON,

11 and 12, ALDERSGATE-STREET, LONDON, E.C.

THE SELF-ILLUMINATING OPHTHALMOSCOPE.

Arranged by Professor LIONEL BEALE, F.R.S. (King's College).

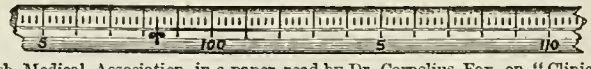
May be used to examine a patient in any position, in daylight, generally without atropine. Is held in the hand. No dexterity required in its management. Is adapted to form an Otoscope, Endoscope, Laryngoscope, &c. Descriptive Circular forwarded. *Vide* "British Medical Journal," April 2nd, 1870. Price, in case, 42s. Sole Maker, HAWKSLEY, Surgical Instrument Maker, Blenheim-street, Bond-street, London, W.

HAWKSLEY'S PATENT CLINICAL THERMOMETER.

HER MAJESTY'S LETTERS PATENT have been granted for this Thermometer, the index of which cannot be shaken into the bulb, or the black divisions rubbed out. Prices of the 6-inch patent instrument, in safety case, upon which are three engraved scales, 12s. 6d.; 5-inch ditto, in ivory case, 13s. 6d.; 3-inch ditto, in silver case, for waistcoat pocket (Prof. Beale's), 16s. Post free.

Hawksley's Improved Clinical Thermometer.

Section showing actual size, range 90 to 110.
Vide "Lancet" Report, July 3rd, 1869.



Vide British Medical Association Reports, 1869.

At the last meeting of the British Medical Association, in a paper read by Dr. Cornelius Fox, on "Clinical Thermometers," it was announced that this instrument was far superior to that of any other maker. Prices of the Improved Clinical Thermometers, with indelible divisions, in similar cases to the patent instrument, 6-inch, 10s. 6d.; 5-inch, 12s. 6d.; 3-inch (Prof. Beale's), 16s. Post free. Temperature charts bound for the pocket. Descriptive circulars forwarded. Inventor, Patentee, and Sole Maker, **HAWKSLEY**, Surgical Instrument Maker, Blenheim-st., Bond-st., London, W.

Protected by Royal Letters Patent. Approved by high Medical Authority.

FOX'S PATENT PALATABLE COD-LIVER OIL, PALATABLE COD-LIVER OIL WITH QUININE, PALATABLE CASTOR OIL.

The advantages of Fox's Patent consist in the purest Oils being so prepared as to be really agreeable and pleasant to the taste of the most fastidious, whilst their medicinal properties are not in the least impaired.
They can be readily taken by both infants and adults.
They do not produce the slightest sickness or aversion.
They can be retained on the stomach when all other kinds have been rejected.
They can be readily mixed with any Pharmaceutical Preparation.
They need only to be tried to be universally appreciated.
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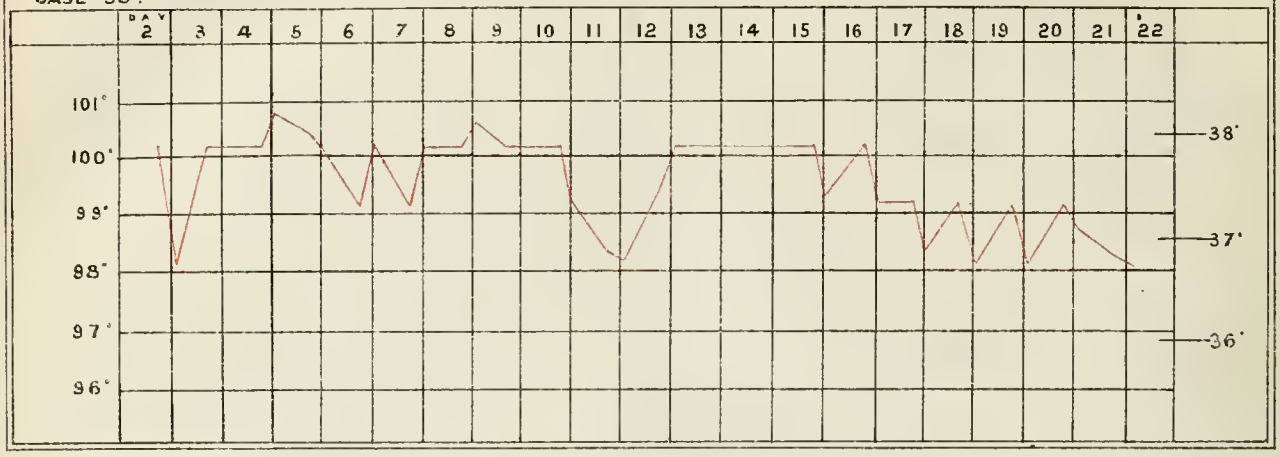
CAUTION TO CHEMISTS, DRUGGISTS, AND OTHERS.—Letters Patent having been granted to George Wakefield Fox, of 208, City-road, Manchester, for his Palatable Cod-liver and Castor Oils, and it having come to his knowledge that inferior imitations of the said Oils are being vended, Notice is hereby given, that proceedings at law will be instituted against any person or persons vending such imitations, or any infringement of the said Patent, or applying to such imitations or to the ordinary Oils, the said Patentee's Name or his Trade Mark—namely, the word "Palatable."
EDWARD K. DUTTON, Agent for the said Patentee, 3, Smithy Door, Manchester.

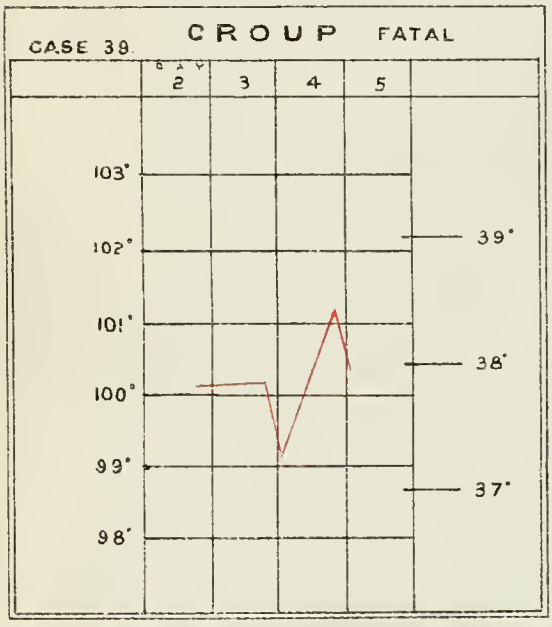
TETANUS

CASE 38.



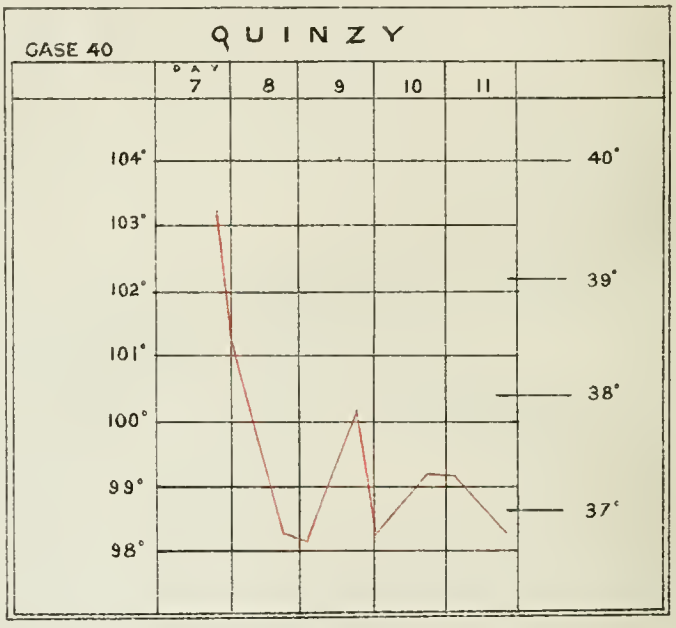
CROUP FATAL

CASE 39.



QUINZY

CASE 40



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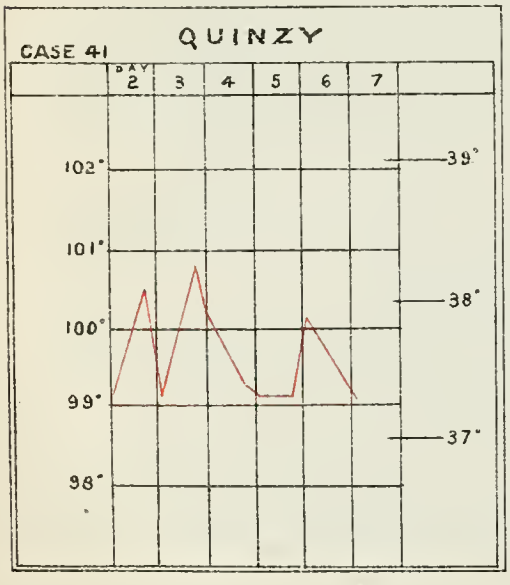
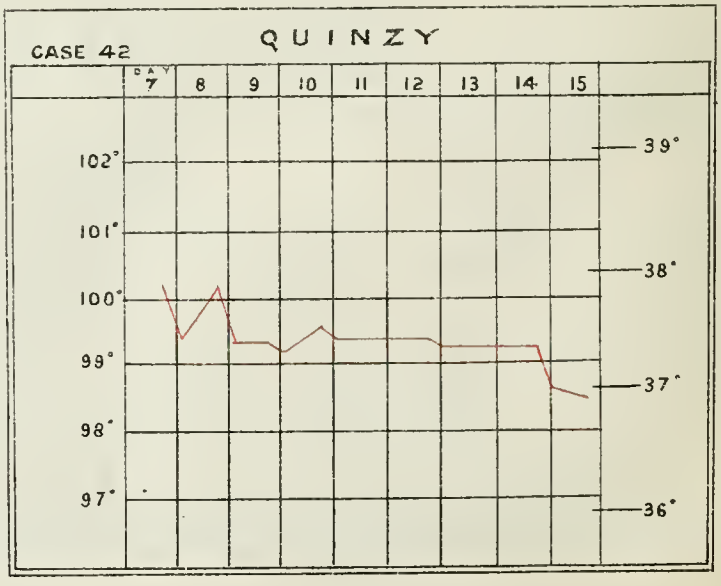


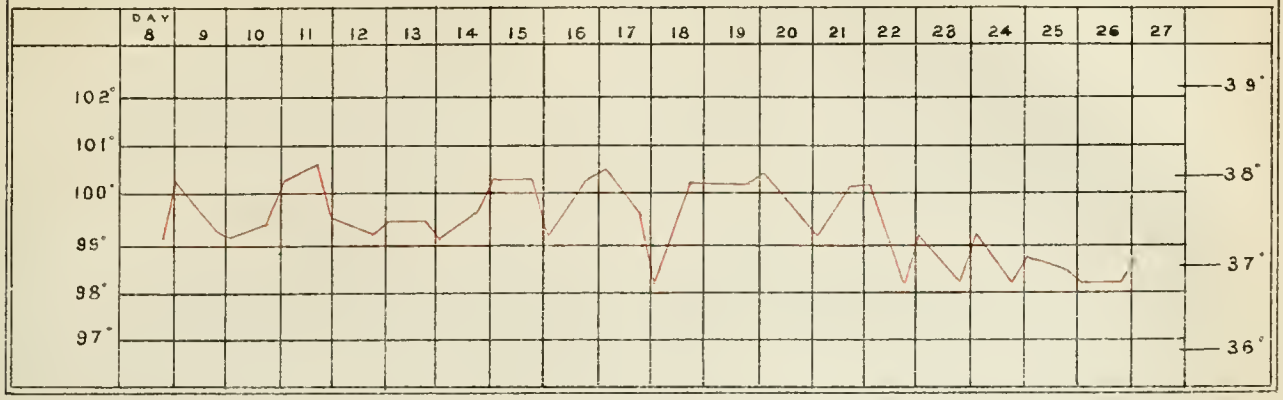
QUINZY

CASE 42



CASE 43.

BRONCHITIS



CASE 44.

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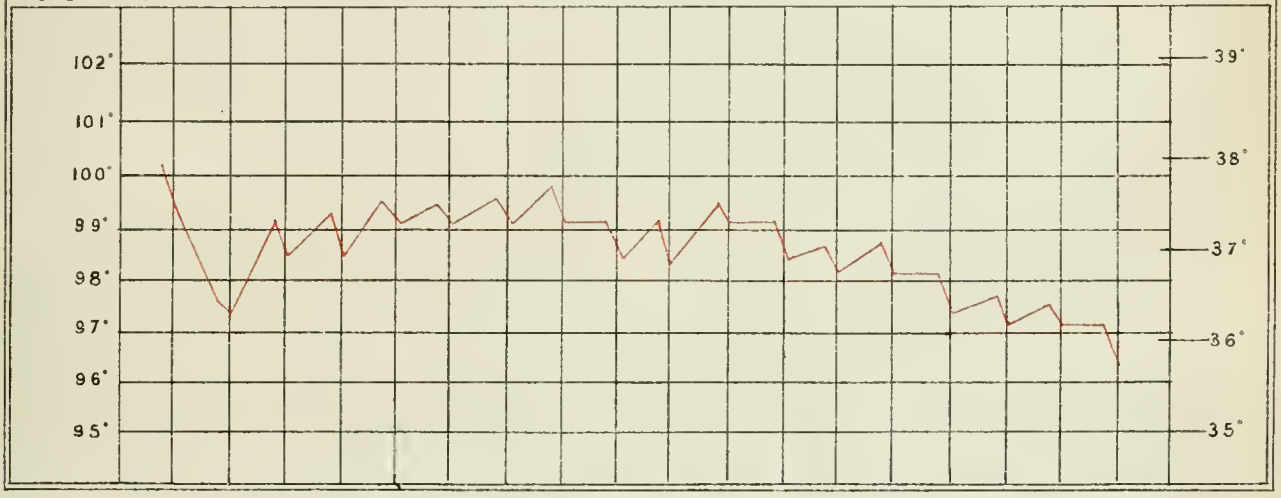
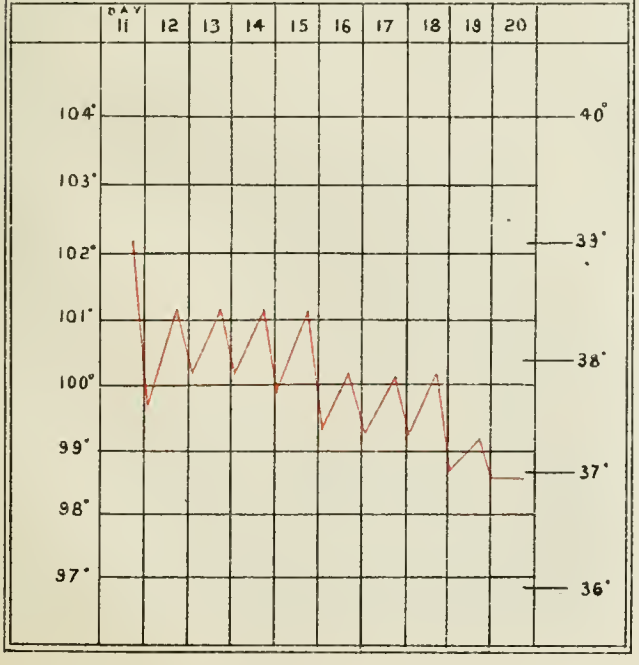


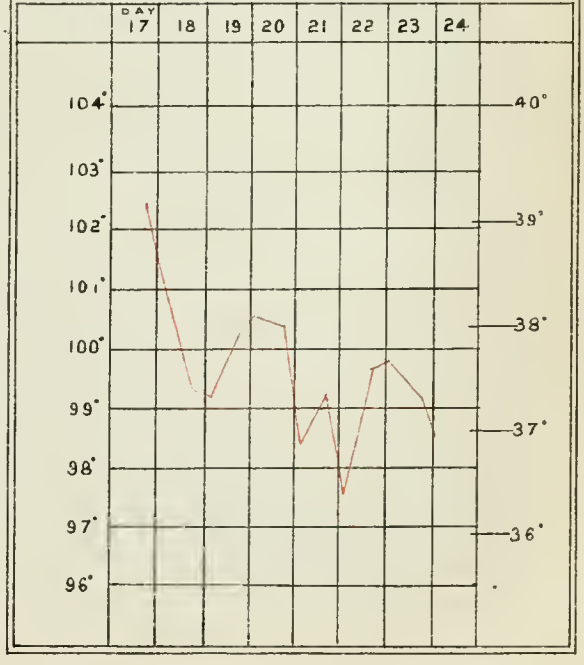
CASE 45

BRONCHITIS



CASE 46

CAPILLARY BRONCHITIS



ORIGINAL LECTURES.

ON VISCERAL NEURALGIA.

By Dr. ALBERT EULENBURG,
Lecturer on Clinical Medicine in the University of Berlin.

III.—Neuralgia Mesenterica.

Synonyms.—Colic, enteralgia, enterodynia, lead colic (*Colica Saturnina*).

The morbid phenomena known under the name of colic, neuralgia mesenterica, and so on, the prototype of which is the lead colic, and the endemic colics related to it, are characterised symptomatically by spontaneous paroxysmal pains occurring principally in the mesogastric region. They occur, as a rule, without premonitory symptoms, and are described by the patients as tearing, cutting, twitching, and piercing abdominal pains. The umbilical region forms a kind of centre for them, and in their radiation they affect chiefly the parts corresponding in position with the lower part of the intestinal canal—the cæcum, the ascending and transverse colon—hence the name colic—but oftener they radiate also into the epigastric, hypogastric, and lumbar regions. Pressure, as a rule, alleviates the pain, but some patients complain of tenderness on pressure. The abdominal walls during an attack are generally tense, epigastrium drawn in, recti muscles tightly contracted and sometimes of wooden hardness. When the abdominal wall is loose, single coils of intestine distended by gas may sometimes be traceable on abdomen; these give on percussion a loud, deep, not tympanitic sound; they may disappear with a gurgling sound, and reappear in other parts. These coils, distended as it is believed in consequence of spasmodic constriction of other parts of the canal, are limited to the region of the cæcum and colon. There follows spasmodic contraction of the sphincter ani, which is particularly frequent in lead colic. These phenomena, on which we shall have further to dwell, help to explain the constipation which is generally connected with each attack of paroxysmal colic; the constipation, however, often occurs without constriction of the intestinal canal, especially so in lead colic. The renowned observer of lead colic, Tanquerel des Planches, found constipation to exist in 1140 out of 1217 cases. It is often very obstinate, lasting from a week to a fortnight, or sometimes three weeks. It is rare in an attack of colic to observe any other changes of motility in the abdominal organs, such as nausea, vomiting, desire to micturate or retention, retraction of the testicle, and others. Changes are, however, frequently present in the circulatory system which point to general disturbance of the circulation, more particularly in lead colic to abnormal weakness of the heart's action. The impeded peripheric circulation, the arterial anæmia of the external parts, are indicated by a pale colour and coldness of the face and extremities, a subjective feeling of chilliness which may increase to complete rigors, chattering of the teeth, and by the smallness and tension of the pulse of peripheric arteries; the pathognomonic hardness of the pulse—as if a piece of wire were under the finger—has been previously pointed out in connection with painters' colic by Stoll; at the same time the heart's action is decreased, the impulse being scarcely perceptible; the number of beats sometimes increased, but generally diminished—retardation of the heart's action is in a high degree characteristic of lead colic. Tanquerel, amongst his 1217 cases, found 678—more, therefore, than one-half—whose pulse was only between 30 and 60 per minute. I have in one case noticed 28 beats per minute. The hardness and slowness of the pulse seem to bear a direct relation to the intensity of the pain. Lentin has found in miners that the pulse was extremely slow and full at the acme of the pain, and has declared it to be a favourable phenomenon that the number of beats should be increased. I have noticed increase of pulsation—up to 120—only in slight cases, and towards their termination.

The duration of the paroxysm of colic may be from one minute to several hours, or it may last with several intermissions even a whole day. A recurrence of the attack is very irregular, occuring sometimes daily, sometimes only after years. This condition is not peculiar to, but is most frequent and most marked in cases of lead colic. After the patients have withdrawn themselves for years from the exciting causes, and have remained free from the disease for years, suddenly, and without any known cause, they may be again attacked. In the severest cases painless intervals scarcely exist, merely remissions of the pain occur. After a whole series of attacks has ceased when stopped by Medical aid, a very long uninterrupted period of months or years may follow before the recurrence of another series of attacks. As a rule, however, the intervals between one series and the next become shorter, and in addition other symptoms of chronic lead poisoning are manifested. Old workers with lead remember their individual attacks well, their number being generally smaller than might be expected. A painter, æt. 67, who was under my care, was apprenticed at the age of 17; his first attack occurred at 25, second at 29, and his third at 30; then the intervals became longer, but he had altogether seven or eight attacks with no other symptoms of poisoning. On the other hand, a youth of 18, apprenticed to a painter (the boy's father having also been in the same trade, and having also had lead colic), had four severe attacks of colic and lead-palsy also before he had been apprenticed three years. In this instance the hereditary taint may perhaps have had some influence.

Pathogenesis of Colic and Physiological Analysis of its Symptoms.—The neuralgic nature of colic seems to have been first indicated by Willis, who very justly distinguished the mere symptomatic pains of a colicky nature from colic proper—a differentiation which many subsequent authors have neglected to a truly deplorable extent. How little the name colic has been limited to enteric neuralgia, and how much it has been promiscuously applied to the most different kinds of pain in the intestinal canal and its appendages, is best shown by the large number of forms of colic which are recognised, and by the fact that most authors have distinguished "nervous colic" as a separate kind. The seat of this nervous colic has been located by the majority of writers in the mesenteric plexus, and the affection called hyperæsthesia of the mesenteric plexus, neuralgia mesenterica, or meseraica.

Most authors have agreed on this point, that the common neuralgic colic, the mesenteric neuralgia, is one of the sympathetic neuralgiæ, or, as it has been called, one of the ganglion neuralgiæ. Painters' colic particularly has been attributed to a diseased state of the abdominal ganglion system by Dehaen and Vanstrostroyk; the same is done by Andral, Grisolle, Ranque, and others. The latter three, however, declare that the spinal cord also participates. On the other hand, Astruc and Sauvages considered colic to be of purely spinal origin, and several other authorities have denied its neuralgic nature, in order to reduce it to certain anatomical changes in the intestinal canal and the abdominal walls. Amongst these not very fortunate attempts belong the hypothesis of inflammation of the bowels (Bordeu, Broussais, Renauldin, and others), exsiccation of the mucous membrane of the bowels (Stockhausen, Pariset), accumulation of fæcal matter (Gardine), accumulation of gas (Despois), spasmodic contraction of the intestine (Illsemann, Hoffmann, Combalusier, Anguetin), and contraction of the diaphragm and abdominal muscles (Giacomini, Briquet). Tanquerel des Planches(a) propounded most positively the theory of the sympathetic origin of painters' colic; he did not, however, place its starting-point inclusively within the mesenteric plexus, but in other sympathetic plexuses also according to the seat of the pain (plexus cœliacus, hypogastricus and renalis). Tanquerel had as his basis the ideas of the physiologists and pathologists of his time, according to which the sympathetic nerves were looked on as the centres of motion and sensation of the vegetative organs of the body; from this standpoint Tanquerel denies any participation of the spinal cord as assumed by Andral and others; this he thinks only occurs when besides colic paralysis also exists, and in "arthralgia saturnina," the colic, however, has its seat only in the sympathetic, and nowhere else.

Amongst the forty-nine cases recorded by Tanquerel in which post-mortem examinations were performed, in only one was any morbid change detected in the sympathetic. In all the other cases examination of the sympathetic gave a negative result, and Tanquerel himself believes that the anomalies found in his twenty-five cases were not of anatomical origin, but should be considered as effects of phenomena observed during life. All other local changes discovered in lead colic are also of an insignificant and inconstant nature, and become of still less consequence from the fact that, in the cases where post-mortems were made, death had not taken place in consequence of the colic, but by means of accidental complications. Other observers—Andral, Copland, Louis, Stokes, and others—have also discovered either no changes at all or only slight accidental ones.

(a) Traité des Maladies de plomb ou saturnines, Paris, 1839.

Under such circumstances we are compelled to fall back on the results of clinical observation exclusively, and the question arises whether this can supply us with criteria which show with more or less probability that colic is of sympathetic origin. In the present day we of course cannot, as Tanquerel did, place the centre of mobility and sensibility of the abdominal organs in the ganglia of the sympathetic. We know that the sensorium commune of man is exclusively cerebral, and that at the same time the movements of the vegetative organs gain their different kinds of irritation from cerebro-spinal nerve centres, as has been shown experimentally and pathologically at innumerable times in the case of the stomach, intestines, ureters, bladder, uterus, etc. If we consider the group of symptoms which has been denominated enteralgia or colic to be of a neuralgic nature, then we must become mainly interested in the question, through what peripheric tracts does irritation become painfully and abnormally felt; in other words, is the pain communicated to the centres by means of sympathetic or by means of cerebro-spinal fibres? If the first be the case, the sympathetic as an exclusively sensory-motor nerve becomes analogous to the ischiatic nerve in sciatica, and the trigeminal nerve in prosopalgia.

In common as well as in lead colic, we find a series of abnormal motor phenomena which have been thought to be of a reflecto-motor kind, as, for instance, the partial spasmodic contraction of the intestines and sphincter ani, the vomiting, and more especially the tension of the abdominal walls which often precedes an attack. This view of the facts is dependent on the illusion that the changes in sensibility are the primary and essential phenomena of the disease, and that the changes in motility are accidentally and secondarily dependent upon them. This mode of explaining the facts is as little justified in this disease as it is in angina pectoris and other neuralgiæ—hemicrania, for example. In fact, the colic is as little a pure hyperæsthesia of the mesenteric plexus as angina pectoris is a hyperæsthesia of the cardiac plexus; but it is a mixed neurosis of motor-sensory nature. The same morbid conditions which excite abnormal irritation of the sensitive nerves may at the same time cause anomalous motor impulses by their influence on the motor nerve apparatus and the muscular fibres. This is particularly evident in the case of lead colic.

From numerous experiments on animals and from the results of chemical investigations in man, we know that lead has a special predilection towards deposition in the muscular system. We know further that it has a very powerful local effect, inducing contraction of the involuntary muscular system, be it direct or by means of the intermuscular nerve ramifications, by which the known astringent, styptic, and hæmostatic action of the lead preparations are for the most part explained. Nothing, therefore, can be more self-suggesting than the idea that the lead deposited in the walls of the intestine irritates the involuntary muscular fibres of the bowel, thus causing contraction and partial spastic constriction of the intestinal canal. The same thing will apply to the non-striated fibre of the œsophagus and stomach, of the ureters, bladder, urethra, cremaster, and so on. With regard to the dependance of the hardness and tension of the abdominal walls on reflex contraction of the abdominal muscles, it must be emphatically stated that such an assertion is void of all physiological support; at least, I am not aware that any one has ever succeeded in producing, or even attempted to produce, reflex contraction of the abdominal muscles through the agency of the sensitive nerves of the bowels. And besides, the hardness and abdominal tension are neither constant nor proportionate to the pain, and may (as Romberg correctly observes) be absent even with very intense pain.

The symptoms mentioned above, pointing to general changes in the circulation, and more particularly to abnormal depression in the action of the heart during a paroxysm, must, however, be considered as reflex phenomena dependent on irritation of the sensitive abdominal nerves. It is an arrest of the action of the heart by reflection, in consequence of irritation of the medullary centres of the vagi nerves, as has been shown by the experiments of Galtz and Bernstein.

We come at last to the question, which has hitherto been entirely ignored, By what tracts are impressions of pain perceived during an attack conveyed to the centrum?

I leave out of consideration the possibility, in our times only here and there believed in, of "transverse conduction"—*i.e.*, transference of sensory impressions from the sympathetic to the sensory cerebro-spinal fibres, as has been maintained by Kuttner and Volkmann. I also feel bound to accept as an unquestionable postulate that anatomically a constant connexion exists between the afferent sympathetic fibres and the fibres of the posterior roots and trunks by means of the rami communicantes; on this supposition it seems to me not improbable that the splanchnic nerves are for the most part the agents of the pains in the abdomen. It is well known that Ludwig and Haffter(b) have observed intense pain to be connected with section of the splanchnic nerves. The painfulness of all operations on these nerves has been confirmed by the most recent investigator in this field—viz.,(c) Nasse. Whilst the motor fibres and those causing arrest (hemmüngsnerven), as is well-known, supply only the small intestine, the sensitive fibres of the splanchnic, according to Nasse, extend to the ascending and transverse colon.

Besides the sensitive intestinal nerves from the splanchnic, sensitive vaso-motor nerves from the plexus of the abdominal aorta may also participate in the paroxysms of pain. I direct your attention to the experiments of Colin,(d) which show that the arteries of the abdominal organs are characterised by great tenderness, whilst those of external parts are devoid of such sensibility.

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture IV.

I.—DISEASES OF INFLAMMATION.

Inflammation from Specific Poisons.

Mr. President and Gentlemen,—Inflammations of the skin originating in specific poison have a general family resemblance with each other, which enables us on the one hand to consider them together, and, on the other hand, to separate them by a well-defined margin from those diseases which are the result of the operations of common inflammation. The poison, whatever its source, when brought in contact with the tissues of the body, whether of the exterior or of the interior, remains apparently inactive for a while. After a period of seeming rest or latency, symptoms arise which show that the nervous system has taken alarm at the presence of the enemy, and a rash or exanthema suddenly appears upon the skin, beginning with the head and moving onwards from the centre to the periphery, the feet and the hands being some time later than the face in manifesting the presence of the rash. Moreover, the evidence is before us that the skin is not the only part in a state of hyperæmia, for the mucous membranes throughout the whole body are more or less congested, and the congestion of the conjunctivæ, of the nasal membrane, and of the fauces is especially manifest.

You perceive how accurately this brief sketch of the specific inflammations represents the eruptive history of rubeola, with its ephemeral satellite roseola, of scarlatina, of variola, in fact of the exanthematic fevers, and also of dermato-syphilis and elephantiasis. But let us give a little more attention to the eruption. At its first appearance it is punctated—that is, it is follicular. The folliculitis continues to increase, and then an inter-follicular suffusion takes place which is more or less restricted or extensive. If we could perceive the approach of the exanthema from the beginning, we might detect it first at a considerable depth in the skin. By degrees it approaches the surface; the follicular plexus up to the aperture of the pore is congested, then the pore is rendered more or less protuberant, and a minute papule is developed. Moreover, the congestion is sometimes confined to nerve districts of small extent so as to produce patches or blotches, sometimes is scattered, and sometimes is more or less general.

The next thing that strikes us in the exanthemata caused by blood-poisons, is the venous tint of colour which the eruption assumes. This it is which has suggested the terms roseola and rubeola, and the same kind of colour is observable in dermato-syphilis and elephantiasis. Scarlatina with its arterial tint and variola must be regarded as exceptions in this particular, but it is not easy to say on what cause the exception depends. There is one other pathological feature which is conspicuous:

(b) "Neue Versuche über den N. Splanchnicus, major et minor. Inaugural Dissertation." Zurich, 1853. Heule und Pfeufer's *Zeitschrift*. Neue Folge. Vol. iv. p. 322.

(c) "Beitrage zur Physiologie der Darmbewegungen." Leipzig, 1866.

(d) "Sur la sensibilité des artères viscerales." *Comptes Rendus*, lv. pp. 403—405.

throughout the whole series—namely, desquamation of the cuticle, the consequence of disturbed nutritive function of the skin.

Roseola I have termed a satellite of rubeola, and I have done so because there is one form of roseola that so closely resembles rubeola as to be altogether undistinguishable from it, and has received the name of "false measles." It would have been more correct to have called it "mild measles," for, with the exception of severity, it is identical with rubeola in every essential respect. We need not trouble ourselves with the question as to whether it originates in the same poison as rubeola, because upon that matter we have little or no information. The form of roseola which resembles rubeola is that in which the eruption appears as small clusters or corymbi of red puncta, more or less completely united by an erythematous base (*roseola corymbosa*). Sometimes the corymbi and sometimes individual puncta throw off narrow rings from their circumference, and the eruption has an annulate character (*roscola circinata*). A third form is that in which the follicular congestion is the most remarkable feature of the exanthem constituting a *roscola punctata*; while in a fourth the eruption appears as a circular blotch of uniform redness, fading at the circumference, and entitles itself to the designation of *roscola orbiculata*.

In Rubeola the corymbous form is the ordinary type of the eruption; the small patches have been termed "crescentic," but an oblong cluster is all that can usually be discovered. On certain parts of the surface, as on the face, the patches are more or less completely blended, and in this situation as in others the follicles are very commonly raised up into minute papulæ.

In Scarlatina the exanthem is more general than in rubeola; it is less confined to nerve districts, but, like rubeola, is usually papular, the papulæ having a similar origin—namely, in congestion of the follicles.

In Variola the exanthema, which is also punctated and papular, is the starting point only of a further progressive development; the papulæ soon become vesicles at the summit, and shortly after pustules, and beyond the pustular period there occurs an ulcerative period.

The diseases just named are the acute exanthemata or exanthematic fevers; they all have their regular mode of development, their acme, and their decline; they run their appointed course in a definite period; they leave behind them in the constitution no perceptible traces of their existence, and, in general, they manifest themselves only once in a lifetime. And I may further remind you that a roseolous exanthem is a common feature of continued fever.

But I have now to direct your attention to certain exanthemata—for example, dermato-syphilis and elephantiasis, which are chronic instead of being acute, which have no decidedly mature form, whose regular course extends over months and often years, and which leave behind them in the constitution lurking traces that at any time may be manifested by destructive changes in the economy.

Let us instance Dermato-syphilis; a chancre, the focus of inlet of the poison, has run its course and healed up; six weeks afterwards an exanthema is developed in the skin, which is identical in appearance with roseola; after the passage of some days or weeks the epidermis exfoliates, and the skin returns to its natural state without other sign than a brownish stain. Another six weeks elapses and a second exanthem appears, no longer a roseola like the first, but an eruption of papulæ of a size corresponding with common leichen. The former attack we should call *dermato-syphilis erythematosa*, or *roseolosa;* the latter *dermato-syphilis papulosa;* or if you choose you may employ the terms roseola syphilitica, and leichen syphiliticus. Then another interval of six weeks transpires, and the eruption may appear for the third time, but with dimensions still further augmented, namely, as a tubercle, *dermato-syphilis tuberculosa* or *tuberosa*.

Therefore the history of dermato-syphilis is somewhat different from that of the acute exanthemata, but perfectly alike in principle, at first an erythematous exanthem, then a papule, and thirdly a tubercle. The erythematous exanthem has the purple tint of roseola, and may be corymbous, or annulate, or orbicular. The papular eruption, which is an exaggeration of roseola, has similar characters, but is chiefly corymbous and disseminated; and the same observation applies to dermato-syphilis tuberculosa, in which the tubercles may vary in size, in distribution, and in mode of growth. Some are simply scattered over the surface; others are gathered into clusters; some are annulate; others are stationary; and others, again, grow by the circumference while they subside in the centre to the natural level of the skin. Conjoined with the whole of these forms is more or less desquamation; with the papular and tubercular forms sometimes suppuration; and with the tubercular forms, also, sometimes ulceration. A dry scale surmounting the flat, orbicular, or annulate tubercle of dermato-syphilis, has received the objectionable name of *lepra syphilitica;* and a thick crust composed of desiccated purulent secretion, and covering a syphilitic ulcer, has been denominated *rupia*.

We have some knowledge of the so-called "poison" of syphilis, but we have none whatever of that of Elephantiasis. There is reason to believe that the latter poison is of malarious origin, and that the disease which it engenders is under certain circumstances susceptible of transmission by contagion. One of the early manifestations of the affection is by the skin, where it throws out a purplish exanthem, consisting of circular spots. At a later period, as we have already seen to be the case in dermato-syphilis, the maculæ become papulæ and tubercula, and the tubercles very frequently fall into ulceration. Thus, it may be shown that an important analogy subsists between all the exanthemata; that, beginning with the simplest and humblest, roseola, we are imperceptibly led onwards to the most complex and the most grave, namely, elephantiasis; and that between these extremes we find dermato-syphilis manifesting every variety of form and degree, a range of variety, in fact, that renders the diagnosis between simple idiopathic roseola and syphilitic roseola, a matter often of difficult diagnosis, and at the same time, that between syphilitic roseola and the roseola of elephantiasis an equally obscure problem.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

OBSERVATIONS ON

DR. BUCHANAN'S LECTURE ON PROFESSOR VON PETTENKOFER'S THEORY OF THE PROPAGATION OF CHOLERA AND ENTERIC FEVER.

By Professor MAX von PETTENKOFER.

I am not surprised at an opposition to my views concerning the relation between supposed organic processes in the soil and ground-water fluctuations on the one hand, and epidemic diseases (abdominal typhus, cholera) on the other, proceeding from a country where hitherto the influence of drinking-water on the occurrence of these diseases has most generally been considered an established fact; and I may say that I am glad that it has come from a man like Dr. Buchanan, who has already made such valuable researches upon the influence of soil on consumptiou and upon other topics of public hygiene. His objections are raised also above the level of ordinary opposition, which, perhaps, has no other basis than captiousness. Buchanan contends on the ground of existing facts, which are in natural connexion with the question before us; his objections therefore admit of a discussion, which cannot but contribute to mutual understanding, and thereby advance the cause.

In Dr. Buchanan's introduction I might correct and amplify something. The mathematical degree of probability, which Professor Seidel has calculated from Buhl's typhus(a) tables and ground-water levels in Munich from 1856 to 1864, is not as Buchanan gives it (273 to 1), but 36,000 to 1.(b)

Again, I might lay stress on the fact that in the meanwhile the researches of Buhl, which had been made on the fatal typhus cases in the General Hospital during eight years, have been extended by me to the whole city of Munich, and over a period of twelve years(c) with a precisely similar result. Through the increase and extension of all numbers which form the groundwork of my inquiries, the probability, already very great and sufficient, which Seidel arrived at out of the numbers of Buhl, has obviously become higher by many degrees. In this essay it has been shown that the three larger epidemics, which had attacked Munich from 1856 to 1868, coincided in time with the three lowest observed ground-water levels, and in such a manner that the largest [epidemic] coincided in point

(a) The translator adopts the term "Typhus" as used by Dr. Pettenkofer, and thinks it well to add that it is frequently employed by Dr. Pettenkofer, both here and in his other writings, as synonymous with enteric fever.

(b) *Vide Zeitschrift für Biologie*, Bd. i. p. 230.

(c) Ueber die Schwankungen der Typhussterblichkeit in ünchen von 1850 bis 1867. *Zeitschrift für Biologie*, Bd. iv. p. 1.

of time with the lowest [water level]; the second and third greatest epidemic (1866 and 1864) with the second and third lowest water levels.

The highest have also been no less remarkable than the lowest ground-water levels. Ever since the ground-water has been observed in Munich (since 1856), the smallest typhus mortality has been yielded in the year 1867, and the next smallest in the year 1861, and, correspondingly, the highest observed ground-water level occurs in the year 1867, and the next highest in the year 1861.

If proof and counter-proof thus agree, one must have very strong prejudice or other outweighing grounds not to find a causal connexion probable between two phenomena so coinciding. However, this is not the point of controversy between Buchanan and myself, for Buchanan himself accepts the researches of Buhl as decisive as to there being in Munich a connexion between the movement of the ground-water and the frequency of typhus, only he wishes to explain the relation otherwise—viz., through an influence of the ground-water fluctuation on the quality of the drinking-water.

Buchanan expresses himself astonished that I hint at processes as yet quite unknown in the soil, and do not rather accept the sinking of the ground-water, as merely signifying contamination of the drinking-water, and thereby favouring the origin of cholera and typhus in the manner already known; he even believes that the facts adduced by Buhl and myself are all in favour of the influence so generally acknowledged in England, and he asserts that we have brought forward no facts which exclude the influence of drinking-water, saying, "he can find neither in my nor in Buhl's treatises, any statement that the coincidences in question have been observed to exist in any one town, which, situated on porous soil, obtains its drinking-water from *springs outside the town*." This objection is, at all events, not applicable to that city in which Buhl and I have observed the typhus frequency and ground-water disturbance for the longest time and most closely—viz., at Munich. Already in the cholera epidemic of 1854 the result of an exact inquiry on the influence of the different drinking-waters in Munich was quite a negative one. I have reported thereon at length in my little book, "The Propagation of Cholera," which appeared in 1855.(d) The greatest part (four-fifths) of the city lies to the left of the river Isar, and the greatest part of the drinking-water was conducted from the more highly situated right bank of that river, on which the suburbs Heidhausen and Giesing are situated. But in 1854 the cholera was raging epidemically on the left bank, especially in those quarters of the town, which were provided with water from the opposite shore; whilst on the right bank, whence the drinking-water came, no case had as yet occurred.

The drinking-water conduits in Munich, under Government or municipal management, passed through very different streets, as I have shown, and very frequently competed in one and the same street. The Munich water-supply offered, therefore, very good points for comparison. I followed out not only the effect of one and the same drinking water in different streets and quarters of the town, but I inquired from house to house from which conduit the water was received, or from what well it was derived. I believed, then, quite as firmly as Buchanan does still in the possibility of the influence of drinking-water, but I came, at Munich, 1854, just as Dr. Letheby in London in 1866, to quite a negative conclusion. I have called attention to these (my negative experiences) not merely in my book, but repeatedly since, on the last occasion last year in the *Zeitschrift für Biologie*, Bd. v., p. 223, the year before in Bd. iv., p. 26.

Since 1854, another very striking fact has come under observation in Munich in favour of the non-influence of the drinking-water, especially with regard to the frequency of typhus. After the cholera epidemic of 1854 and the great typhus epidemic in 1857-58 in Munich, the cry for more and good drinking-water was ever becoming louder. The municipal authorities erected in Thalkirch, about an hour's ascending walk from the town, new waterworks to supply especially its southern, western, and northern portions of the town. The streams flow—precisely as Buchanan desires for the decision of his question—from an area situated outside the town, higher than it and wholly uninhabited; they supply the purest water one could desire, and Munich can surely only rejoice in their possession. But facts have shown that even this excellent new drinking-water is no more able to guard the inhabitants of Munich from typhus than the old drinking-water was able to occasion it.

(d) Pages 50 to 61, etc.

I have before stated my views in a short paper in the *Zeitschrift für Biologie*, Bd. iv., p. 512—"Professor Dr. Hallier über den Einfluss des Trinkwassers auf den Darmtyphus in München." The new drinking water was in November, 1865, given up to public use; in the winter 1865-66 a very virulent and generally spread typhus epidemic developed itself in Munich. Soon after the introduction of the fresh drinking-water, derived from above and quite outside the town, far from all buildings, there followed the second largest epidemic of typhus which has visited Munich in the course of thirty years. The houses and streets in which the new water became used in November, 1865, did not suffer less than the other parts of the town which had preserved their former water arrangements; and, on the subsidence of the epidemic, not only those portions of the town provided with the new Thalkirsch water became free from typhus, but those other quarters (*i.e.*, about two-thirds of the whole town) equally and at the same time which had not made the smallest alteration in their water relations, and which have not done so up to the present time.

In the year 1867 Munich had so few cases of typhus that everybody was astonished, and it was believed by the adherents of the drinking-water theory, who are numerous in Germany too, and widely circulated, "that the astonishing decrease of typhus in Munich since the erection of the new waterworks showed how much the assertion was justified that typhus arose from the drinking-water." These gentlemen knew not that in 1860-61—that is, four years before the introduction of the new drinking-water—Munich had passed an equally quiet time, as in 1867, a fact which certainly could not then be accounted for by the water. Personally, I should not have the least objection if it were as these gentlemen say, for I myself have contributed much to the existence of the new Thalkirch works, which the Munich authorities acknowledged by giving to the new waterworks my name. But I still cannot on that account believe that through one-third of the inhabitants of Munich drinking the water from "Pettenkofer's Waterworks," therefore the remaining two-thirds who had kept to their old drinking-water had also escaped the typhus.

In the years 1868 and 1869 an increase of typhus again showed itself in Munich, in spite of the Thalkirch water, and I have no doubt that we shall again meet with as bad a time as 1865-66. Buchanan may himself decide whether or not I, after my experience at Munich, could agree in his view of the influence of drinking-water on the origin and spread of cholera and ileo-typhus.

I can conceive only one supposition on which the hypothesis of Buchanan would be still applicable to Munich, and this supposition is that the ground-water in Munich, so far as it supplies wells and springs, both within and without the town, everywhere simultaneously absorbs an infectious material from the earth. But this supposition finds not the least support in Munich, where the frequency and localisation of the typhus has been observed for a series of years up to the most recent times. Certain portions of the town of Munich are at times very unequally affected by typhus, although they are provided with drinking-water from the same conduit pipes. In the summer of 1869 we had a slight epidemic, which essentially ran its course in the eastern portions of the town left of the Isar. These districts obtained their water principally from the opposite right shore, which, however, remained exempt from the epidemic, notwithstanding the identity of the drinking-water. This drinking-water from the left bank of the Isar is also used in those districts left of the Isar which extend far beyond the districts attacked by the epidemic of 1869, but without spreading the disease to them.

There are, moreover, other cases which show still more strikingly that abdominal or ileo-typhus, or enteric or nervous fever, can arise epidemically without even the most remote possibility existing, that the infection has proceeded from the drinking-water. All these cases are not equally beyond contradiction. The best cases will be those in which age and sex, ways of life and food, trades and occupations, household economy, and so on, of a somewhat large number of men are as much as possible alike. The finest case of the kind is that recently described in the *Zeitschrift für Biologie*, Bd. iv. p. 1, by the regimental Surgeon, Dr. Eugen Buxbaum, "The Typhus in the Barracks at Neustift, near Freising." This case has, through a lucky concatenation of many circumstances, become a truly typical one, more complete than can generally be met with.

The barracks serve for cavalry, and consist of two buildings, A and B, which stand 100 feet from one another at the same level, and apparently on similar soil, by an abundantly flowing brook, into which the privies of the two buildings directly

discharge. In building A there are two squadrons, in B one squadron. In a squadron there are on an average 120 to 130 men. There are stables attached to building B; none to A. *The culinary departments of the two buildings take their drinking and kitchen water out of one and the same well.* The inhabitants of the two blocks are always soldiers of the same regiment, remaining, therefore, under quite similar circumstances. They have like employment, like hardships, food similar both in quantity and quality, and the same water which they obtain from one and the same well—in short, they have all, those dwelling in A and those in B, a similarity in the circumstances of life which cannot be exceeded.

On August 2, 1865, typhus broke out in building B. Up to September 5 twenty-nine men had fallen ill of typhus. "Of them twenty-eight belonged to that squadron which dwelt in B, only one was from one of the squadrons occupying building A."

One may imagine that this striking limitation of the disease to the inhabitants of block B caused surprise. Then one sought to explain the fact by there being stables in block B, the vapour from the stalls and dung of which had contaminated the air. "The building A had no stall, and therefore no stall vapour; the rooms in it were much higher and better ventilated, and have, so far as may be judged by the sense of smell, mostly purer and better air than the rooms in B." So far this case of typhus had been provided with its customary etiology, only it was even then clear that the drinking-water could not be accused, it being quite the same both for the inhabitants of A and B.

The commonly received views, however, suffered in the year 1868 a deadly blow. From September 4, 1868, to January 12, 1869, fifty-two cases of typhus occurred. "Of these fifty-one were from the two squadrons which lay in block A, and a single one came from block B, where the typhus epidemic of 1865 had reigned."

Dr. Buxbaum has by means of maps and plans which he has appended to his treatise, made the cause of the epidemic so patent that every reader has it vividly before him.

We see here two buildings, A and B, standing very near one another, inhabited by a much more similar class of men than we meet with in the families which commonly occupy the different stories of the same house. In the year 1865, 22 per cent. of the occupants went from the building B into the Hospital ill with typhus, from block A only 0·4 per cent. In the year 1868-69 the case of the buildings was reversed, in block A 20 per cent. of the occupants were taken with typhus, and in block B only 0·8 per cent.

In this case not only is the drinking-water to be excluded, but many other things that are still deemed sufficient by many to explain an epidemic of typhus. I will only draw attention to one. It is here seen how little typhus can extend beyond or be received outside the infected locality. We have on each occasion, both in 1865 and in 1868, in the non-infected building only one single case, notwithstanding easy and frequent intercourse between the inhabitants of A and B, and in this case infection is very probably to be traced to a temporary sojourn in the infected house, together with a strong individual predisposition. Abdominal typhus is undoubtedly as little directly contagious as cholera, and it appears that the spread of typhus not less than that of cholera is due not only to a specific germ x, but also to a substratum y, which latter is furnished by time and place.

This authentic case admits of no other influence but that derived from the soil. Even the frequent and much-clung-to explanation of the differences in individual disposition here fails. One cannot say that this disposition had been wanting in the inhabitants of the building B, having already exhausted itself in the previous epidemic of 1865, and that the men had been protected by a species of inoculation, for in the interim the regiments had been changed; in 1865 three squadrons of Cuirassiers, in the year 1868 three squadrons of Chevaulegers, were quartered in Neustift. And even had that not been the case, at all events half the strength would be renewed in the three years by the loss of recruiting. This case appears to me so important on account of the appearance of the epidemic in different years and in different buildings, among a number of men in all other respects similarly circumstanced, leaving to most hypotheses so little scope, and compelling us to place the outbreak of the epidemic to the account of time and place alone.

One may feel assured that every effort was made, both by the Physician and the commander of the regiment, to find out in what the difference between the buildings A and B consisted. All the floors were taken up, but nowhere was the least essential difference found; but when they went to the soil they found differences, both very evident and considerable. The house A stands on a soil quite differently stratified from B, with very different permeability for ground-water. Professor Dr. Holzner has given, in an appendix to the treatise of Buxbaum, the exact results of this soil investigation. According to my view, two so different ground strata can, notwithstanding their close proximity, become typhus-ripe at dissimilar times in different years, and it appears to me not improbable that the soil of A in the year 1865 was still too wet for that process to have taken place, which would supply to the house the y for the typhus germ x; whilst in 1868 in B it was perhaps too dry, and the process in the soil had already run its course, and all the conditions for its repetition had not yet been again produced. In order to be able to say anything more definite, the rhythm of the permeation in the two places A and B should be noted during a series of years. Such observation would, in the place A, on account of its multiple stratification, be very difficult.

It must now be conceded that there can be, and in truth are, virulent epidemic outbreaks of ileo-typhus in which all causation by drinking-water or neglected sewers is excluded, and which permit for the present the recognition of the soil alone as of causal moment and requiring closer investigation. Again, no one would deny the logical advantage of regarding and explaining these as all cases of specific disease always depending on the same laws of causation. If, now, cases such as those observed at Munich and Neustift point so peremptorily and with such distinctness to a particular action of the soil to the exclusion of the drinking-water and of other causes hitherto usually accepted as of etiological importance, I know not what could hinder Buchanan from applying the same etiology to the typhoid or enteric fever of all English places which have soil and ground-water. By close and continued examination of the relations of soil and ground-water, much greater and more instructive differences will gradually be found than hitherto, by investigating different drinking-waters; with prolonged and regular seeking, those essential portions of the typhus and cholera processes will at last be discovered which depend on the soil and a certain change in its permeability. But so long as one continues to seek them where they do not exist—viz., in drinking-water—one will not find them.

It appears to me to be shown by the cases of Munich and Neustift much more decidedly that the drinking water has played no part therein than it is proved by the cases of Buchanan, that the soil and ground-water act only through their influence on the drinking-water. In the observations on which I rely the influence of the drinking-water is certainly much more unequivocally excluded than in the cases of Buchanan it is necessarily included. It is easy to apply my theory to all the cases cited by Buchanan.

Buchanan quotes the case of a small village in Essex where, after an inundation, typhus broke out in one part of the village and limited itself exactly to that part, the inhabitants of which obtained their drinking-water from a particular well—the public parish well. This is a typical case, and one often met with, and such cases form the chief grounds of the widely spread, but I am convinced, nevertheless, completely mistaken opinion as to the influence of drinking-water. In Germany, too, one often speaks of such typhus wells in whose neighbourhood the epidemic appears, and also at a distance from them—*i.e.*, in the neighbourhood of other wells.

If we ask why, in the Essex case, only a certain portion of the village obtained water directly from the parish well, we find, indeed, in Buchanan's report no answer; but, judging from analogy, the chief cause might well have been in the ground and soil, the local distribution of dwelling-houses thereon, the proximity or neighbourhood of the well. Those parts of the place which were provided with water from the parish well will probably be found all to be similarly placed and circumstanced alike in regard to soil and drinking-water, which differ on nearer examination from the other non-infected districts in much the same way as at Neustift the ground of building A differed from that of building B. Buchanan can say that in his case no such difference had been shown. That I do not dispute. I am convinced that it is demonstrable that in the soil and ground-water relations of the free and affected districts much greater and more positive differences might be shown than those in the drinking-water on more exact and searching inquiry. In Neustift a difference was found between the soil of A and B only when it was searched for, for the surface was made level with one and the same kind of gravel.

That typhus often gathers and concentrates itself around particular wells with especially bad water does not justify the conclusion that the use of the water causes the disease. It fails in showing that it is the use of the water, and not the soil around the well, that leads to the epidemic development of the disease germ.

The quality of the water comes not from the well alone *per se*, but is much more influenced by the surrounding soil. The water becomes contaminated, as a rule, not in the well, but in the soil on its way to the well. An impregnated soil can at one place, at one stratum, contaminate the water passing through it with various matters which engender no typhus; whilst at another place, in other strata not at all touched by the water flowing to the well, quite different processes take place which furnish products that do not pass into the water, but rather into the air of the soil, and from thence into the air of the dwellings, as must have been the case at Neustift. If now there should be processes to which a somewhat larger quantity of water in a stratum of ground were hostile—as the soil and ground-water theory must certainly suppose it to be in typhus—they would, as a rule, not take place just in those strata of soil which lie next the ground-water level, and therefore the water of the well would remain free from them. Wells with impure water are to me only signs of impurity of the soil in their neighbourhood; and if such soil sometimes produces typhus, it still does not show that the noxiousness proceeds from the well water or arises in that part of the soil through which the water passes to the wells. Since it has been shown that there are cases in which contagion proceeding from the soil without any conceivable connexion with the drinking-water can yet abundantly reach men, one must be very cautious in maintaining the drinking-water to be the common or only way of its doing so. Up to the present time every proof is wanting that typhus epidemics can arise merely through a definite quality of the drinking-water, the influence of the soil being excluded in as distinct and unequivocal a manner as the influence of the drinking-water was excluded in the epidemic at Neustift.

The application of the drinking-water hypothesis to typhus has still another great defect. As a rule, the water has only been ascertained to be impure at the time of the epidemic, but not that it had changed before the outbreak or after the subsidence of an epidemic. In Munich, where the changes of the residual quantity of the well waters have been observed for some time past, no stand-point has been gained from which to draw the conclusion that the composition of the water shows variation corresponding to the frequency of typhus. What I have pointed out with regard to the cholera wells in Altenburg(d) may certainly always be shown in such typhus wells—viz., that a large number of families besides those affected use the drinking-water at the same time without a single member of them falling ill, provided they dwell on another soil.

But it will be objected there are certainly many cases known of local epidemics, in which the police have closed such typhus wells and the epidemic has soon afterwards vanished. This I have always held to be a very feeble argument, for to these cases are always opposed a much larger number where the disease has disappeared just as soon without the wells being closed. The delusion is as great concerning the cause of the termination as the cause of the beginning of the epidemic. If, for instance, at Neustift in 1865 one had closed the well, or in any way changed the drinking-water on the disease becoming epidemic in building B, one might have thought this epidemic to have been cut short thereby, or that the building A remained exempt because the well had been closed in time. This would indeed have been a fallacious inference, often made, but no proof of the influence of the drinking-water. For his chief argument against the influence of ground-water fluctuations on the processes in the soil, as I understand and meanwhile accept them, but which require still more close investigation, Buchanan takes from his highly and justly esteemed paper "On the Influence of Water-supply and Draining on Twenty-five English Towns," which John Simon has published in his interesting yearly report. He particularises seven towns in which the drainage served at the same time to remove or lower the ground-water. He states when in these towns the drinking-water became supplied from reservoirs lying outside the town, when the draining works began and how long they lasted, then what was the typhus frequency before these works were begun, and what it was during their continuance. Now Buchanan believes that if my view of the action of the ground-water fluctuation were correct, in all the seven towns during the continuance of the works, and therefore, during the time that the ground-water was sinking, the typhus rate must have correspondingly increased, whilst it in reality sank in all, in some even considerably. Buchanan now concludes, therefore, that the sinking of the ground-water increases the frequency of typhus only in a place like Munich, where the ground-water of the town serves as drinking-water, and pure water is not obtained from without.

That this statement of Buchanan's concerning Munich, so far as it relates to the drinking-water, is erroneous and not applicable, I have already shown. But I am indeed very glad that he brings forward this very point, the lowering of the ground-water by draining; he gives me an opportunity of speaking on the different etiological values of different causes which ground-water fluctuations call forth, and I may, perhaps, succeed in removing what remains of misapprehension on this subject.

(To be continued.)

(d) *Zeitschrift für Biologie*, Bd. ii. p. 87.

SINGULAR CASE OF UMBILICAL HERNIA AND ARTIFICIAL ANUS.

By P. J. HAYES,

Surgeon to the Mater Misericordiæ Hospital, Dublin.

Cases of umbilical hernia terminating in the formation of fæcal fistula or artificial anus are, I believe, of rare occurrence, and I am not aware of any such case presenting the peculiar and interesting characters of one which was lately under my observation in Hospital. The particulars of the case are as follows:—

During the first week of September, 1869, J. O'N., an elderly woman, was admitted to the Mater Misericordiæ Hospital, and placed under the care of my colleague, Dr. Hayden. On the morning following her admission, Dr. Hayden asked me to see the patient with him; the following facts were then ascertained:—The patient was a small, thin woman, unmarried, and aged 55 years. She complained of considerable abdominal pain, nausea, debility, and loss of rest—the consequences of prolonged constipation, as the bowels had not acted for six days. She stated that during the last eleven years she passed all alvine matter through an opening at the navel. Upon examination, we found an umbilical hernia about the size of a large orange; this felt hard, tense, and pressure caused pain. The base, or attached portion, was constricted somewhat, and could not easily be exposed. At the anterior, inferior, and right side of the tumour was what I may term an abnormal anus, from which projected a long intestinal prolapsus; this the patient always supported by means of an oiled rag and broad bandage. At a past period ulceration must have taken place, both in the integument and at the entire circumference of the intestine, where, contained within the hernial sac, simultaneously, adhesion must have occurred, which resulted in the formation of a perfect line of junction between the margin of the opening in the integument and the mucous membrane lining the upper portion of the divided intestine. During the elapse of time eversion of the mucous surface gradually increased, until, as when we saw it, there was a prolapsus six inches in length projecting from the new anal orifice, and directed downwards, forwards, and towards the right side. Dr. Hayden at once remembered to have seen the patient many years previously, at a time when she was in Jervis-street Hospital, under the care of the late Dr. Alexander McDonnell.

The history given by the woman of her case, confirmed in some particulars by Dr. Hayden, was as follows:—She was always a person of very active and industrious habits, used to work as a house-servant and wash clothes. Nearly twelve years ago, when lifting a heavy cauldron from a fire, she "felt something snap in her back," and was weak for some minutes afterwards. Soon she noticed the appearance of a tumour close to the right of the umbilicus, and then she became subject to attacks of constipation, or perhaps intestinal obstruction, accompanied with violent abdominal pain, tension of the hernial tumour, and coldness of the extremities. So severe were her sufferings at times that, to quote her own words, she used to "work on the floor." When the paroxysm was about to pass off, heat would return gradually to the limbs, pain diminish, and the relief be rendered complete by action of the bowels. At length, when labouring under a prolonged and unusually severe attack, she was admitted at Jervis-street Hospital by the late Dr. A. McDonnell. At that time the hernia became inflamed, suppuration took place at the right side of the protrusion, ulceration followed, and then some fæcal matter was

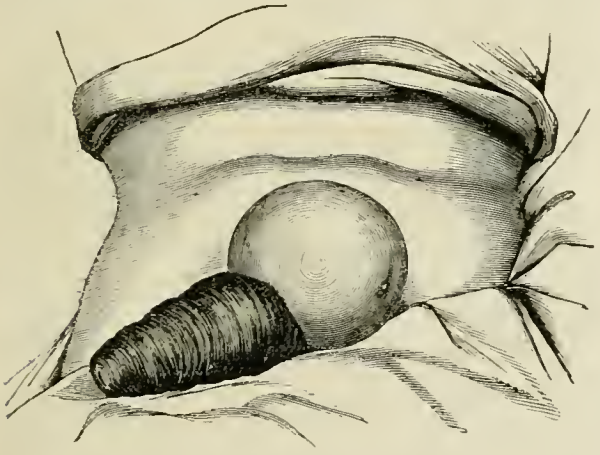
discharged through the aperture. Soon the opening increased in size, the bowels were more freely relieved, and, after an ordeal, which nearly exhausted the vital powers, she became restored to comparative health, but with an abnormal orifice, through which all evacuations from the bowels passed. Occasionally, during the past eleven years, she suffered from fæcal accumulation, but, by careful regulation of diet and the aid of castor-oil, she was able to overcome those difficulties until the week preceding her admission to the Mater Misericordiæ Hospital.

We found hardness and tenderness extending from the hernial protrusion, upwards and towards the left hypochondriac region, the prolapsed portion of intestine appeared slightly congested and turgid, but the patient stated it was usually smaller, of different shape, and wrinkled. The only evidence or trace of the umbilicus that could be detected was a slight depression covered by a scab-like incrustation, situated upon the integument at the left side, and near the base of the tumour.

On passing a large catheter into the prolapsus, we could feel the point, at the hernia, in contact with hardened fæces; and when the instrument was withdrawn some of the matter was found adhering to it.

As I was much interested in the case, Dr. Hayden kindly volunteered to have the patient transferred to one of my beds, but previously we agreed that an enema of olive oil and gruel should be thrown into the intestine, at the site of the obstruction, through a large gum-elastic catheter.

As regards subsequent treatment, I found that small but frequent injections of simple olive oil, and careful regulation of diet, served to relieve the bowels without discomfort to the patient. She also derived much benefit from tonic medicines, especially the aromatic iron mixture. During the period of convalescence, a drawing of the protrusion was made by Mr.



Burnside. A copy of this drawing will render the peculiarities of the case more obvious and intelligible.

The occurrence of umbilical hernia in a woman of spare and wiry frame, who never had a child, is unusual. Again, though operation for the relief of symptoms indicating strangulation in such cases is not often successful, yet the formation of an abnormal anus with restoration to comparative health and comfort, is a termination the Surgeon should scarcely expect or even hope for.

The portion of intestine engaged in this case was, in my opinion, the colon; my reasons for thinking so, are that the prolapsus at times presented a somewhat sacculated appearance, and upon it were slight depressions which would correspond to the arrangement of the longitudinal muscular bands of the large intestine. The everted mucous membrane, though undoubtedly altered in consequence of long exposure, presented none of the characteristics which specially belong to the small intestine. The matter discharged was dark and very consistent, in no respect differing from that which is ordinarily evacuated through the natural aperture. For a considerable time, after a full meal, or even consequent upon a dose of aperient medicine, she could feel the movements of the bowels before any fæculent matter would appear at the opening. Moreover, though naturally a person of spare habit, she was not badly nourished, and possessed considerable bodily energy; in proof of which, I may mention that a few days after leaving the Hospital she walked across the City to get more of the aromatic iron mixture, as she derived much benefit from using it.

ON THE

REACTION OF AORTIC ANEURISMS ON THE HEART.

By Professor AXEL KEY, of Stockholm.

Translated from the "Nordiskt Medicinskt Arkiv," vol. i. part 4, 1869. By J. W. Moore, M.B., Ch.M. Dub.; Ex-schol. Trin. Col. Dub.

(*Continued from page* 604.)

5. An aneurism the size of the closed hand, springing from the convex border of the entire transverse aorta, terminating suddenly to the left at the left subclavian artery, more than half filled with tolerably firm coagula. The descending portion of the aorta below the aneurism is dilated 7 centimetres, and presents extensive signs of atheromatous degeneration, with numerous knobby elevations, and a few bony plates. The ascending portion of the aorta, between the origin of the vessel and the aneurism, pretty considerably dilated, passes into the latter without a sharply defined boundary. The atheromatous degeneration is continuous quite down to the sinuses of Valsalva, but in them the internal coat is almost smooth and even, thickened to an extremely slight extent. The aortic opening is dilated 10 centimetres. The aortic valves, proportionably large, are not thickened either at the corpora Arantii or at their opposed or inserted edges. They appear perfectly competent. The heart, largely covered with fat, considerably augmented in size, having the apex composed exclusively of the left ventricle, measures from the left border of the pulmonary artery to the apex 11·5 centimetres; from the right border of the same also 11·5 centimetres; in breadth, 12·5 centimetres. The left ventricle is very much dilated; the musculi papillares large, somewhat tendinous at their apices; the carneæ columnæ of ordinary thickness. The muscular wall at the conus arteriosus of ordinary thickness, 11 millimetres, but otherwise attenuated, measuring to the middle of the ventricle 8 to 9 millimetres, near the apex 5. The curtains of the mitral valve uniformly, but to no great extent, thickened throughout from the base to their free borders; grayish-yellow, opaque, small, retracted; the right curtain measuring scarcely 22 millimetres from base to apex. They have clearly been insufficient, the more so as the opening is dilated 10 centimetres. The left auricle is also dilated, its internal coat perceptibly thickened, the muscular wall 2 centimetres. The pulmonary artery is likewise considerably dilated; its orifice measures fully 11 centimetres, its valves healthy. The right ventricle is moderately increased in size. The muscular wall, which near the septum is very thin, only 1 millimetre in thickness, from the middle-point throughout to the apex measures generally 2 to 3 millimetres.

The dilatation of the left ventricle in this case is the result, not of the aneurism, but of the insufficiency of the mitral valve, which was clearly present; as well the state of the curtains of that valve, as the well-marked changes in the left auricle place the existence of that insufficiency beyond all doubt.

6. The aneurism of the size of a large closed hand, of a rounded, oval, somewhat irregular form, arises at the upper part of the ascending portion of the aorta, which is tolerably dilated, involves the entire transverse aorta, and extends 4 to 5 centimetres below the origin of the left subclavian artery. The greatest dilatation is well on the convex aspect of the transverse portion; but from its concave surface there projects with a sharply defined margin a dilatation equal to a goose egg in size and filled with fibrinous coagula. This latter presses on the trachea and the right branch of the pulmonary artery. In the ascending aorta, between the aneurism and the heart, a considerable nodulated thickening of the internal coat exists, with laminated bony plates; but the morbid change ceases below, and in the sinuses of Valsalva that membrane is perfectly smooth and even. The aortic opening is dilated 9·5 centimetres; the valves quite healthy, without any thickening. The heart, of the usual shape, seems to be rather smaller than natural, pretty well covered with fat, the apex composed of both ventricles equally. From the left border of the pulmonary artery to the apex, 7·5 centimetres; from its right border to the apex, 9 centimetres; the breadth at the base, hardly 10 centimetres. The left ventricle is slightly diminished in size. Both carneæ columnæ and musculi papillares are thin. The muscular wall, thinner than normal, measures at the conus arteriosus 9 millimetres; half-way near the septum 7 millimetres; near the apex 5 millimetres. At the left border of the ventricle the wall measures near the base scarcely 8 millimetres; halfway down 7 millimetres; near the apex 5 millimetres.

Mitral valve quite healthy. The right ventricle is proportionally rather large; its wall measures at the right border 2 to 3 millimetres, but near the septum scarcely more than one millimetre. Valves healthy. Pulmonary artery 10 centimetres in circumference at its opening.

We have here, then, a considerable aneurism of the transverse aorta, co-existent with some atrophy of the heart and thinning of the muscular structure of the left ventricle, though its cavity is somewhat lessened; the pulmonary artery rather dilated.

7. An aneurism, the size of a child's head, in a man of from 30 to 35 years of age, projecting from the convexity of the ascending and transverse portions of the arch of the aorta, arising with a sharp border 3 centimetres above the aortic opening, and decreasing gradually to the origin of the left subclavian artery. At its point of departure it bends back over the lower part of the ascending portion, lying just outside the right border of the pulmonary artery, and almost completely covering the right auricle. The descending aorta is dilated, with partial thickenings. A large nodulated thickening of the internal coat is continuous from the aneurism down to the sinuses of Valsalva, but ceases at their level with a sharply defined border, the internal coat below this being throughout the sinuses smooth, even, and unthickened. Aortic valves healthy. Heart of ordinary size, only proportionally somewhat increased in breadth, with a rounded apex, which is principally composed of the left ventricle. From the apex to the left border of the pulmonary artery, 7·5 centimetres; to its right border, 9·5 centimetres; the breadth at the base, 11·5 centimetres. The cavity of the left ventricle appears, on the whole, rather smaller than ordinary; but is relatively broad at the apex. Carneæ columnæ fine, musculi papillares small. The muscular wall, attenuated, measures near the septum at the conus arteriosus 10 millimetres; at the middle point, 8 to 7 millimetres; at the apex, 5 to 3 millimetres; at the border it measures near the base 10, midway 7 to 8 millimetres. Mitral valve healthy, except slightly thickened at its opposed borders. The right ventricle somewhat dilated at the base, carneæ columnæ and musculi papillares rather stronger than usual. The wall itself measures almost uniformly 2 to 3 millimetres in thickness; valves healthy; the opening of the pulmonary artery 10 centimetres in circumference.

With this large aneurism, situated close to the heart, the left ventricle is somewhat atrophied, but with a rounded apex; the muscular structure attenuated; pulmonary artery widened; the right ventricle slightly dilated, in consequence of the pressure exercised by the aneurism on the pulmonary artery.

8. The aneurism, from a man aged 57, is in size somewhat larger than a newly-born child's head, has caused erosion of the sternum and several ribs on the right side, pressed forward under the skin into the right subclavicular and mammary regions, and burst externally through inflammatory separation of the cuticle at this point ("Hygiea," 1868, *Proceedings of the Swedish Society of Physicians*, page 83). It opens into the aorta through an obliquely oval aperture of only 4 centimetres in length in the right wall, about midway between the aortic opening and the arteria innominata. The ascending and transverse portions of the arch are besides throughout widened, so as to resemble an aneurism, the largest circumference measuring 20 centimetres.

The extensive atheromatous degeneration, with numerous bony plates, which is met with in the ascending and transverse portions, ceases abruptly at the origin of the sinuses of Valsalva, in which the internal coat is smooth and even. Immediately above the anterior sinus of Valsalva a small opening, of the circumference of a pea, leads into a little partial aneurism the size of an almond, situated between the middle and adventitious coats of the vessel. Aortic valves slightly thickened at the corpora Arantii; not retracted. The aortic opening 9·5 centimetres in circumference. The heart, rather rounded in form, of ordinary size, much covered with fat, measures from the apex to the left border of the pulmonary artery 7·5 centimetres; to the right, 9 centimetres; in breadth, 10 centimetres. The left ventricle is in breadth somewhat increased down towards the apex. Musculi papillares and carneæ columnæ of the usual thickness. The wall itself measures at the conus arteriosus about 10 millimetres; at the middle point near the septum, 10 to 11 millimetres; nearer the apex, 5 millimetres. At the border the wall measures near the base 10 millimetres; midway to the apex, 8 to 9 millimetres. There is slight thickening of the mitral valve, without rigidity. Right ventricle somewhat enlarged at the conus arteriosus, elsewhere of ordinary size. The muscular wall tolerably uniformly 2 to 3 millimetres in thickness. Right auricle rather large; valves healthy. The opening of the pulmonary artery 10 centimetres in circumference.

A very slight transverse dilatation of the left ventricle down towards the apex, with a corresponding thinning of the muscular structure; also dilatation of the pulmonary artery, and some hypertrophy of the conus arteriosus of the right ventricle, were the only points which distinguished this heart from one perfectly normal, notwithstanding the extreme nearness of the aneurism. Nowhere any indication of hypertrophy.

9. A colossal aneurism, quite as large as a fully-grown man's head, has, consequent on erosion of the sternum and of several ribs on the right side, burst through the chest wall, and speedily become diffused under the skin in the entire subclavicular and mammary region, pressing also deeply into the axilla. On opening into the thoracic wall, the sac is found somewhat compressed, lessened in size, funnel-shaped within the chest, and communicates through a particularly fine aperture, in diameter scarcely equal to an ordinary lead pencil, with the aorta in front, on the convex aspect of junction of the transverse with the ascending portion of its arch. In addition to this, all the ascending portion from the sinuses of Valsalva and the transverse as far as the origin of the left subclavian were dilated into a spindle-shaped aneurismal tumour, particularly so on the convex side of the vessel. The greatest dilatation occurs at the boundary between the transverse and ascending portions, just at the place where the fine opening leads into the large aneurism. Moreover, from the ascending aorta three other smaller, partial aneurisms project. One, of the size of a walnut, is situated on the anterior wall, 8 millimetres above the aortic valves, opening through an oval aperture of, probably, a centimetre in diameter. Both the others, which are rather smaller, lie close together on a level with and behind the opening into the great aneurism. They open through fine round apertures of a diameter of 4 millimetres. The atheromatous degeneration, which is considerable, with scattered bony plates throughout the dilated ascending and transverse portions of the arch, ceases almost completely at the origin of the sinuses of Valsalva, so that the internal coat in them is all but even, with very slight thickening. The aortic opening does not appear dilated; it closes pretty tightly round the inserted thumb. The valves almost uniformly, though slightly, thickened; the lunulæ, in consequence of this thickening, but little marked; the free borders, somewhat furred, especially at the corpora Arantii, appear to be slightly retracted; the valves, notwithstanding, pliable. Whether they had been fully sufficient cannot be investigated by the water-test, as one of them was injured in the dissection. The heart of rounded shape, rather enlarged. The apex is composed principally of the left ventricle, which also includes a larger portion of the anterior surface (of the heart) than normal. From the apex the heart measures to the left border of the pulmonary artery 10 centimetres, and to the right border 11·5 centimetres. The breadth is 12 centimetres. The left ventricle is dilated in the same proportion as the heart is enlarged. Carneæ columnæ and musculi papillares of ordinary size. The muscular wall itself, attenuated, measures at an incision near the septum in the conus arteriosus 10 to 11 millimetres, at the middle point 9 to 10 millimetres, down from which to the neighbourhood of the apex 7 to 8 millimetres. At an incision, which runs rather behind the left border, it measures generally 8 to 10 millimetres. The curtains of the mitral valve are, like those of the aortic, slightly thickened, but pliable; the aortic curtain a very little retracted. They appear to be competent, and the left auricle is not dilated; rather, atrophied in some degree. The right ventricle of ordinary size; its wall measures pretty uniformly 2, or at most 3, millimetres. Carneæ columnæ and musculi papillares of the usual thickness. The tricuspid valve quite healthy, but in the opening of the pulmonary artery an important change is found. The aneurism, above described as of the size of a walnut, partly filled by fibrinous coagula, and projecting from the aorta immediately above the sinuses of Valsalva, is seen to bend towards the posterior wall of the pulmonary artery near the sinuses of Valsalva and the attachment of the valves, so that in this situation a hard round knob is formed, which lessens the calibre of the vessel to such a degree that the index finger can barely be inserted. The change which the valves themselves have here undergone in consequence of the aneurism is peculiar. The posterior and right valves are separated one from the other by an intervening space of 7 millimetres. They are, besides, strained, and so diminished in size that the right curtain measures only 11 millimetres, the left posterior one only 14 millimetres; yet they are not thickened, but thin and transparent. The anterior curtain has almost singly fulfilled its function. It measures 32 millimetres in length at the free edge, and seems almost sufficient for the entire compressed opening.

Even with this most colossal aneurism, which I had the opportunity of examining, combined with an aneurismal dilatation of the ascending and transverse portions of the arch of the aorta, together with three smaller partial aneurisms affecting the former, one just above the aortic valves, no hypertrophy of the left ventricle was found. Its chamber was somewhat dilated, and the muscular structure was proportionably attenuated. The inconsiderable dilatation did not, meanwhile, of necessity staud in direct connexion with the aneurismal structure, for it will appear that the aortic valves were not perfectly sufficient. That neither hypertrophy nor dilatation had occurred in the right ventricle as a consequence of the changes in the opening of the pulmonary artery is particularly worthy of note.

10. (No. 1306 in the older collection.) A tolerably large aneurismal dilatation of the ascending and half the transverse portions of the arch, especially involving the convexity and commencing immediately above the sinuses of Valsalva; greatest circumference 19 centimetres. At the junction of the ascending and transverse portions, besides, are situated two sacciform partial aneurisms, one of the size of a hen-egg, projecting with an orifice 15 millimetres wide from the concavity; the other, of the size of an almond, proceeding from the anterior wall and curving cornet-shaped towards the wall of the pulmonary artery. The atheromatous degeneration ceases for the most part at the limit of the sinuses of Valsalva. The aortic opening, relatively compressed, 8 centimetres. All the aortic valves are in their free edges roughly thickened, somewhat stiff, and shortened. Moreover, they are throughout slightly thickened, and two of them perceptibly atrophied, and partially attached to each other. The lunulæ, not distinguishable, seem for the most part to have disappeared in the thickening of the edges. The valves have evidently been insufficient; the endocardium below the aortic opening is for a distance of 4 centimetres much thickened, and is covered with cicatricial markings. The thickening reaches also over to the right curtain of the mitral valve, and is continuous to the middle of it, quite down to its extremity, affecting likewise the chordæ tendineæ. All the curtain is rather atrophied. The heart large, measures from the apex to the left border of the pulmonary artery 10 centimetres; to the right, 10·5; in breadth, 11 centimetres. The apex is composed exclusively of the left ventricle, whose cavity is considerably dilated; carneæ columnæ and musculi papillares tolerably large. The wall itself measures in the conus arteriosus 10, at the middle point 8, becoming rather quickly thinner down to the rounded apex, 3 to 5 millimetres. The right ventricle is very small, the pulmonary artery, nevertheless, dilated; its opening 10 centimetres. The muscular wall of the ventricle measures generally 2 millimetres.

The great dilatation of the left ventricle, which was observed in this case, was plainly dependent on the insufficiency of the aortic valves. The diminution in size of the right ventricle, which was by no means merely relative, and this, too, notwithstanding the dilatation of the pulmonary artery, was remarkable.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE

IN

MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

ANEURISM OF INNOMINATE ARTERY SUCCESSFULLY TREATED BY ICE AND REST.—DISLOCATION OF HIP—TREATMENT OF AMPUTATION WOUNDS—COMPOUND FRACTURE OF FEMUR, ETC.

(Mr. HOLMES COOTE'S Clinique.)

On Thursday, May 26, we had the pleasure of attending Mr. Coote's visit to certain of his wards, and as some of the cases were of unusual interest it may be well to give brief notes of these. The case which most attracted our attention was one of innominate aneurism in Henry VIII. ward. The patient, a man aged about 35, was admitted on November 9, 1869, having noticed some swelling in the right side of the root of the neck for three weeks only. He could not attribute it to any blow or strain, nor had he been out of health, but the swelling once noticed increased so rapidly that when he came into the Hospital the man was nearly suffocated by it and suffered from excessive pain about the right shoulder and behind the ears. The tumour itself was reported at this time to be the size of a large orange, very prominent, thin-walled, and with violent pulsation, so that it felt as if on the point of bursting. The man was at once put to bed and kept at perfect rest. A blister was applied over the swelling and afterwards it was painted with iodine, but without any notable effect.

Early in December a bladder of ice was applied over the aneurism, and this treatment has been constantly kept up since—except during the night, when the melting and replenishing of the ice disturbed the man's sleep too much. For a long while perfect rest was maintained, but free meat diet was permitted from the first, aud the aneurism made marvellous progress towards recovery. He could not raise his hand on admission, but he now pulls himself up in bed easily with the right hand. There is no obvious prominence, and although one still detects a considerably extended area of impulse, yet this is quite quiet, and the manipulation gives no pain. The radial pulsation at the wrist is small but quite perceptible, and when asked how he feels the man describes himself as "Fine.. Eats hearty, sleeps well, and no pain." The ice-bladder is still worn, although the diet just now is somewhat modified on account of an attack of orchitis which has declared itself during the past few days.

We saw two or three cases of necrosis of the lower third or more of the shaft of the femur, and Mr. Coote, in his remarks to the students, described these cases as having very frequently fallen under his observation. He is usually able to attributo the condition to the constant bearing of the weight of the body (perhaps heavily loaded) upon one leg, and the consequent production of a sort of chronic ostitis, with general swelling of the bone. Pus then accumulates under the periosteum, and, if the abscess be at once opened and the limb kept at rest, no further ill effects may follow, as we saw in another similar case in an adjoining ward; but the rule is for necrosis, more or less extensive, of the shaft to follow, and the Surgeon should then wait about six months for the sequestrum to become detached before attempting its removal.

In a corner bed in Henry VIII. ward is an instructive case of old dislocation of the hip. The patient is a sailor, and some eight months ago, whilst off the coast of Peru, he slipped off the deck down the hatchway, striking the left hip violently against the edge of the aperture as he fell. He could not rise, and, when assisted up, could not move the left leg, which lay somewhat across its fellow. Three times he sought such Surgical assistance as he could procure, and reduction of the dislocation was attempted each time, but without success. The present appearance of the man gives, at first sight, but little clue to the form of injury, for there is no inversion of the limb, and he readily moves it in almost any direction as he lies in bed; there is, however, nearly two inches shortening. Mr. Coote pointed out that in a case of this kind one should apply a tape over the three prominences of the anterior superior iliac spine, the trochanter major, and the tuberosity of the ischium. If these be found to be all in one line, the bone is not out of position. On applying this test, the head of the bone was found to fall above the line so indicated, and further careful manipulation discovered the head of the femur moving freely, but with a rough grating feeling outside of and above the acetabulum, about midway between the anterior superior spinous process and the central ridge of the sacrum. A fairly useful position has, however, been gained here, for the man can walk a mile—although, of course, with some difficulty. The main point of interest in the case seems to be the short time—only 8 months—in which the limb has so well adapted itself to its altered circumstances.

A case of large carbuncle on the back of an old man who had been greatly relieved by the incision of the swelling, led Mr. Coote to state that he hardly ever practised incision in these cases, but that every now and again one might meet with a case like the present where the severe tensive pain rendered incision advisable and useful. In the same ward with this patient is a valuable case for teaching purposes. A young man has a swelling in the left thigh occupying Scarpa's space. It is clearly fluid of some kind, and the femoral vessels lifted up by it give it at first the visible pulsating appearance of an aneurism. It is apparently an abscess connected with a collection of pus within the pelvis, but there is no obvious swelling above the groin, and there is nothing in the history to guide one to a diagnosis. Mr. Coote pointed out the care requisite in opening these abscesses, and the various conditions with which they may be confounded, stating that abscesses descending from within the pelvis generally take their course beneath the femoral vessels.

In one of the female wards is a little fellow, aged 8, with a large medullary tumour of the femur, occupying the upper half of the thigh, and apparently beginning to encroach upon the pelvic bones. The question of removal of the limb was entered into at some length, and the reasons for and against so severe a measure balanced. Mr. Coote was against interference, and no doubt, with such an extensive implication of the limb, any operation would be hazardous enough. Neither skin nor glands were affected, however, so far as could be seen; and we remember seeing a very similar case under Mr. Nunn's care at the Middlesex Hospital in 1868 or 1869, in which the disease was clearly limited to the femur of a boy about four years old, and in which amputation through the hip-joint was performed with the happiest results, the child recovering with an excellent stump, and with hitherto (to the best of our belief) no recurrence of the disease. We may mention that there is in a bed nearly opposite a woman with well-marked pemphigus affecting nearly the whole of the body, who is able to exhibit to the students at each visit the different stages of this extremely rare disease in the adult, fresh bullæ still continuing to appear daily.

Two or three cases of amputation of the thigh called for some comment upon the "disinfectant treatment of operation wounds." Mr. Coote stated that he was firmly opposed to the germ theory of disease, and cared little for putrefaction in wounds. His invariable method of dressing the wound after amputation is to insert two or three metallic sutures, support the flaps by broad straps between these, apply dry lint over the wound, and bandage the stump up. It is left in this state for four or five days, and then, on removing the dressings, there is usually some putrefaction somewhere; but the greater part of the flaps are often already firmly united, and there is seldom much trouble afterwards. Thread ligatures Mr. Coote considers "the most harmless little things in the world."

Similarly, compound fractures are treated in these wards in the simplest manner. We saw three cases of compound fracture of the femur—in one instance into the knee-joint, with dislocation backwards of the leg-bones and fracture of the patella also. This last had been done eight weeks, and the case was making capital progress. The whole treatment had consisted in an appropriate splint, with water dressing over the wound, some Condy's fluid being usually added to the water.

INFIRMARY FOR EPILEPSY AND PARALYSIS.

ON THE COMPARATIVE VALUE OF SUBCUTANEOUS INJECTIONS AND THE CONTINUOUS GALVANIC CURRENT IN THE TREATMENT OF NEURALGIA.

(Under the care of Dr. ALTHAUS.)

The treatment of neuralgia, and more especially of that form of it which Trousseau has termed "epileptiform," is still so often unsatisfactory that it requires the most serious attention of those who have the opportunity in public institutions to see a comparatively larger number of such cases than falls to the lot of more casual observers. In the worst forms of neuralgia, especially in tic of the face, the most reputed nervines, such as arsenic, quina, nitrate of silver, zinc, bromide of potassium, etc., are utterly useless. Where the paroxysms are very frequent and the pain severe, Dr. Althaus is in the habit of commencing the treatment with the subcutaneous injection of a mixture of acetate of morphia (gr. $\frac{1}{8}$th) and sulphate of atropia (gr. $\frac{1}{60}$th), unless this should have been previously done without effect. Where the general health seems to require it, cod liver oil is administered; but where the patient is otherwise in good condition, either a simple placebo or $\frac{1}{10}$th grain of phosphorus is given in pill or mixture twice a day.

The injections are generally well borne, except in a few very nervous females, who complain of dizziness, a feeling of intoxication, and excessive dryness of the mouth and throat afterwards. The addition of a small quantity of atropia effectually prevents sickness, for while a somewhat large dose of the morphine alone almost invariably caused sickness and vomiting, those treated by the mixture of the two alkaloids were completely free from that troublesome symptom. A temporary difficulty in passing the urine was observed in most patients over 40 years of age, but not in the younger ones. Some slept for twelve or fourteen hours consecutively the night after the injection, while in others the ordinary sleep was not prolonged.

The result of these hypodermic injections has been that temporary relief was afforded in every case thus treated, except in two of tic of the face, where the patients denied having derived any benefit from them. Some cases were completely cured by two or three injections. They were four cases of sciatica, two of intercostal neuralgia, and two of brachial neuralgia. Of all forms of the disorder, Fothergill's seems to resist most obstinately the use of these sedatives, as in no case of true tic, of which five have been under treatment, did they produce any but temporary relief. Where the pain returned in any case after the third or fourth injection, the hypodermic treatment generally proved a failure; for although the dose of the sedatives was gradually increased, so that in some cases half a grain of morphia and one-twentieth of a grain of atropia were ultimately given, the free intervals gradually became shorter, and at last the injection seemed to be totally ineffectual in relieving the pain, although the physiological effects of the drugs used became fully and disagreeably manifest.

In such cases, Dr. Althaus then resorts to the use of the continuous galvanic current. In tic of the face, ten or fifteen cells of Daniell's battery are employed, and the length of the application is from half a minute to five minutes. Where the application to the *puncta dolorosa* is ineffectual, the cervical sympathetic is included in the circuit. As a rule, the external application by moistened conductors to skin and mucous membrane is sufficient; but in a few very bad cases of tic and sciatica, galvano-puncture was used, the skin having been previously rendered insensible by ether spray. Galvano-puncture is unquestionably the most effective method of employing the continuous current, but as it is at the same time the most disagreeable one, it is only used where the external administration of the galvanism fails to cure the complaint.

The continuous current, applied in either of these ways, appears to be the most effective and reliable nervine tonic and sedative with which we are acquainted. Severe pain often disappears for good after a single application of one minute's duration; but in most cases from six to twelve operations are required. The first or second applications are often decisive as to what the result of the treatment will be; for where these do not produce any benefit, the current is likely to fail altogether. An important rule for this treatment is that, where the pain has completely disappeared after the first operation, nothing further should be done for some time, as under such circumstances a second application may do harm, and throw the patient back into his previous condition.

It is probable that in such cases the neuralgia is due to a faulty position of the electrical molecules of the nerve, which is corrected by one application of the current, but again disturbed by a second, which does too much, and is therefore hurtful. Du Bois-Reymond has shown that we are able, by the continuous galvanic current, but by no other form of electricity, to change the peripolar arrangement of the electrical molecules of the nerve into the dipolar position; and as the microscopic examination of excised nerves, which had been the seat of neuralgia, has given totally negative results, the supposition that a disturbed molecular arrangement is the cause of certain forms of neuralgia, gains additional ground. In other cases, the result is probably due to the catalytic effects of the continuous current, by which the nutrition of nervous matter is thoroughly altered.

Dr. Althaus lays great stress upon the necessity of *short* applications, especially where the galvanism is applied in the immediate vicinity of the brain and the cervical sympathetic. One minute there will often do good, while five minutes may do harm. This applies chiefly to tic of the face, and occipital neuralgia, while in brachial and intercostal neuralgia, pain in the back, and sciatica, a longer and stronger application is generally necessary—that is, from five to ten minutes at a time, the power of the current used being from thirty to forty cells of Daniell's battery. For galvano-puncture fifteen to twenty cells are sufficient. Neuralgia in the back yields most easily to the continuous current; of twelve cases which have been under treatment, eleven were cured by external application; one ceased to attend before much benefit was attained. Of seven cases of intercostal neuralgia five were cured, and two much improved, but the treatment was rather longer than for neuralgia in the back. Of twenty-three cases of sciatica eight yielded to external application, and seven to galvano-puncture; five were improved, while in three the affection remained stationary. Of three cases of occipital neuralgia two were cured, one unrelieved. Of five cases of tic in the face one was cured by external application, two by galvano-puncture; two were unsuccessful. All these cases had resisted subcutaneous injection. Of brachial neuralgia only one case was not benefited by the latter plan, and this one yielded to five applications of the continuous current.

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Medical Times and Gazette.

SATURDAY, JUNE 11, 1870.

A ROYAL SOCIETY OF MEDICINE.

Of all professions the Medical is the most split and divided. Doctors differ proverbially, and their differences extend and ramify in a wonderful, and to outsiders an incomprehensible, manner throughout the whole Medical body politic. The old feuds between Physicians and Apothecaries, which blazed up in the time of Garth and Radcliffe, have, as our own pages have recently proved, never in the course of two hundred years quite died out, and even now on the slightest provocation are ready to burst into flame. The College of Physicians competes with the College of Surgeons to license in Surgery, and with the Apothecaries' Society by giving its licentiate "Physicians" the right to dispense and send out their medicines. The Medical Faculties of the Universities acknowledge that their interests are not those of the other Medical authorities, and upon any attempt, as at present, by legislation, to reduce Medical chaos to cosmos, the force of repulsion is immediately brought into action, and each body flies off on the erratic course to which its own particular advantage seems to point. What is true of the governing bodies of the Profession is equally true of its voluntary associations, and in some degree, at least, of its individual members. With regard to the latter, who will affirm that the growth of specialism, and the multiplication of small Hospitals and Dispensaries—and especially of special Hospitals and Dispensaries—however they may have tended to benefit individuals of the Profession, have not had a disastrous effect on the fortunes and prosperity of the Medical body as a whole? Lastly, if we take the voluntary associations of the Profession, we find the same centrifugal and repulsive forces everywhere at work. Medical men fall into the mistake of forgetting that they all belong to a Society, of which the interests are more important to themselves and to the public than those of any of the sections into which it has been accidentally divided; and that the interests of such sections, nay, the interests of the individuals who compose them, whether those interests be scientific or social, will in the long run be best advanced by consolidating and strengthening, organising and energising the Profession of Medicine as a whole; from which, indeed, the component parts, whether sections or individuals, derive their sole claim to be heard in matters relating to the physical welfare of mankind.

Having said thus much in favour of the principle of union amongst Medical bodies in the common interests of the Profession of Medicine, and of the organisation and consolidation of the Profession, we approach, with a bias which we do not disclaim, the difficult question of amalgamation which is now being discussed in the principal Medical societies of London. The question, we acknowledge, is a difficult one, because, however in the abstract such union and amalgamation may be desirable, the position, the circumstances, and the traditions of the different societies are so widely dissimilar that fusion can only be brought about at the expense of much that is valued by some of them, and by the exercise of a considerable amount of forbearance and conciliation by all. And here we are met with a difficulty in the outset which, we fear, will have the effect of postponing, if it do not destroy, the whole plan which the friends of amalgamation are desirous of seeing carried into effect. It is well known that a plan for amalgamation, embodied in certain resolutions passed at general meetings, has been offered by the Royal Medical and Chirurgical Society for the consideration of the other Medical societies (with the exception of the Medical Society of London and Harveian Society) of this metropolis. The Royal Medical and Chirurgical Society have somewhat unadvisedly, we venture to think, appended to their scheme the following resolution:—

"That this Society, while not objecting to any modifications in the details of the scheme now agreed to, does not feel disposed to accede to any essential change in that scheme."

We are perfectly aware of the circumstances under which this resolution was proposed and passed, and of the causes which led to its adoption. But we retain our opinion that it was a mistake in tactics for the Medical and Chirurgical Society, not merely to come to such a determination, but to publish it in large type at the foot of the scheme which it offers to the other societies as an invitation to mutual co-operation.

Nevertheless, we cannot but feel great satisfaction that the Pathological Society, at its meeting on Tuesday last, affirmed the principle of amalgamation by a sufficient majority. There is no doubt that the Pathological Society, which for success, usefulness, and scientific renown is in the foremost rank of the Medical societies of Europe, has nothing to gain, and may lose much, by amalgamation. The Pathological Society requires no support from other societies. It is in a position to confer and not accept aid. The acceptance of the principle affirmed in the scheme of the Royal Medical and Chirurgical Society is an act of grace which we think redounds to the credit of the Society. The meeting, however, at which the principle of amalgamation was adopted, stands adjourned for the consideration *seriatim* of the resolutions contained in the scheme offered by the Medical and Chirurgical Society. That scheme in all its particulars we think can hardly be accepted by all the other societies, but if a difference of opinion should lead to its wreck, the fault will not lie at the door of the Pathological Society.

The Obstetrical Society has yet to declare its final acceptance or rejection of the scheme. That Society has already been accorded special privileges in the proposal, but it is said that the Obstetricians are by no means satisfied. For our own parts, we think that no scheme for a Royal Society of Medicine, consisting of various sections for the culture of the different departments of our science, can have any claim to approach perfection in which the cultivation of the two principal departments—Medicine and Surgery—is to be carried on in one section, whilst such artificial departments as Epidemiology and Clinical Medicine and Surgery are to have special sections allotted to them. The oldest and most natural division of the Medical art is into Medicine and Surgery. Obstetrics, as a separate branch, is of more modern origin. The proposed scheme ignores the distinction, which had its rise in remote antiquity, and has been adopted by every nation having any pretence to civilisation, but is quite ready to recognise the most arbitrary divisions which have simply originated in the convenience of modern scientific workers. For the practical working of the proposed Royal Society of Medicine, we are convinced that the division of Medicine and Surgery into separate

sections is most desirable. It is not for the benefit of a Physician to be bored *nolens volens* with Surgical statistics and the details of Surgical operations, nor do Surgeons wish to be always present at the discussion of abstruse points of Medical diagnosis.

The separation of Surgery from Medicine would remove much that lies at the root of the opposition to the scheme. Neither branch of our science would suffer by it, but each, we believe, would flourish more vigorously, united as they still would be as common sections of the Royal Society of Medicine. We need not say that, in any plan, in consideration of the union hitherto maintained between Medicine and Surgery in the Medical and Chirurgical Society, the right of access to the Medical and Surgical sections might be freely accorded to all who are Fellows of that Society at the time of reconstruction.

We have indicated some of the difficulties which lie in the way of the formation of a society on the plan offered by the Medical and Chirurgical Society. We do not believe that they are insurmountable, could the societies be led to approach them with less care for their individual interests and a more single eye to the well-being of the commonwealth of Medicine. The Medical men of this country have no common rallying point, no centre of action, no means for intercommunication, no authoritative combination whereby they may address the Government of the country or the public. The corporations are disunited examining bodies, which have undoubtedly done much for Medicine, but which yet have their own interests and privileges to conserve. The British Medical Association is a great association truly, which spends nearly all its funds in publishing a Medical newspaper, and competing with other ventures of the same kind. These bodies in no true sense can represent English Medicine. In a Royal Society of Medicine formed somewhat after the model of the French Academy, Medical men would find all the benefits which accrue from organisation and co-operation; scientific work would meet with due appreciation and with its fitting rewards; through it the Profession would speak authoritatively on all that appertains to the physical well-being of the people; and it would be a means of establishing another and a much-needed channel of communication between Medical Practitioners and the Government of the country. Whatever, therefore, be the immediate fate of the scheme offered by the Royal Medical and Chirurgical Society, we can only hope that if it die the movement in which it originated will not die with it, but that it will result at no very distant period in an amalgamation and reorganisation of the societies, which are now separately cultivating departments of Medical science, upon a fair and liberal basis.

A FINAL CRITICISM.

The discussion on the Medical Act (1858) Amendment Bill in Committee of the House of Lords will commence on the 17th inst. It seems now tolerably clear, considering the period of the session at which we have arrived, that if the Bill is to be made in some degree satisfactory to the Profession, and if it is to pass into law, the chief improvements and alterations must be made in it in the Upper House. If, on the other hand, the Lord President of the Privy Council should prove deaf to all remonstrances and representations as to the shortcomings and practical uselessness of the Amended Bill, opposition can be brought to bear against it with more hope of success in the House of Peers, where the Government are in a minority, than in the House of Commons where Mr. Gladstone can count on a majority of a hundred. It is because the Bill, and with it the best interests of the Medical Profession, are in this critical position that we again urge what we believe to be the main objections to the Bill in its present form, and point out those alterations, additions, and omissions which are necessary to make it a useful and satisfactory measure.

Before, however, we repeat the oft told tale, we may notice a proposal which we hear is likely to be advanced by a noble lord, who, it is understood, will represent the opinions of one of the leading Medical authorities in Ireland. It is in reference to the question of whether there shall be one board of examiners for the three divisions of the kingdom, or a separate board in each. If report speaks truly, the supporters of the single board scheme have abandoned the notion of a travelling company of examiners as untenable, and have adopted instead of it the plan of one board in three divisions, a certain proportion of the examiners of each divisional board being sent as representatives to be present at the examinations of the other divisional boards. This plan, of course, is not so utterly impracticable as the peripatetic scheme, but it is open to the following objections:—First, on the supposition that the visitors who are to be sent by divisional boards to be present at the examinations of the other divisional boards, will in reality take the place and usurp the functions of the independent visitors, who have been hitherto commissioned by the General Medical Council to visit examinations. For obvious reasons we hold it to be better that assessors or visitors should not be engaged themselves in conducting examinations elsewhere, which, in their turn, would have to be subjected to the criticism of those whom they are visiting. Secondly, if, on the other hand, the visitors are merely to be extra examiners sent to assist in the examination or, not to put too fine a point on it, to be mere dummies, unnecessary expense and trouble will be incurred for a very theoretical benefit. The fact is that it is immaterial whether the examinations be conducted by a separate board in each division of the kingdom or by three nominal divisions of one board. The two things are substantially the same; but we maintain that the function of visiting, supervising, and criticising the examinations ought to be vested, as hitherto, in the General Council of Medical Education.

We return now to the more palpable and real objections to the Bill. The first one is that, in its amended form, the Bill entirely fails of erecting one portal of admission to the Medical Profession. It is not, however, too late to restore clause 18 to its original place in the Bill, and to add some provision by which, under carefully guarded restrictions, the universities may be allowed to grant purely honorary Medical titles, as distinctions only, to unregistered persons, or, which would undoubtedly be more consistent with the principle of the Bill as originally framed, that all university graduates should be required to possess the licence of the national board before receiving their degrees, such license being given them on the easiest possible terms. Nothing less, however, than the restoration of the one portal principle as the leading one of the measure can make it acceptable to the Medical Profession. Secondly, the clause permitting the introduction of all sorts of Medical heresies into the examinations of the national board must be expunged or greatly altered. Thirdly, the clause which permits foreign adventurers with doubtful Medical diplomas to come to England and prey upon the public must be altered or withdrawn. Fourthly, the penal clause requires to be altered in the direction of stringency. The difficulty of proving that practice has been conducted for gain would in many cases render the clause nugatory.

We have more than once descanted on the injustice and inutility of the majority clause, now the 29th clause of the Bill. But we must once more urge upon the Profession and the Government the strong objections to which it is open. This clause provides that a majority of the Medical authorities in each kingdom may exercise the powers of all in all matters provided for by the Act. In England and Scotland we have already shown that this clause takes all power from the corporations, and gives all power to the universities. Supposing on any question the universities take one view and the corporations another, the voice of any one of the universities will carry more weight than the voice of the largest corporation. Again, the effect may be to entirely exclude any one body or

any two bodies, or in England or Scotland even three bodies, from all participation in the formation of a conjoint board, or the framing of a conjoint scheme. The monstrous injustice of this only requires, we should suppose, to be exposed. If it be the intention of the Government that the Corporations should be deprived of their examining functions and extinguished, let the thing be attempted openly and boldly, bnt do not let us have clauses inserted in this Bill which at any time may be used for their destruction. The majority clause is, we maintain, an unnecessary clause, as well as an unjust one. It is unnecessary, because if the Medical authorities cannot agree upon a scheme the General Medical Council are to take the work out of their hands, and in that Council all the Medical authorities are represented. The injustice of the clause is aggravated in the amended Bill by the very proper limitation of the powers of the Privy Council, which could not be used for such a redress of the grievances of one or more of the Medical authorities as would amount to a modification of the scheme. On these grounds, then, we would urge the erasure of this obnoxious and useless clause.

There are still other objections to the Bill as amended. One is that in the body of the Bill there is no provision for the registration of any Medical titles besides the licence. It is true that in Schedule III. the column for the registration of higher qualifications is retained, but as there is no reference to it in the Bill this may be a mistake. We doubt whether the non-registration of Fellowships and Memberships of the Colleges and of University degrees will be acceptable to the Medical authorities or to the Profession. We notice that strong objection is taken to the amended Bill on this point by the Edinburgh College of Physicians in a recent report.

Again, we have something to urge upon the lax provision which the Bill makes for the preservation of a proper standard of Professional and moral conduct amongst British Medical Practitioners. This was one of the points we urged in our first criticism of the Bill. We then proposed that the old-fashioned expedient of administering an oath to every candidate before admission to practice should be adopted. This, however, we were informed was not practicable, and, in lieu of it, a clause was introduced giving the General Medical Council the power, on application of any of the Medical authorities, to inquire into the case of any registered person accused of infamous or disgraceful conduct, and, on proof of such conduct, to cause the erasure of his name from the register. We submit that this regulation is not sufficient to ensure a high standard of Professional morality. Conviction of misdemeanour or crime in a law court, or proof of infamous or disgraceful conduct, will rarely be established against Medical Practitioners, but there are offences against Medical ethics which the Profession has a right to demand shall be repressed in any new measure of Medical legislation, which would be left entirely untouched by the amended Bill. It is to be urged on the Government that the General Medical Council should have the power to impose the observance of a well considered set of rules of moral and Professional conduct upon all candidates who obtain the national licence, and that they should have full power to punish infractions of the code.

Lastly, we still believe that some mode by which the General Medical Council might be placed on a broader basis, and its members made representatives of the Members, Fellows, and Graduates of colleges and universities, rather than of the small governing bodies of those institutions, would be acceptable to the Profession, and would undoubtedly increase confidence in the result of its deliberations. We think that this should be attempted in the present Bill, the more so as we hold that a prospect of a succession of Medical Reform Bills would afford the best reason for declining any.

THE sum of £1000 has been left for the British Hospital for Diseases of the Skin.

THE CONTAGIOUS DISEASES ACT.

ONE of the speeches made in the House of Commons when the motion for the repeal of these Acts was discussed with closed doors has been published, and lies before us. When we say that the speech was made by Dr. Lyon Playfair, we may all be certain of one thing—namely, that it is a passionless, sober and philosophical exposition of facts, free from the bias of a partisan, and well calculated to instruct the distinguished assembly to which it was addressed. The allegations made by those desirous of the repeal of the Acts of 1866, 1868, and 1869, are mainly the following:—1. That they were passed, if not secretly, yet at least without due consideration. In reply to this, Dr. Playfair points to the very exhaustive and careful manner in which the subject was considered, if not by the assembled Parliament, yet by Select Committees of both houses, whose voluminous reports were in the possession of every member. It was doubtless considered that the subject could be more calmly legislated on thus than through the medium of a full debate. 2. It is asserted that experience shows that the Acts have had little influence on the nature and extent of venereal diseases. It is replied that, as respects syphilis, this assertion is the very reverse of the truth. Even Dr. Balfour, who was utterly opposed to the introduction of the Acts and doubtful of their advantage, when examined by the Select Committee, authorises Dr. Playfair to announce that his opinion is altered. Comparing protected with unprotected stations, the fact is too glaring to be any longer denied that whereas in the latter syphilis remains a constant amount among the troops of 110 to 112 cases per 1000 of force, in the former it has lessened to 86 in 1867, to 70 in 1868, and to 58 in 1869. Another fact is striking as an instance in point: "Last year, on March 1, a battalion of Guards left London for the newly protected station of Windsor, which formerly had been notorious for its unhealthiness. During a stay of four months only 30 cases of disease occurred. Then the battalion returned to London, and in the next four months 108, or three and a half times more cases arose." A somewhat similar observation was made when the 5th Fusiliers left Aldershot for the unprotected towns of Glasgow and Ayr. Besides this, it is observed that the severity and duration of the malady have lessened. As regards the women, Dr. Playfair mentions that in Chatham when the Act was first introduced 70 per cent. were found diseased, while in the last quarter only 6 per cent. were found in that condition. 3. But the main contention is that the Acts are opposed to religion, justice, morality, and public liberty. Dr. Playfair reminded the House that there was a time when vaccination was opposed as an impious interference with a visitation from God, that when potatoes were first introduced into Scotland the benefactor of the people was pelted with his own tubers because potatoes were an irreligious crop nowhere mentioned in the Bible, and that Sir J. Y. Simpson was denounced as irreligious when he introduced chloroform as an alleviation of the pangs of childbirth. He met the objection of partiality in alone subjecting the women to the operation of the Act on the ground that in so doing Parliament was only following out its own traditions, inasmuch as it only deals in these Acts with the vendor and not with the purchaser in what between them is a trade bargain or traffic. It cannot without an unwarrantable interference with the liberty of the subject suppress the traffic, but, as in other instances where it is similarly placed, it can try to diminish its evils by forcing the traffickers to carry on their trade with the least injury to the public. No doubt in this endeavour the liberty of the vicious trafficker is infringed, but the same thing is done by a hundred other Acts when a subject uses his liberty injuriously and licentiously. 4. It is stated the operation of the Acts is to degrade the unfortunate women, and to bring upon innocent and virtuous women an unmerited insult. As to the prostitutes, Dr. Playfair maintains that the assertion is directly contrary to the truth, instancing

the amelioration of manners and appearances observed among them both in Aldershot and every other protected station, and the fact that the Acts have operated in the way of deterring girls from frequenting singing-saloons and similar places of resort, lest they should become classed among their fallen sisters. And as to the virtuous, he very truly says that the miscarriages of the Acts by which suspicion has been thrown upon innocent women have been most remarkably rare, considering the vast number of women altogether who have been brought under their operation; the alleged cases, even doubtful as to fact, have been more rare than those in which innocent persons have been hanged for murder. A single misadventure, of course, is to be regretted, but the law throws a veil of privacy over every proceeding of the police and magistrates, and the very rare occurrence of such an event is no argument for the abolition of a law which confers large benefit upon the public at large.

The above is very briefly the substance of Dr. Playfair's address, and the arguments are such as we hold are not to be refuted. It will be impossible in the face of the truths put forth by our distinguished *confrère* for Parliament to retrace its steps. It would be impolitic, even if it were possible, without denying the primary necessity which led to the first enactment of 1866. But the extension of the Contagious Diseases Acts to the civil population is a very different question from the repeal of the Acts now on the statute book, and Dr. Playfair was careful not to confound the two propositions. Those who are in favour of the repeal are not always quite so particular. The subject of prostitution and the duty of the State with regard to it, in view of the moral and physical health of the people, has become one of the great questions of the day. Women, forgetful of the sweet modesty and reticence which is the most charming attribute of their sex, write and speak upon it with an openness which the most learned and bold among men can but distantly approach, but unfortunately also with a disregard to truth and logic, which goes far to prove their utter unfitness for taking an active part in matters political. Let them be at peace. Public interest has been aroused, the importance of the subject is fully recognised, and Parliament follows in the track of public sentiment. But it will not listen to mere rodomontade. Before we conclude, however, we must suggest to all who wish to make themselves acquainted with the scope of the Acts and with the safeguards it provides against abuse the perusal of a short description of these Acts by a barrister, Mr. A. S. Lamb. It may serve to remove some groundless apprehensions, and possibly Mr. Lamb may be listened to with the greater readiness in that he does not concur in the policy of the Acts themselves.

THE WEEK.

TOPICS OF THE DAY.

A MEETING of the Executive Committee of the General Medical Council was held on June 2. Amongst other business, a letter was read from the Medical Officer of the Privy Council asking the Registrar to consider an amendment to the Medical Act (1858) Amendment Bill proposed by the Registrar-General. It was to the effect that every registrar of the United Kingdom on registering the death of any Medical man should transmit a certificate of that death to the Registrar of the General Council and to the Registrar of the Branch Council for the purpose of the erasure of the name from the Medical Register, the expense of the certificate and transmission to be defrayed by the General Medical Council. The Registrar, Dr. Hawkins, in his reply, which has been approved by the Executive Committee, argues that the Medical Register is kept for the benefit of the public, and that, therefore, it would be unfair to tax the General Medical Council with the expense of a provision for the public good. The Registrar also argues that the funds of the General Medical Council will not bear any additional expenses if the Council has to meet the expenses of prosecutions under the 22nd section of the amended Bill.

A letter from the Under-Secretary of State for the Home Department was read, requesting that returns from each of the licensing bodies named in the schedule of the Medical Act of 1858 should be furnished to the Home Office to be laid before the House of Commons. The following are the returns required:—

"1. The number of each kind of licence, diploma, degree, or certificate, entitling the holder to be placed on the register of qualified Practitioners granted during each of the years 1865 to 1869, inclusive, distinguishing between qualifications in Medicine, qualifications in Surgery, and qualifications in Medicine and Surgery.

"2. The amount of 'the fee' paid for each kind of licence, diploma, degree, or other qualification which entitles the holder to be registered under the Medical Act.

"3. The number of years during which the candidate for each class of qualification is required to be engaged in studying the Profession, stating how many months he is required to be in attendance at Hospital.

"4. The number of years or months during which the candidate is required to have been engaged in the practical work of a Medical or Surgical Hospital as dresser, clinical clerk, or pupil, having the actual charge of patients under the Medical or Surgical officer of the institution, stating the dates at which such practical Hospital work was declared to be a requisite qualification for a candidate for licence to practise.

"5. Is the candidate for any, and if for any, for which of the qualifications to demonstrate at the bedside of a patient that he has acquired a practical acquaintance with disease, giving the date at which such rule was adopted, and the date since which it has been operative."

The Registrar was directed to send a letter to each of the licensing bodies requesting them to send the returns required without delay.

Another candidate, Mr. John Adams, is, we hear, to be proposed for the honour of a seat in the Council of the College of Surgeons. Mr. Adams's candidature offers the first example of a Fellow who has already filled the office of councillor, and at the expiration of his term of office has been passed over by the Fellows, again, after an interval of time, offering himself for their support. There can be no valid reason against such a candidature, and it may be that the electors will be disposed to value Mr. Adams's claims of former service more highly than on a previous occasion. We should be sorry, however, to see the precedent frequently followed. As a rule, we think that a seat in the Council for a full term of years should content most Surgeons. The men whose position gives them a right to aspire to such an office are sufficiently numerous to supply a never-failing list of candidates. With regard to the chances of the next election, they are at present very doubtful; but it is probable that the power of the Fellows by examination will make itself more felt than in previous years. They are a compact and increasing body, and there is ground for believing that, as a body, they will take a more active interest in the affairs of the College than their older and possibly more occupied brethren.

In the case of Atherton *v.* the British Nation Life Assurance Association the Court of Chancery have recently set aside a policy of life insurance for £1000, on the ground that the policy was obtained by fraud and misrepresentation. The form of proposal contained the usual question whether the person insuring, one Rigg, was "afflicted with or subject to any illness or disease or of intemperate habits." The answer given was, "None—temperate generally." Six years after the policy was effected Rigg died, and the cause of his death was stated in the Medical certificate to have been (1) chronic gastro-hepatitis; (2) albuminuria, with dropsy. The business of the British Nation Company was transferred to the Phœnix before the death of Rigg, and the latter Company through their agents discovered that before the policy was effected Rigg had been a person of intemperate habits, and had been subject to attacks of delirium tremens, and that once he had been in a lunatic asylum on account of one of these attacks. The Phœnix

Company therefore disputed the claim. The case had been decided in favour of the representative of Rigg by the Master of the Rolls, but this decision is now reversed by the Lord Chancellor, with the concurrence of Lord Chief Justice Giffard. Both these judges held that the policy was fraudulently obtained, and was therefore invalid.

The Syndicate of the University of Cambridge have signified their approval of the main provisions of the Government Medical Act Amendment Bill. It is evident, however, from a statement which appears in the *Times* of June 6, that the Syndicate have not taken into consideration the effect of the alterations introduced into the Bill by the Lord President. The Syndicate object to the shortness of time allowed to the Medical authorities for the preparation of a scheme for a conjoint board—viz., until October 1 next, and they propose to try and obtain an extension of the time.

A meeting has been held at Bathgate, the native town of the late Sir James Y. Simpson, for the purpose of erecting a memorial to him there. It is not intended that this movement should interfere with a similar one which has been set on foot at Edinburgh. It is proposed that a statue of Simpson should be erected at Bathgate, and a committee has been appointed to carry out the proposal.

The Sub-Committee appointed to inquire into the out-patient administration of Hospitals propose to hold their first meeting at the house of Dr. Meadows, 27, George-street, Hanover-square, on Friday, the 17th inst., at 8 p.m.

The President and Fellows of the Royal College of Physicians have issued cards of invitation to a *conversazione* on Saturday, June 18.

SMALL-POX AT ALDERSHOT.

A CORRESPONDENT informs us that during the last ten days five cases of small-pox have occurred among the troops at Aldershot, the patients being one officer and two soldiers of the 33rd regiment, a sergeant of the Royal Engineers, and a child. There is good reason to suppose, although we hear that no direct contact has been traced, that the disease has been imported into camp by the militia, as about a fortnight before the occurrence of these cases, a man of the 2nd Royal Surrey Militia had died from small-pox, in the Hospital of the 33rd regiment, and about the same time a child in the 3rd Royal Surrey Militia two days after arrival in camp from Kingston-on-Thames presented symptoms of the disease. Scarlet fever and measles also continue of frequent occurrence among the children in camp.

THE CASE OF DR. FOWLER.

THE hard case of Dr. Fowler, to which we last week referred, has not improved during the subsequent period. The guardians of the City of London Union have by a majority of 34 to 22 affirmed the decision of their committee, and Mr. Brown, of St. Mary's-axe, occupies the place of Dr. Fowler. Now we do not wish to say a word against Mr. Brown, whom we believe to be in every way well qualified for the post; but our opinions on such subjects are well known. We hold that prolonged and faithful service gives a man a claim to a post as long as he can fill it satisfactorily. That Dr. Fowler has so served to the satisfaction of all concerned is proved, not only by the special recognitions vouchsafed to him by former boards of guardians, but by the interest now taken in his case by his fellow parishioners, notably the rector of St. Botolph's. We understand that Dr. Fowler intends to appeal to the Poor Law Board, on the grounds that the newly formed district is above the standard of population fixed by the Board, and we sincerely wish him success. From the report of proceedings which has reached us, we can hardly help concluding that one ground of offending on the part of Dr. Fowler in the eyes of some, was that he had done his duty to the sick pauper only too well. To have done so cannot be a matter of regret on his part, and come what may, he may be assured of the sympathy of his brother Practitioners.

THE ALEXANDER MEMORIAL PRIZE.

THE first competition for this prize among Army Medical Officers has just terminated in its being awarded to Assistant-Surgeon A. B. R. Myers, of the 1st Battalion Coldstream Guards, who wrote under the signature "Tempora mutantur," etc. The contest was, we believe, so very close between Mr. Myers's essay and another under a motto commencing "The Physician understands," etc., that there was considerable difficulty in deciding between the two. Three other essays were also sent in. The subject of the essays was "The Etiology and Prevalence of Heart Diseases in the Army." Both essays will, with the consent of the authors, be published in the Army Medical Department Report for 1869. The value of the prize is £50 and a gold medal value £10. The Medal, we hear, is still in the hands of the makers, Messrs. Wyon, medallists to the Mint. By the directions contained in the will of the late Mr. Alexander, Director-General of the Army Medical Department, the prize is to be competed for triennially by executive Medical Officers of the Army on full pay. The next competition—the subject for which has not yet been announced—will therefore take place in 1872, the present essays having been sent in on or before December 31, 1869. The interest taken in the subject by Mr. Myers and the practical knowledge of it he has attained are well known to the members of some of our Medical societies, and we warmly congratulate him on the result of his labours.

THE SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

WE beg to direct attention to a letter of Dr. Joseph Rogers, President of the Poor-law Medical Officers' Association, at page 646. Whilst agreeing in the main in Dr. Rogers's suggestions and observations, we would earnestly urge upon our readers the importance of petitioning the House of Commons at once. A single name to a petition is sufficient; indeed, a great number of petitions has more weight with the House than a small number more numerously signed. It is of great importance, also, that direct communication should be made with members, urging upon them the necessity of attending to vote and speak, if necessary, on the subject. The time is not unfavourable for the introduction of the Bill, and if it is not carried it will be the fault of those most immediately interested in the question.

POST-MORTEM EXAMINATIONS AT PUBLIC INSTITUTIONS.

MR. WOOLRYCH, stipendiary magistrate at the Lambeth Police-court, and Mr. Coroner Bedford have recently earned for themselves some notoriety by questioning the right of the Medical officers of a public institution to perform a post-mortem examination without the consent of the friends. Mr. Bedford stated that "any Surgeon or other person opening a body without the consent of the relatives or an order from the proper authorities was guilty of a misdemeanour at law." Mr. Woolrych expressed the same opinion. It appears to us that these gentlemen have quite mistaken the law on the subject. As far as we are aware no law has been enacted to provide for the performance of post-mortem examinations. The Anatomy Act of 1832 was passed for the express purpose of improving the supply of bodies for dissection, and clearly does not apply to post-mortem examinations. The two things are totally distinct—that of a student making a minute dissection of all the parts of a body, and a Physician making an examination to ascertain the cause of death, and then transferring the body to the friends for interment. By referring to the thirteenth section of the said Act, it will be seen that the Act refers to bodies given over by the friends for dissection. It reads as follows:—

"That every such body so removed as aforesaid for the purposes of examination, shall, before such removal, be placed in a

decent coffin or shell, and be removed therein; and that *the party removing the same* or causing the same to be removed as aforesaid, shall make provision that such body after undergoing anatomical examination be decently interred, etc."

The claimed bodies, which constitute by far the greater majority in our Hospitals, are always interred by the friends. In fact it is a very unusual thing for a body to go from the wards to the dissecting room. Then again the fifteenth clause distinctly states that the Act is "not to prohibit post-mortem examination."

Mr. Bedford, in stating that "an Hospital is not a school for teaching anatomy," is clearly mixing up the two things—a post-mortem examination and a dissection. Who ever learnt his anatomy in the post-mortem theatre? The thing would be nowadays impossible. The body is merely opened to ascertain the cause of the disease; it is not hacked about and butchered as the public seem to think. After the parts have been carefully replaced, the body is viewed by the friends, who could soon detect any unnecessary mutilation that might have been made. The friends almost invariably refuse their consent unless they are coaxed into it, and if the question is asked officially as Mr. Bedford suggests, "Do you object, etc.?" the suggestion is quite enough to excite suspicion and a prompt refusal. It would be impossible in many cases to perform a post-mortem examination after obtaining the consent of friends, for they are often so dilatory in making their appearance and so unwilling to give their consent. It is very important that examinations should be made as soon as possible after death, especially in summer weather. Who will doubt that post-mortem examinations are absolutely necessary in many cases, to ascertain the precise cause of the disease?

CHLORIDE OF ETHYLIDENE.

It is curious to observe how, occasionally, medicinal agents which have been used, reported on, and laid aside, crop up again. This week the daily papers report from Berlin that Liebreich has been employing as an anæsthetic the chloride of ethylidene—that is, the monochlorinated chloride of ethyle, with which Dr. Snow made us familiar nineteen years ago. Some of our most eminent Surgeons, Mr. Bowman, Sir W. Fergusson, Mr. Henry Lee, and others, operated on patients under this agent, and there was an almost unanimous opinion in favour of it, Snow himself being peculiarly impressed with its safety. The chloride when pure boils at a temperature a few degrees lower and has a lower specific gravity and a lower vapour density than chloroform. It has a higher boiling point, a higher specific gravity, and a higher vapour density than bichloride of methylene. Its composition is $C_2H_4Cl_2$; chloroform is $CHCl_3$, and bichloride of methylene is CH_2Cl_2. It is isomeric with Dutch liquid, but differs in boiling point. The dose required to produce deep anæsthesia is about half an ounce. The notice of monochlorinated chloride of ethyle recalls to us the remembrance that our distinguished countryman, Snow, was suddenly seized with his fatal illness while in the act of writing on this agent. He was drawing near to the conclusion of the chapter in his work which treats of this subject, when in the middle of a sentence he wrote his last word on the page—the word was "exit."

THE NOMENCLATURE OF MORBID GROWTHS.

We find that Mr. Birkett, in his very valuable lectures on morbid growths, just delivered at the College of Surgeons, expresses himself as dissatisfied with the old terms, cancer and carcinoma. We fully agree with him that the time has come when the use of these terms should be either carefully limited or altogether abandoned, but we are by no means prepared to adopt the alternative offered to us by the learned Professor. We are told that the time has now come when the great advances made in late years in microscopic investigation have rendered such a term as cancer absurd, and we are accordingly invited to adopt the more scientific name, "cellule growth" in its place. But surely if microscopic examinations have taught us anything at all, they have landed us a stage farther than this. To the mind of a disciple of Virchow, the term "cellule growth" implies absolutely nothing more than organised structure of any kind, and the expression would be every whit as applicable to a nerve ganglion or a wart, as to the most typical scirrhous breast. What is really wanted is first a definite and authoritative statement of the anatomical structure of cancer, and then a scientific term which shall express the distinction between this and the numerous other forms of malignant growth, which perplex the pathologist and baffle the Surgeon. But we earnestly trust that the present stage of our knowledge of the minute anatomy of morbid growths may not be thought to be represented by the adoption of such a term as "cellule growth" in the place of our old and much abused friends cancer or carcinoma.

THE SMALL-POX EPIDEMIC IN PARIS.

The continuance of the virulent epidemic of small-pox in Paris has given rise to the holding of a weekly conference, or, as it sometimes called, a vaccine congress. Not more than 200 Practitioners have been present at the first two of these that have been held, and no Hospital Medical officer, except M. Gallard, has taken any part in the proceedings. The first subject discussed has been the "Comparative Value of the Two Vaccine Viruses, and the Danger of Vaccinal Syphilis;" and M. Tardieu, jun., commenced with an essay on "Vaccination in relation to the present Epidemic." He comes to the curious conclusion that it little matters what form of vaccination is used, for the epidemic really depends chiefly on meteorological conditions. He states that the number of deaths from all causes that have occurred between January 1 to May 20 has amounted to 23,703, among which 1900 have been from variola. We may here notice that the statement of the French correspondent of one of our contemporaries that the Hospital mortality returns from small-pox in the weekly bulletins do not include the deaths from this cause in the Hospitals is erroneous. An *interne* from each Hospital in which these have occurred attends daily at the *mairie* of the locality, and reports them. It is suggested that the deaths occurring among the Hospital and civil populations should be distinguished in the bulletins, in hopes of diminishing the fears of those who wish to resort to Paris.

M. Tardieu observes that even when the deaths from small-pox are subtracted from the general mortality, this still very far exceeds the ordinary mortality of Paris, so that other causes are in operation. The affections of the respiratory organs are those which have especially exceeded the ordinary mortality. It is found too that the same quarters in which the cholera of 1865 and 1866 first and chiefly appeared, are those in which small-pox has first appeared, and in which phthisis is now and always most prevalent. Sevres and the other suburbs which are especially inhabited by laundresses, are those in which the cholera was and small-pox is most prevalent. Since April, portions of Paris, which had been hitherto spared, became the seat of small-pox, so that now it prevails over the whole town—a fact upon which the increased mortality from the disease is dependent, rather than on its greater relative fatality.

We are unable to follow M. Tardieu in his exposition of the influence of the north-east winds in this epidemic, and of the ozonometric conditions observed. He considers that during these latter years they have in Paris been traversing an epidemic curve commencing with the eruptive fevers, continuing with typhoid and diarrhœa, and attaining its maximum in cholera. When this last was attained the curve reversed, passing through diarrhœas, eruptive fevers, and miliary sweating. All these epidemic conditions are held together by a common tie, and have to a certain point an analogous origin. In all of them atmospheric conditions play the capital part. Hence vaccina-

tion, by either virus, proves insufficient to combat the epidemic. It is only throwing a few drops of water on a vast conflagration. It is useful enough in ordinary times, but every one is aware how a disease differs from itself in epidemic seasons. Regarding the epidemic influence as purely atmospheric, M. Tardieu would look for aid in disinfectants and antiseptics; and calls attention to the fact that carbolic acid seems recently to have exhibited some of the disinfectant virtues which *à priori* he would have anticipated from its employment.

Want of space compels us to postpone an account of the discussion which followed the reading of this paper. The deaths from small-pox for the week ending June 4 amounted to 173 in a general mortality of 1174.

HEALTH OF THE MAURITIUS.

It is gratifying to learn from the mortality table for April last, that the total registered deaths from all causes among the civil population of the Island, shows a very marked diminution when compared with the mortality during the corresponding months of the two preceding years, as follows:—

April,	1868	2036 deaths.
„	1869	1498 „
„	1870	672 „

276 of the deaths in April, 1870, were from malarious fever; 179 of the total number of deaths occurred in the town of Port Louis; 95 having been from fever. The death-rate, however, of Port Louis, still continues very much higher than in the country districts, having been nearly 36 per 1000 in the town, and 22 per 1000 in the country. But even this shows an improvement in the public health of Port Louis, when compared with the mortality which prevailed on the first outbreak of the epidemic of malarious fever. The sanitary measures for the improvement of the great dismal swamp, "Mer Rouge," are being unintermittingly carried out, and when completed, will no doubt be followed by favourable results. Our correspondent also informs us that Dr. Francis Reed, Deputy Inspector General of Hospitals, and Principal Medical Officer of the station in the island, is about to retire from the service and to settle in the island, where he holds an important public position. Since the reduction of the garrison, the Mauritius is no longer to be a station for a Medical officer of that rank, and the duties are now being performed by Surgeon-Major Small. A few fresh cases of fever have occurred among the troops, but on the whole their health is good.

FROM ABROAD—THE MEDICAL PLÉBISCITE.

One would have thought that the French had had more than enough of "*plébiscites*" of late, but M. Marchal de Calvi and others are trying to organise what they call a "Medical *plébiscite*," with the object of indicating to the ruling powers certain persons who have been forgotten or neglected during the annual showers of ribbons and crosses. The first individual selected for the demonstration is M. Robert Latour, who during a long life has been riding a hobby as to the curative agency of collodion or other impermeable substances applied to the skin in visceral inflammations. He does not seem to have made many converts to his procedure, but we suppose his perseverance has been deemed by his friends equally well deserving of recompense as the qualifications of many of those who have succeeded in obtaining decorations so prized by all Frenchmen. Accordingly, several of the French Medical journals have opened their pages for the purpose of inserting the names of those who approve of the bestowal in question. We fear that these are too few and the abstentions too numerous to encourage the hope that much influence will be exerted upon the powers that be; and M. De Ranse, one of the editors of the *Gazette Médicale*, seems to be of the same opinion, for while approving of the "Medical *plébiscite*" idea he wishes to impart to it an important modification. Collect the suffrages by all means, he says, so that the laborious Practitioner may be suitably indicated, but, in place of applying to power for his reward, let us, who are the best judges of his merits, bestow it ourselves in the shape of a medal of honour. The soldiers have their medals, and at each annual exhibition they are decreed to artists; and why should they not be given to Doctors by Doctors? "The modest rural Practitioner would then find his continued devotion to his duties recognised and recompensed quite as justly as the services which are more remarked, but not more deserving, of the great Physicians in our large towns. The medal must be voted by universal suffrage, and in regard to such a mark of distinction all will be on an equality." An annual Medical congress will meet at different places, and will have a committee, whose business will be to inquire into, and report on, the merits of those who have most distinguished themselves as Practitioners or *savants*. In order that the congress should be rendered imposing by the number of its adherents rather than by the gross sum subscribed for its purposes, it has been resolved to place the subscription at half a franc, which surely will be missed from nobody's pocket. Of course it is easy to foresee that such a project will either never be realised, or will very soon break down in its working; but it is almost incredible that in these times of common sense and actuality a scheme so visionary and so ridiculous could ever have secured the approbation of some ten or twelve sponsors who have signed their names to it. Even in the event of failure, M. de Ranse has his resource in proposing that the Medical press should employ the ample means it possesses of obtaining information as to where neglected merit lies hidden, and of calling it forth to receive the reward of public approbation. Verily, this "Medical *plébiscite*" bids far to outdo its political model in mischievous absurdity.

REVIEWS.

Report by J. L. W. Thudichum, M.D., on Cholera Chemically Investigated. 1866.

Dr. Thudichum's Report (chiefly Introductory) on Researches intended to promote an improved Chemical Identification of Diseases. 1867.

Further Report by Dr. Thudichum on Researches intended to promote an improved Chemical Identification of Diseases. 1868. (Contained in the Ninth, Tenth, and Eleventh Reports of the Medical Officer of the Privy Council.)

We congratulate the Medical Officer of the Privy Council in having secured the services of so useful a coadjutor as Dr. Thudichum. The first labour imposed upon Dr. Thudichum in his new capacity was to investigate the general subject of "The Entozoa found in the Bodies of Animals used as Food," and his exhaustive report, drawn up in a great measure from personal observation, was published about five years ago. Since that time he has contributed to Mr. Simon's annual volumes, the reports whose titles stand at the head of this article.

We shall commence the consideration of these three articles with a notice of "The Report, chiefly Introductory," published in the annual report for 1867. The author begins by telling us that "The broad object of the researches is to advance the knowledge of disease by such new chemical information as may be established with certainty." Admitting as he does that "the definitions of the chemical terms used in pathological chemistry do not differ from those used in general chemistry," we cannot see any necessity for his at once proceeding to occupy seven pages with definitions of the terms, elements, atoms, molecules, atomic weights, atomic heat, and with a long table of atomic weights, all of which may be found as well, if not better expounded, in any of our more recent treatises on general chemistry. From this section, which concludes with a sketch of the theory of types, he proceeds to the second part of his report, which he entitles "A Sketch of Chemical Physiology, and of its Points of Contact with Pathology." The secretions concerned in the digestive process, as the saliva, gastric juice, pancreatic juice, and bile, are first considered; after which he passes on to the discussion of the chyle, blood, voluntary and involuntary muscles, cerebral and nervous matters, connective tissue, fatty tissue, bones, pus, the spleen and other ductless glands, the salivary glands, the

pancreas, liver, and kidneys, the urine, sweat, breath, and fæces. In about twenty-four pages Dr. Thudichum manages to give a condensed sketch of the present state of our knowledge on these topics, which, as the reader will perceive, include the greater part of physiological and pathological chemistry. He condenses, however, rather too much; and we question the accuracy of some of his statements. For example, it would have taken up very little space for him to have named the chemists whose analyses of the different forms of saliva he quotes in page 159, and to have there mentioned that the dog was the animal whose fluids were employed. From the omission of the names of Bidder and Schmidt, persons not versed in animal chemistry would probably infer that Dr. Thudichum was responsible for the analyses. Where did the author learn that "the parotid saliva transforms starch into sugar by means of the ferment termed ptyaline?" We presume that he refers to the observations of Ordenstein and Eckhart; but, if we rightly recollect, these physiologists arrived at the somewhat anomalous conclusion that, while human parotid saliva possessed the property in question, the parotid saliva of the horse and dog possessed scarcely any sugar-forming power. And does not the fluid which he calls "sympathetic saliva" possess the same property? We have no objection to find with the sketch of mixed saliva, which is of incomparably more importance than its individual constituents. "This can be collected in quantity by irritating the fauces with a feather, and producing vomituritions. It does not reduce alkaline copper solution, but retains a little copper oxide in solution when copper salt and alkali only are added. It transforms starch into sugar; so that chewed pap, after some standing with copper sulphate and caustic potash, at 70° C., yields red copper suboxide. It does not change cane-sugar into invert sugar, and thus differs from yeast."—(P. 161.)

The following remarks on the formation of the hydrochloric and lactic acids which occur in the gastric juice during digestion will be read with interest even by those whose ideas of sodium hydroxide and hydroxyl are not very clear:—

"Digestion in the stomach is produced by a process in which of chemical ingredients hydrochloric acid takes a main part. In the dog this hydrochloric acid is so strong that the hardest bones are absolutely dissolved. In man such a solution of bones cannot easily take place, but they are certainly corroded when they are introduced into the stomach. The acid which dissolves them in the dog is hydrochloric acid only; in man the acid is probably a mixture of hydrochloric and lactic acid. But although we find in the economy chlorides everywhere, and lactates constantly in the chyle, yet we do not meet with these acids in the free state. We are therefore obliged to assume that in the walls of the stomach a chemical process is constantly taking place, by which hydrochloric and lactic acids are being formed. This process is very simple, consisting in the separation of the chlorine from the sodium chloride (or common salt), and the combination with it of a certain quantity of hydrogen. This hydrogen is derived from the water. What then takes place in the glands of the stomach may be stated to be a splitting-up of water and sodium chloride, and cross combinations of the elements to hydrochloric acid on the one side, and sodium hydroxide on the other.(a)

$$\underset{\text{Water.}}{H_2O} + \underset{\substack{\text{Common}\\\text{salt.}}}{NaCl} = \underset{\substack{\text{Hydrochloric}\\\text{acid.}}}{HCl} + \underset{\substack{\text{Sod. hydr-}\\\text{oxide.}}}{NaHO}$$

"The lactic acid is produced from lactates in a similar manner, and in the formula for its formation the place of chlorine in the foregoing formula would be occupied by the formula $C_3H_5O_3$ of lactic acid. This is simple and certain. But we find in the body no caustic soda, or sodium hydroxide, and we are therefore driven to inquire what becomes of this caustic soda so produced. Before it is carried away from the gastric glands by the blood, a part of this sodium hydroxide has an important function to perform—viz., to protect the stomach against the corrosive action of its own secretion. It keeps the blood and tissues more alkaline, and prevents the acids and pepsine which have become more energetic after secretion and mixture with the peptones, from corroding the textures of the stomach. . . The sodium hydroxide is soon transformed into carbonate in the blood, and passes through the gastric veins into the portal, and thus into the liver." (Pp. 164-5.) Dr. Thudichum mentions in a footnote that he lays claim to the discovery of this reason why the stomach does not digest itself.

The following paragraph contains a suggestion worthy of notice:—"Bile (not decomposed) has never yet been found in any fæces. Most remarkable and suggestive is the discovery by Liebig of alloxan in the mucous evacuations from a case of intestinal catarrh. Alloxan is a product of decomposition by oxidants of uric acid, and precedes the formation of urea. Possibly, therefore, functions of chemolysis are allotted to the intestine which at present we place into other organs, or know not where to localise. Gout might find an explanation in the failure of this chemolytic action; for uric acid, once in the blood, seems as far out of the reach of oxygen as sugar in the blood is in diabetes." (P. 183.)

In his third section, which is headed "Illustrations of the Tentative Nature of the Researches," the author specially considers tetanus and hydrophobia, and explains the processes he adopted in searching for some poison developed in the economy in these diseases which would give rise to their special symptoms. Then comes "The Spectroscope and its Application in Pathological Chemistry." After observing that the researches of Kirchhoff and Bunsen "led to the discovery of several new elements," and "to the discovery of their general distribution in the mineral, vegetable, and animal world," he adds, to our astonishment, "I augmented the means of studying the nature of the sun and of the fixed stars." We had always thought that the augmentation of our knowledge in these departments was specially due to Kirchhoff, Miller, and Huggins, and presume that the *I* must be an unfortunate misprint for *It*.

The different pieces of apparatus which he employs in his spectroscopic researches are clearly described and illustrated, and on page 198 he gives us a figure of "the most simple form of spectroscope." It shows, he tells us, the entire spectrum at one glance, and of great brilliancy when a sulphide of carbon prism of a refracting angle of 60° is used. It not only shows Fraunhofer's lines in diffuse daylight, and gives a good spectrum with any candle, but "by its instrumentality the fine absorption lines of fluopittine, boviprasine, and five-banded hematine and cruentine were discovered."

By the application of the phenomena of fluorescence, for the knowledge of which we are mainly indebted to the splendid investigations of Professor Stokes, Dr. Thudichum has been "able to identify many substances, and to discover at least five new bodies. Such are fluorescentine, an organic alkaloid derived from albumen, which being colourless, fluoresces with a violet colour; omicholine and omicholic acid, being red, and fluorescing with a grass-green colour; a derivative of hæmatine, being red, and fluorescing with a grass-green colour; another derivative of hæmatine, fluorescing in its own red colour, a novel and most remarkable phenomenon." (P. 200.)

Passing over his remarks on the decompositions of albuminous substances, on the colouring matters of the bile and urine, and a few other subjects, we arrive at the final section of this first report, in which "Alcohol in Relation to the Chemistry of the Human Body" is considered. After showing that in the well-known experiments of Lallemand, Perrin, and Duroy, only a very small portion of the alcohol that was taken reappeared in the urine, he proceeds to reinvestigate the subject with the view of finding out, if he could, the ultimate destiny of alcohol in the system. The urine of thirty-three men, who, during six hours of athletic sports, drank forty-four bottles of wine, was submitted to examination. The wine contained 4000 grammes of absolute alcohol, while the urine collected during the six hours yielded only ten grammes; and if the same quantity were supposed to pass off by the lungs and skin, only five grammes out of every 1000 would escape undecomposed. In another experiment, in which he had the able assistance of Dr. Dupré, performed upon six young men similarly engaged, who drank wine containing 11,088 grains of absolute alcohol, of which only 0·82 per cent. was recovered from the urine. In this instance all the young men were more or less affected by the wine, which was not the case in the former experiment. The author ascribes the difference in the results to the quicker consumption of the wine in the latter case, "for less alcohol passes into the urine in proportion as we drink it in smaller quantities and at longer intervals," and he believes that "there is a limit, and that if we do not pass that limit, no alcohol whatsoever, excepting the merest infinitesimal portion, passes into the urine, and that is eight, ten, or twelve ounces of wine—namely, just that quantity which a reasonable man might drink with his dinner."

In experiments on a case of typhus fever, in which enormous quantities of alcohol were consumed, Dr. Dupré never found so much as half a grain of alcohol in the urine (with one-tenth of a grain in the fæces), the great bulk of the alcohol clearly being oxidised in the system.

Dr. Thudichum's *Further Report* to the next annual volume

(a) In this formula we have substituted the new notation for the hideous barred symbols employed by Dr. Thudichum, and have corrected an obvious misprint.

issued by Mr. Simon, commences with notes on the febrile and some other morbid processes with reference to their chemical investigation, in which he points out that "we must have a measure of the disintegration of the blood, and that we can only find in uromelanine, or, better still, in a method of determining urochrome with the same despatch as urea. With such a measure we could ascertain the quantitative effects of fever far better than with the thermometer or urea analysis alone. The thermometer gives us a measure of the aggregate chemical changes; the urea a measure of the disintegration of albumen; but urochrome would show us the amount of disintegration of corpuscular respiring and oxidising part of the blood." Considering the obvious benefits that must accrue to science from the discovery of a urochrometer, our readers will be thankful to learn that Dr. Thudichum's "researches of the last two years have lain very particularly in this direction."

Then comes a note on waxy liver, which "contained of abnormal substances syntonine, cholesterine, and benzoic or succinic acid. Biliary acids and sugar were (abnormally) absent; a trace of cholophæine was present; only very little fat was met with. Consequently the degeneratiou consists mainly in the displacement of gelatiniform tissue and the disappearance of sugar and biliary acids, with the abnormal deposition of syntonine (or a matter behaving like syntonine) and cholesterine."

This is followed by a "Determination of the Quantity of Sugar circulating in the Blood in a Case of Diabetes," which the author estimates, by means of the saccharometer, at 10·8 grammes, if the whole of the blood be taken at 4500 cubic centimetres.

Further researches on urochrome and the products of its chemolysis occupy the next dozen pages, in which those of our readers who take an interest in such matters will find a full account of omicholine and omicholic acid, which "are evidently well-defined entities, although they have not yet been obtained in a pure state," and whose importance "to pathology may be inferred from the fact that they are capable of forming in the human body in certain forms of kidney disease," as is evidenced by the breath and the exhalation of the skin in such cases smelling strongly of these bodies.

Intermittent hæmaturia is one of the diseases which has attracted our author's attention, and the following are some of the conclusions to which his spectroscopic observations lead: —(1.) The urine contains hæmatocrystalline and hæmatine in solution. (2.) The hæmatine also occurs as a precipitate, which increases on standing. (3.) The hæmatocrystalline is in part transformed into hæmatine, which for a time remains dissolved, but is gradually deposited in an insoluble form. The author believes this to be the first instance in which hæmatine has been proved to be present in an organic morbid fluid.

The last subjects discussed by Dr. Thudichum in this report are "Leucine" and "A Series of New Yellow Substances contained in Animals and Plants," his researches on the latter subject being suggested by a desire to define the substance somewhat vaguely called "Hematoidine." The yellow substances occurring in the animal series are (1) *ovario-luteine* in the *corpora lutea* of mammals, (2) *ovo-luteine* in the yelks of hens' eggs, (3) *butyro-luteine* in butter, (4) *cysto-luteine* in an ovarian cyst, (5) *scro-luteine* in animal blood, and (6) *intestino-luteine* in the yellow evacuations of sucking infants. The following are his most important conclusions as deduced from the comparison of the spectra of various extracts from the *corpora lutea* and the yelk of hens' eggs:—(1.) The spectra yielded by the corresponding extracts are identical, and consequently the body which produces these spectra must be chemically the same in both cases. To this body, which is a yellow crystalline substance, he gives the name of "Luteine." (2.) Luteine differs entirely both from hematoidine and cholophæine. (3.) Hematoidine may be retained as a useful expression for certain microscopical crystals and bodies occurring in effused blood whose substance has not been chemically isolated or defined.

We have no space for any reference to the author's investigation regarding the yellow substance occurring in vegetables, and must conclude our notice of this report with an expression of unqualified praise of the beauty of the illustrations attached to this section of Dr. Thudichum's labours.

We now turn to the earliest, in point of date, of the three reports—that, namely, on "Cholera, chemically investigated," in which we shall glean a few of our author's most original remarks.

From his observations concerning the formation and excretion of urea in cholera, we find that in cases of death from rapid collapse little or no urea is found in the body; that in cases that have continued for some time in the protracted algid state before death more urea is found; that when the torpid condition has lasted from three to six days there is much urea present; and that the greatest quantity is found when the torpid stage has lasted six or more days before death, which has occurred after a considerable rise of temperature.

The "biles," as Dr. Thudichum terms them, of seventeen persons were examined, and in five cases no biliary acid could be detected, while in six others there were mere traces, the six remaining "biles" containing the ordinary amount of biliary acids. The biliary colouring matters were absent in five cases.

From his "Observations concerning the State of the Epithelia," we learn, *inter alia*, that, in consequence of the death of the nasal epithelia, there is "no sneezing in collapse;" that "the cylinder axis separates, and the nerve marrow curdles;" and that the secretion of milk continues in collapse, the breasts at the same time becoming hard, and their temperature increasing. With regard to the last-named point—namely, the increased temperature of the lactiferous breasts—the author suggests the following theory:—"It is owing to the process of secretion, which, like every similar process in glands, produces heat. This heat is due to the process of secretion itself, and to the incidental chemical changes which albumen undergoes in the process. These changes may be characterised as a splitting-up of the atom of albumen into two equivalent, or in all respects equal, atoms of caseine. The atomic weight of caseine is consequently only one-half of the atomic weight of albumen. The formation of milk-sugar from some other material, probably hepatine or glycogenic matter, no doubt also adds to the heat."

Dr. Thudichum's reports are specially remarkable for the great prominence given in them to spectroscopic analyses. The present report alone contains admirably coloured representations of the spectrum of a fermented cholera stool, of urocyanine in alcohol, of red colouring matter from cholera-urine, of indigo in alcohol, of cholocyanine, of hematine in alkaline alcoholic solution, of hæmatine in acetic acid and water, etc.; while the second of his reports contains a still larger number of spectroscopic illustrations. We cannot say that results of any very great value have as yet been deduced from these praiseworthy and laborious investigations. The nature of the benefits sought after by this mode of research is in some degree indicated in the following quotation from his comparison of myochrome, the colouring matter of the muscles, and its derivatives, the spectra of urocyanine, etc.:—"We have here a number of chemical bodies possessing strong chromatic powers, which in their optical properties resemble very much the blue and red matter obtained from cholera-urine. But the spectrum of no one body is identical with the spectrum of any other, and consequently we are constrained to admit that they are all of a different atomic constitution. By the width of its band, urocyanine resembles most to indigo, but the shading of the green and absence of the blue from the urocyanine spectrum distinguish it strikingly from indigo, and approach it to the spectra obtained from hemo- and myochrome. . . . . The urocyanine of cholera-urine is present in such small quantities that we can never hope to obtain insight into its composition and atomic weight by direct analysis, but the information wanted has to be obtained by synthetical comparisons, such as those above instituted."

A careful and unbiassed study of these elaborate memoirs, which are fortunate in finding an abiding dwelling-place in the annual "Reports of the Medical Officer of the Privy Council" leads us to much the same conclusion as that expressed by the author in certain experiments on the rice-water discharges in cholera, namely—"Their results have clearly exhibited the increase in the difficulty which the human intellect experiences with the nearer approach to the problem of the definition of disease."

Académie des Sciences.—Mr. Joule, of Manchester, has been elected a corresponding member in the Section of Physics, in place of Professor Magnus, of Berlin, who died on April 4. Mr. Joule received the votes of 32 of the 48 members present.

Injections of Liqueur de Villate in Carious Bone.—M. Nélaton employs the following modification of the *liqueur de Villate* as an injection to be thrown into the fistulous tracts connected with carious bone:—Acetic acid 100, sulphate of copper and sulphate of zinc of each 10, and acetate of lead 5 parts. There is a considerable precipitate, so that the solution requires shaking before employing it.—*Union Méd.*, May 31.

GENERAL CORRESPONDENCE.

THE INFLUENCE OF THE RELATIVE MAGNITUDE OF THE ORIFICES OF THE HEART ON THE CIRCULATION.

LETTER FROM DR. R. DOUGLAS POWELL.

[To the Editor of the Medical Times and Gazette.]

SIR,—All must agree with your reviewer in his appreciation of the great value of Dr. H. Davies' observations on the true relation of the cardiac orifices to one another. But there is one statement in Dr. Davies' paper which seems to me ambiguous, and if I construe him wrongly, in which case your reviewer has fallen into the same error, I trust he will correct me, for the point in question is an important one, though it does not necessarily affect the main argument of his paper.

Dr. Davies states that the two ventricles of the heart expel equal quantities of blood, in equal and the same time, with unequal force, to overcome unequal resistances. So far true. But he also states that this blood must be carried to unequal distances in equal times; in other words, as I understand him, he implies that a given quantity of blood (three ounces) passes from the left ventricle to the right auricle in the same time as that in which an equal quantity passes from the right ventricle to the left auricle. The quantity of blood expelled by each ventricle, and therefore the quantity received, must of course be the same in equal times, but inasmuch as there is a much larger mass of blood in the system than in the pulmonary circulation, it follows that, in order to supply these equal quantities to the two ventricles, the *times* of passage of equal amounts of blood through the two circulations must be only *proportional*, not equal. The time of the *pulmonary transit* from the right ventricle to the left auricle must be to the time of *systemic transit* from the left ventricle to the right auricle universally as the quantities of blood in the two circulations—*e.g.*, representing, merely for the sake of illustration, the quantity of blood in systemic circulation as 100, and quantity in pulmonary circulation as 10, and, taking seconds of time, the proportion would be 10″ for pulmonary, and 100″ for systemic, circulation, the latter number representing the *mean* time that each ventricle-full of blood would take to pass from the left ventricle to the right auricle, for the circulation through the different parts of the system occupies a very variable amount of time, and is liable to frequent interruptions or retardations.

It appears to me, then, that the greater initial velocity of the arterial blood has more reference to the greater resistance it has to overcome in its longer path than to the rate with which it has to travel.

I am, &c.

Nottingham-place. R. DOUGLAS POWELL.

DR. BRADY'S BILL FOR THE SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

LETTER FROM DR. JOSHUA ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Would you permit me to acquaint the Poor-law Medical Service that the Superannuation of Poor-law Medical Officers (England) Bill will come on for second reading on Wednesday, the 22nd inst., and to make a few remarks.

I have received between two and three hundred separate petitions, inclusive of one from the College of Physicians, the Council of the College of Surgeons, the Guardians of the parish of Leeds, etc., etc.; but it would produce a greater moral effect could this number be increased. To do this there is no time to be lost. I have therefore to request that all who intend to petition should do so without delay.

I also earnestly entreat all Medical officers and others who have influence with M.P.s to communicate with them at once, and beg them to attend in the House of Commons and support Dr. Brady's efforts. In several of the letters I have received, fault has been found as regards the probable utility of the Bill on the grounds of its being permissive only; and fears have been expressed that boards of guardians will generally refuse to grant any allowance even when they obtain the power to do do so. To this objection I have to state:—

1st. That superannuation of other Poor-law officers is at present only optional. 2nd. That the Irish Act passed last year is permissive only. 3rd. That until guardians and the public are better informed as to the value of the services which an efficient and contented Medical service can render the community, it would be hopeless to expect that other than a permissive enactment could be secured.

In conclusion, I have further to state that, under the provisions of the Irish Act, several aged and infirm dispensary Physicians have already been superannuated by the guardians there; it is therefore highly probable that the same boon would be extended to gentlemen here where sufficiently deserving cases were brought forward for such consideration.

I am, &c. JOSHUA ROGERS.

33, Dean-street, Soho, June 8.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JUNE 7, 1870.

RICHARD QUAIN, M.D., President, in the Chair.

SPECIAL MEETING.

THE PRESIDENT requested the Secretary to read the minutes of Council relative to the whole affair of amalgamation since the first communication was made to the Society. He asked them to consider what was best for the interests of the Society, and he trusted they would act rightly in the matter. The advocates of the scheme would have to make their views clear. The Society would have no opinion of the President or Council to bias it. First of all, they would discuss the general question whether amalgamation was desirable or no, and after that, were it resolved on, the details might be considered.

The SECRETARY having read the minutes,

Mr. HOLMES rose to move the adoption generally of the Royal Medico-Chirurgical scheme, which he considered it his duty as one of the delegates to do. He only proposed a general assent, so that any one might propose alterations in detail. It was well-known that there were great differences of opinion in the original committee, especially as to the Medico-Chirurgical Section. Still, it was the general opinion of the Profession that amalgamation was desirable, and it would be impossible to get a fairer offer than this. If it was resolved to unite, let it be with no half mind, otherwise the scheme would certainly fail.

Mr. GASCOYEN seconded, because he thought it would be for the benefit of all concerned. The scheme was the result of much labour, and was exceedingly fair, and the offer on the part of the Medical and Chirurgical Society was genuine. If the scheme was not the best for the Pathological Society, they might try to modify it.

Dr. PEACOCK felt some difficulty in speaking, as he had not been able to attend the preliminary meetings of Council, but they ought to know exactly what were the advantages of union. He had never been able to learn these. The financial question should also be considered, what amount of public support were they likely to obtain after union. He thought there must be a diminution somewhere, and the general body could not guarantee the continuance of the *Pathological Transactions*. Before entering on such a scheme they ought to know how the Profession was to benefited.

Dr. RISDON BENNETT would like rather to hear more distinctly an account of the objections to the scheme. Dr. Peacock had contented himself with the financial views, but the advantages would be great. They might claim rooms from Government which would constitute a common centre for the Profession, and give it increased weight with the public. As matters now stood, many things were in danger of being omitted, not lying within the special jurisdiction of any particular body. The financial objection was not likely to be insuperable.

Dr. C. J. B. WILLIAMS said they must consider this scheme mainly as it referred to the Pathological Society. Other things might have to be considered, but that was the main one. The position of the Pathological Society as to career, advancement, and present station was everything to be desired. It had been thoroughly successful, and could scarcely be bettered by the change. It needed no help. It had plenty of self-support and vitality. It was rather to be proved that good was to be gained by the change; he doubted if it would flourish better. In the past it had done so in spite of a certain degree of opposition. If they did not come to terms with the Royal Medical and Chirurgical Society, what would be the consequence? Would the Pathological Society hold its own and continue to flourish? Would there not be a branch formed in the Royal Medical and Chirurgical Society, and a division of existing

members? This would be the most undesirable of all results. He was inclined now the offer was made, especially as it was with the design of elevating Medicine and its several branches, to accept the offer. The Pathological Society did not need aid; it might even flourish less; yet he thought it for the benefit of Medicine that there should be amalgamation. He said this with some reserve, as he had not been able to attend all the meetings. He certainly thought there ought to be retrenchment in expenses and diminished subscriptions.

Mr. Arnott asked if the Pathological Society refuse, would the Royal Medical and Chirurgical Society form a branch or would the whole scheme fall to the ground? If the subscriptions were diminished the library or *Transactions* must suffer, and the new body would at best have no resemblance to the French Academy of Medicine.

Dr. Wilson Fox said that at first he had favoured the scheme, but he had come to the conclusion that the price was too high. The union was imperfect, certain of the societies still being left out. He did not think anything was to be gained; there would be less money spent or less work done. As to influence, the new body would not weigh much. The scientific interests of the Society would not be cultivated; they were more vigorous without union. He accordingly moved, as an amendment, the direct negative of Mr. Holmes's proposition.

Mr. Arnott seconded.

Dr. Moxon said in a matter of this kind they ought to consider well their reasons. The advantages were said to be patent to all; he did not see them. There were certain points to be considered. Their property would be diminished. The individuals concerned were much the same in all the societies. In short, he was opposed to the scheme.

Dr. Murchison said that the advantages to the Pathological Society were not very apparent. There were two points of view from which to consider the scheme—as it related to individuals and to science. The individuals to be benefited were few, as most already belonged to both societies, and the union would make no change in the payments. As to science, their *Transactions* were the great thing, and it was extremely improbable they would be published after a union as they now were. Their income would be reduced; a quarter would go to the new body. The interest on their capital would be lost, as would the admission fees. One year their *Transactions* cost more than their income, and they then drew on their capital. After a union they would have no capital to draw on, and what guarantee had they that the main body would grant the necessary sum were such a contingency again to occur? It was possible their numbers might be increased, but it was also possible they might be diminished. They were going on prosperously now, and they could not know what would be the result of the change.

Mr. Wood said their chief object to-night was pathology, but that was closely allied to other subjects such as anatomy and physiology. This subject was now isolated; they received no aid. He had himself experienced the difficulty of bringing certain subjects before a society. The new scheme contained a proposal for an anatomical and physiological section, which would aid them. The new one might stand by the help of the pathological and other sections, but could never do so by itself. Dr. Murchison's figures were hardly sufficiently convincing. Three-fourths of their income was quite enough to go on with.

Mr. Hulke thought that being a servant of the Society as its Secretary should not deprive him of a voice in the matter. He would vote for the amendment. They could not gain much, but they might lose a great deal. The Royal Medical and Chirurgical Society as a scientific body was not so vigorous as it was. It had much to gain, little to lose.

Dr. Dickinson thought that he also, although secretary, might state his opinion. He took a contrary view to Mr. Hulke as to the Pathological Society and the Profession. The Society would be much the same after as before amalgamation; but union might be a great gain to the Profession.

Mr. Holmes, in reply, stated that so much had been said he could not answer all; some he certainly could. As to advantage, the Pathological Society was flourishing, no doubt; but did it do all it might as to the origin of disease and such-like subjects? Union with other bodies might enable it to escape its trammels in this way. Morbid anatomy was the vice of the Society; they might get rid of that. As matters now stood, some societies were interfering one with the other, whilst some were competing. A great society like that proposed might go between Government and the Profession. Further, the Society had already agreed to meet the views of the Royal Medical and Chirurgical Society, which were certainly friendly. They would have the whole capital of the united societies to back them; and common management must be a gain.

The President said that, when Mr. Holmes stated that the Society had failed in its object, that was hardly correct, as he showed by the principles of union. They had been singularly successful. The committee was now engaged studying morbid growths, and another was dealing with amyloid change. He could not listen to such statements.

The amendment having been put, was lost by a majority of 34 to 21. The original motion being put, was carried by 35 to 13. Whereupon, Dr. Webb moved, and Dr. Moxon seconded, an adjournment.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Saturday, May 21, 1870.

Dr. Aldis in the Chair.

Mr. Crace Calvert explained a number of experiments made by him on the action of various antiseptics in arresting decomposition and putrefaction. As his experiments so far might be regarded as only tentative, he promised to lay more definite results before the Association on a future occasion.

Dr. Letheby then read a paper, entitled, "The present Prospects of the Sewage Question in relation to the Public Health, with a brief Review of the First Report of the Commissioners appointed in 1868 to inquire into the best means of preventing the Pollution of Rivers." Hasty and inconsiderate legislation, said Dr. Letheby, promoted by those who had no real knowledge of the subject, had brought the whole question of the disposal of sewage into such a state that the public are not only loud in their complaints, but emphatically demand a remedy. A review of the Parliamentary history of the subject led to the conclusion that the Legislature had become so perplexed that they were glad to dispose of the subject by hasty legislation, or by handing it over to some Royal Commission not always discreetly selected. Bad as was this state of things, the future prospect was still more gloomy; for it was to be feared that the same incompetent sanitarians who had brought on the present difficulties, would also be concerned with the future disposal of the question, and that Parliament would have again to correct the errors of inconsiderate legislation. If this could be prevented it would be of vast importance to the public, and the Medical officers of health of the metropolis were especially fitted to aid in this task. Dr. Letheby then explained the complex nature of sewage, showing how each constituent had its specific influence on the general mass, and on the putrefaction to which it is subject. Although precise information was difficult to obtain, still the subject might be approached in two ways—by ascertaining the average amounts of solid and liquid matter contributed by each individual and by each trade; and by analysing the daily sewage collected at various seasons. It was calculated by competent authorities, that the average amount contributed by each individual was 42·25 ounces of moist, or 2·25 ounces of dry matter daily. The general average of the washings of streets gave 262·6 grains of solid matter per gallon; of which 113·3 grains were dissolved, and 149·3 were suspended. The refuse of factories was determined by the second method, and it was found that the sewage discharged by day in the metropolis, contains about 94 grains of solid matter per gallon, of which 38 are suspended and 56 dissolved. The night sewage contains only about 79 grains of solid matter per gallon, of which 24 are suspended and 64 dissolved. Taking the average of all the results obtained, the metropolitan sewage may be said to contain about 90·4 grains of solid matter per gallon, of which about 29·8 are suspended and 60·6 dissolved, there being about 15 grains of organic matter in each of the constituents. Examined under the microscope, the clear liquor is found to contain a large quantity of amorphous organic matter, and swarms with the lower forms of animal life; but on exposure to the air higher forms of infusoria appear. The sedimentary matter consists of undigested food, and also the products of some of the secretions, with a large quantity of black amorphous matter. When sewage has a very offensive odour it rarely exhibits much sign of animal life, but when diluted with water and exposed to the air, the bad odour disappears, and the higher forms of infusoria are developed, showing plainly the salutary influence of air and water in promoting less noxious kinds of decay. The

mud on the banks of the Thames Dr. Letheby formerly found to contain only the lower forms of animal life, whereas in the middle of the stream, where there was an abundance of air and water, the highest forms of infusoria abounded. In rivers which receive the sewage of large towns the sedimentary matters deposit and putrefy, but the supernatant water containing all the soluble constituents passes on, and rapidly becomes clearer and clearer, until its organic matter is appropriated by living beings or destroyed by oxidation. This process is demonstrated by the improvement in the colour and odour of the water and the character of the vegetation. Dr. Letheby insisted upon this because the Rivers Pollution Commission were at variance with him on this point. He complained that his evidence had not been fairly quoted, for he had mentioned oxidation only as one of the many purifying agencies in a running stream. The investigations made by the Commission were severely criticised by Dr. Letheby because they had been made in winter time, when most of the agencies to which he referred were dormant, and because the air and sewage were enclosed in a bottle—a process which was highly unsatisfactory. In proof of his position, Dr. Letheby appealed to the large facts of nature; for everywhere our rivers were receiving the sewage of towns, and were yet undergoing a rapid self-purification. His view was likewise confirmed by Dr. Miller, Professor Odling, Dr. Taylor, Dr. Angus Smith, Mr. Hawksley, and other eminent authorities. Dr. Hofmann and Mr. Witt in 1858 reported to Government that the formation of mud deposits in the bed of the Thames was by far the most serious evil resulting from the discharge of London sewage into the river. Dr. Odling reported to the Board of Works to a like effect. The chief point, then, to be arrived at was the rapid separation of the suspended matter in sewage, leaving the soluble constituents to mix freely with running water, to be appropriated by infusoria, or destroyed by oxidation. This process is best effected by keeping the solid matter out of the sewage. At Salford the plan of Mr. Goux is adopted, whereby the soil is received into tubs lined with some refuse absorbent. The Pollution Commissioners condemn this plan *in toto*. Their pet scheme is irrigation in all places, and under all circumstances. To carry out this plan, Dr. Letheby maintained that a porous soil was necessary, that the farm should be well adapted for the flow of drainage, that it must not be within reach of danger from atmospheric miasms, that it must have a ready market for its produce, and have an extent of not less than two acres for every hundred head of population. Even if all these conditions could be secured, the objections to the process on sanitary grounds are numerous; for land irrigated with sewage is always a fetid swampy morass, as witness the Craigintinny meadows near Edinburgh. At Norwood, at Beddington, at Aldershot, and at Banbury, the sewage farms are the subject of serious complaints. These miasms are not only offensive, but also dangerous to health; in fact, it was the clearness of this danger which formed the motive for Parliamentary inquiries and enactments. If they are not injurious to health, then why all this extensive and elaborate machinery for getting rid of them? Dr. Murchison traced a particular fever to this very source, sewer gases being, in his opinion, the primary cause of enteric fever; and Mr. Creasy testifies to the prevalence of typhoid fever in the neighbourhood of the sewage farm at Beddington. Dr. Letheby mentioned a number of places investigated by himself which gave similar results. Again the efficacy of sewage irrigation is dependent on the percolation of sewage matter, and the distribution of it through the subsoil water. It follows then that this water must be polluted to such an extent as to endanger the neighbouring wells; as has been found by experience in many places. What evils would follow from this cause can easily be imagined, and if Prof. von Pettenkofer's theory of the connexion between subsoil water and cholera be correct, what frightful evils are we not preparing for ourselves. And yet another evil was to be feared, if the plan of the Commission were carried out—viz., the propagation of parasitic diseases. The ova of intestinal entozoa, distributed with sewage upon the land, would become attached to the crops, would be eaten by cattle, whose flesh would infect man. At present their access to the bodies of herbivorous animals is accidental; make it certain, and what would be the consequence? Dr. Cobbold's views on this subject admitted of no doubt. Although Dr. Letheby admitted that theoretically good results might be obtained from this system, yet so much care and attention was necessary that it could not be advantageously carried out in practice. A heavy flood of rain, dormant vegetation, or frost, were sufficient to derange that nice adjustment that was necessary to prevent the fæcal water from running over the surface and polluting all the wells. The other means of dealing with sewage, so as to separate the suspended matters and to remove a certain portion of those which are dissolved, is to submit it to chemical treatment. At Leicester, at Hertford, and formerly at Tottenham, the sewage was defecated with lime. About twelve grains of lime to a gallon of sewage was found to effect a speedy separation of all the suspended matters and also about one-fourth of the dissolved organic matter, leaving a clear liquor, which, when mixed with six or seven times its bulk of water, is no longer offensive. Crude sulphate of alumina is another precipitating agent, and is used at Stroud, the sulphate being made by adding about 20 lbs. of sulphuric acid to a cwt. of powdered clay. Chloride of iron with lime is also a powerful defecator; it was formerly used at Northampton, and still is to some extent with lime. At Leamington the A.B.C. process of Mr. Sillar is in use. The substance used is a mixture of alum, clay, sulphate of magnesia, etc., diffused through water. Lastly, there is the process of Mr. Blythe, of adding a soluble phosphate of lime and sulphate of magnesia to the sewage. By these processes sedimentary matter is drawn from the sewage, and a considerable portion of dissolved organic matter is removed; but to be successful there must be good agitation of the sewage, and sufficient tank room for holding the sewage for not less than four hours. There should also be a means of filtering the defecated sewage before setting it free. Dr. Letheby would not enter upon the pecuniary point of the question, further than to warn enthusiasts against glowing accounts of commercial profit. Wherever sanitary improvement was the main object no profit was anywhere derived. His object, however, was to point out the serious dangers in the rash recommendations of the Royal Commission. A Royal Commission without any pretence of Medical knowledge was singularly incompetent to deal with such a question.

Dr. Cobbold confirmed what had been said by Dr. Letheby as to the danger of propagating parasites. He maintained that the danger had been by no means exaggerated.

Mr. Holland made light of the danger from sewage irrigation.

Dr. Carpenter spoke at some length about what had been done at Beddington, and asserted that the sewage farm there was a success, and that no injury to health arose from it.

Professor Ansted's experience in Italy and elsewhere supported the views of Dr. Letheby as to the injurious effect of sewage irrigation upon the public health.

Mr. Creasy's experience of Beddington was quite opposed to that of Dr. Carpenter. He maintained that there had been a very great deal of fever.

Mr. Hawksley supported Dr. Letheby's views as to the self-purification of rivers.

Dr. Letheby then made a brief reply, explaining more fully certain difficulties that had been started.

After this the meeting separated, with a vote of thanks to the contributors of the papers.

OBITUARY.

THOMAS NUNNELEY, F.R.C.S.

Amongst the men who have raised and sustained the reputation of Surgeons in the provincial towns of this kingdom, Thos. Nunneley was of the foremost. He was born at Market Harborough in March, 1809, near which place his family for generations had occupied a good position. His early life was one of much privation and suffering. He was supposed to be suffering from some spinal complaint, and had to undergo a long course of treatment, which threw him much on his own resources, and tended to develope that taste for scientific inquiry which was a characteristic of him in after life. He was apprenticed to a Surgeon in Wellingborough, and entered to Guy's Hospital soon after the separation of that institution from St. Thomas's. He was a dresser of Mr. Key, and took so much interest in the business of the Hospital as to reside in a house next door to it. After taking his diploma at the College, and passing the Hall, he spent some months of study at the Paris Hospitals. Subsequently he settled at Leeds, in which town he practised with success for upwards of thirty-five years. Early in practice he paid great attention to diseases of the eye and ear, and took a deep interest in the institution for their treatment, and which was afterwards amalgamated with the General Infirmary. He was an excellent operator on the eye,

and it is said he operated for cataract in upwards of 1000 cases. He had a large and lucrative private practice, and had a reputation of the highest for his skill and success as a Surgeon. It was not, however, until 1864 that he was elected a Surgeon to the Leeds Infirmary, no vacancy having occurred in the Surgical staff of that institution for upwards of thirty years. Mr. Nunneley was for a long period connected with the Leeds School of Medicine, in which he was an able and industrious lecturer on anatomy and physiology. The earliest of Mr. Nunneley's works was an essay on Erysipelas, which was published in 1831, and to which was awarded the first prize offered by the Junior Physiological Society of Guy's. The "Nature, Causes, and Treatment of Erysipelas" was the subject of the Fothergillian essay for 1841, and Mr. Nunneley competed for the medal. Owing to some trifling informality, the essay was rejected, and the author afterwards published it on his own account. The conduct of the Fothergillian Committee was strongly animadverted upon by Mr. Nunneley, and he attacked them again and again with much bitterness and power. Unquestionably his essay was in every way worthy of the prize, and it may be ranked as high, if not higher, in the scale of excellence than any of the essays which have gained the medal of Fothergill from its institution. It was a long time the standard work on the disease, and still retains an honourable position amongst Surgical monographs. In 1858 he published a work on "The Organs of Vision, their Anatomy and Physiology." He published in the *Transactions* of the Provincial Medical and Surgical Association, an essay on "The Effects produced by Hydrocyanic Acid on Animal Life; with an attempt to determine the real value of presumed antidotes and remedies;" and another entitled "On Anæsthesia and Anæsthetic Substances; being an experimental inquiry into their nature, properties, and actions, and their comparative value and danger, and the best means of counteracting an overdose." In this essay he gave the results of experiments on nearly forty anæsthetic agents. His last essay, "On the Effect of the Calabar Bean on the Animal Economy," was published in 1863. He published a paper in the *Medico-Chirurgical Transactions* "On Aneurism of or within the Orbit," and another on "Vascular Protrusion of the Eyeball." In addition to the number of cases of cataract on which he operated, Mr. Nunneley twice successfully removed the entire tongue by sub-mental incision, and operated on seven cases of "aneurism by anastomosis of the orbit." Nunneley may justly be regarded as one of the ablest Surgeons that ever practised in the provinces. If he had not the gifts and the acquirements of his predecessor Hey, he had many of the elements required in a first-rate Surgeon: a powerful will, inimitable energy and industry, shrewd and keen observation combined with unyielding firmness, which often impaired its own value by degenerating into obstinacy. He had an excellent hand and handled instruments well. He formed his opinions rapidly, and stated them uncompromisingly, but he was too self-confident, too sure of being right. In fact, he was not capable of weighing facts which told against him, or of paying due deference to the views of those with whom he differed. We have spoken of his industry, which was unremitting; but it sometimes acted to his own disparagement. His style of writing was often so diffuse, and his descriptions so minute, as to be wearisome to the reader; even the titles of his "essays" in the Provincial *Transactions* are almost prefaces. But he was a conscientious and careful analyst, and gave his evidence as fairly for Palmer as he did against Dove. He was a Liberal in politics, and in favour of great reforms in the Profession. His last appearance in public was in the performance of what he no doubt regarded as a public duty. At a recent meeting of the College of Surgeons, he moved a resolution to the effect that, in the formation of a new general examining board, the colleges should be excluded from taking part. Singularly enough, he argued that, so far as the College of Surgeons was concerned, such an abrogation of its powers would be beneficial to it. He believed that the *honour* of belonging to the College would outweigh the *necessity*, and that the number of its candidates would not decrease. Such a doctrine, coming from the very centre of the free traders, whose axiom is to "buy in the cheapest and sell in the dearest market," astonished most of the audience. But every one admired the plain, bold, and decided tone of the able speaker, and regretted that he should have linked himself with a clique whose object was not, as was his own, reform, but destruction. They were, happily, defeated in their endeavours to destroy the College.

Taken on the whole, Mr. Nunneley is justly entitled to hold a high place amongst English Surgeons. If we cannot award to him unqualified praise, and speak of him in terms of laudatory fustian, we can honestly say that, whatever his faults, he was a just and honourable man: a great Surgeon, worthy to be associated with his townsmen the Heys, Smith, and the Teales, and by no one more deeply lamented than by the writer, who knew him well.

Mr. Nunneley was below the common height, of a somewhat spare figure, but withal a certain air of dignity in his carriage which showed he did not belong to the *profanum vulgus;* it might almost be said of him as was once said of Lord John Russell—"small, but stately." His forehead was capacious, his eyes clear and penetrating, his nose well shaped, and his mouth and chin indicative of that decision of character which belonged to him. He died in his 61st year, after a short illness. There is a good likeness of him in "Photographs of Eminent Medical Men." J. F. C.

DR. DAVID PRICE, MARGATE,

Died on Monday, May 30, in his 84th year. He was the son of a Welsh clergyman, and early in life came to England to pursue his studies for the Medical Profession. He entered to the united Hospitals of Guy's and St. Thomas's, and was a pupil of Henry Cline. After passing his examinations at the Hall and College, he for a short time practised in London, but, in consequence of failing health, he was sent to the seaside. He derived so much benefit by his sojourn at the sea, that he determined to remain at Margate to practise. Accordingly, in 1826, he bought a house in that town, and commenced practice as a General Practitioner. He devoted some hours of two days in every week to gratuitous attendance on the poor, and soon obtained considerable reputation, not only for his skill, but for his kindness and humanity. He was the first Mayor of Margate on its incorporation in 1857, he was an alderman of the borough, a justice of the peace, Consulting Surgeon to the Hospital for Scrofula, and held other important offices in the town. Dr. Price, as far as we know, made no contribution to the literature of the Profession—he was a practical, not a literary, Surgeon. He died from "natural decay" in the very house in which he first resided at Margate.

At a meeting of the Town Council held on May 31, the decease of the venerable Physician was alluded to in very eulogistic and touching language, and a vote of condolence to the widow and family from the Council was unanimously carried. He was buried on Saturday, June 4, in the cemetery. He was followed by his three sons, Mr. Erasmus Wilson, Mr. Henry Smith, Mr. Hoffman, Dr. Rowe, Dr. Hadaway, Dr. W. H. Thornton, and others, including several of the clergy and members of the corporation. Every house in the route taken by the *cortège* was closed.

Dr. Price had a numerous family: two of them, Percival and Peter, died before him. Peter was well known as the author of an essay on excision of the joints, and one of the most rising Surgeons of the day. Dr. David Price has attained distinction by his high scientific attainments, and Dr. William Price carries on the practice. Dr. Price was a type of the old general Practitioner, and a gentleman in every sense of the word.

CHARLES HEWETT MOORE, F.R.C.S.,

Died on Monday last at the house of his brother at the Friary, Plymouth. This well-known member of the Profession was Surgeon to the Middlesex and St. Luke's Hospitals. He was educated at St. Bartholomew's Hospital, and studied also at Berlin and Vienna. He published several works on cancer, and contributed to Holmes's "Dictionary of Surgery" articles on cancer, injuries of blood-vessels, and diseases of the absorbents. He translated Rokitansky's "Pathological Anatomy," vol. iii., for the Sydenham Society. Amongst other of his contributions to Surgery may be mentioned "On a new Method of treating Incurable Aneurism." Mr. Moore was an amiable man, and a good Surgeon. He was a man of strong religious convictions. He took an active part in the Young Men's Christian Society, and an especial interest in all that related to the moral and religious welfare of Medical students.

Dr. Loughheed, of the 21st Fusileers, has received a gold medal from the Chinese Government, through Colonel Gordon, C.B., R.E. It is mentioned that he had Medical charge of a Chinese army 40,000 strong, and ranked second in command of the Franco-Chinese Contingent. He was present, it is added, at no less than fifty engagements, and at the capture of twelve walled cities.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having undergone the necessary examinations for the Fellowship during the week ending on the 28th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and at a meeting of the Council on Thursday, the 9th inst., were admitted Fellows of the College:—

Allen, William Edward, L.S.A., of H.M. Indian Army, diploma of Membership dated November 26, 1858, of University College.
Beavan, James, L.S.A., General Infirmary, Hereford, July 25, 1855, of the Dublin School.
Bradley, Charles, L.S.A., the Park, Nottingham, April 29, 1864, of University College.
Cookson, Henry, L.R.C.P. Edin., of H.M. Indian Army, April 25, 1856, of the Edinburgh School.
Cooper, Alfred, L.S.A., Jermyn-street, St. James's, January 29, 1861, of St. Bartholomew's Hospital.
Davies-Colley, John Neville Colley, M.A., M.C., and M.B. Cantab., January 23, 1868, of Guy's Hospital.
Dobson, Nelson Congreve, L.S.A., General Hospital, Bristol, April 25, 1867, of St. Thomas's Hospital.
Edye, Stonard, L.S.A., Exeter, December 2, 1859, of St. Bartholomew's Hospital.
French, John Gay, L.R.C.P. Ire., of H.M. Indian Army, July 15, 1859, of the Dublin School.
Furnell, Michael Cudmore, of H.M. Indian Army, July 18, 1851, of St. Bartholomew's Hospital.
Hawkins, Thomas Henry, L.S.A., Newbury, Berkshire, May 16, 1859, of King's College.
Keene, James, Brook-street, Hanover-square, July 9, 1855, of St. George's Hospital.
Mackenzie, John Thomas, M.B. Trinity College, Toronto, of H.M. Indian Army, February 6, 1857, of Guy's Hospital.
Rickards, Edwin, Leicester (not a Member), of University College.
Rundle, Henry, L.R.C.P. Lond., and L.S.A., Plymouth, April 26, 1865, of St. Bartholomew's Hospital.
Ryott, Frederic Elliott, L.S.A., Newbury, Berkshire, March 26, 1858, of the London Hospital.
Thomas, John Davies, M.B., and L.R.C.P. Lond., Mildmay-park, Islington, January 24, 1867, of the London Hospital.
Treves, William Knight, L.S.A., Margate, April 27, 1865, of St. Thomas's Hospital.
Woodman, John, L.S.A., St. Sidwell's, Exeter, April 17, 1860, of Guy's Hospital.

Out of the twenty-one candidates examined, only two failed to acquit themselves to the satisfaction of the Court of Examiners, and were therefore referred to their Professional studies for the usual period of twelve months. The next examination for the Fellowship will take place in November.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, June 2, 1870:—

Berry, Walter, Wisbeach, Cambridgeshire.
Hasard, John, Melbourne, near Derby.
Hughes, Richard, Liverpool.
Leadman, Alex. D. H., Headingley, Leeds.
Priestley, Henry, Sheffield.
Walford, Edward, Ramsgate.

As Assistants in Compounding and Dispensing Medicines:—

Cross, William Gower, Mardol, Shrewsbury.
Cocker, James D., Pilsworth, Lancashire.
Metcalfe, Edmund Henry, Richmond, Yorkshire.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

MCEWEN, JOHN, M.D.—Surgeon to the First Lancashire Light Horse Volunteers.

NAVAL AND MILITARY APPOINTMENTS.

ADMIRALTY.—David Lloyd Morgan, M.D., has been promoted to the rank of Deputy Inspector-General of Hospitals in Her Majesty's Fleet, with seniority of May 31, 1870.

In accordance with the provisions of Her Majesty's Order in Council of February 22, 1870, the undermentioned officers have been placed on the retired list:—Staff-Surgeon John Ternan, M.D., and Assistant-Surgeon William P. Clapp, from May 3.

BIRTHS.

DALY.—On June 3, at 101, Queen's-road, Dalston, the wife of Frederick H. Daly, M.D., of a daughter.

KNIPE.—On April 21, at Rawul Pindee, Punjab, the wife of John Copeland Knipe, Surgeon H.M.'s 36th Regiment, of a daughter.

MARRIOTT.—On June 1, at 7, Welford-place, Leicester, the wife of C. H. Marriott, M.D., of a son.

POPE.—On June 6, the wife of Edmund Pope, Surgeon, 19, Manor-terrace, Brixton, of a daughter.

WADE.—On May 24, at Albert-villas, Stoke, Devonport, the wife of Seaton Wade, Surgeon of H.M.S. *Impregnable*, of a daughter.

MARRIAGES.

ANSELL—CHANDLER.—On June 2, at Christ Church, Lee, Kent, William Ansell, M.R.C.S., of Islington, to Emily, third surviving daughter of the late William Berkeley Chandler, Esq., of Kennington, Surrey.

CLARKE—HUTCHINSON.—On June 4, at St. John's Church, Paddington, William Clarke, Esq., of Carlisle, to Mary Elizabeth, daughter of the late John Hutchinson, M.R.C.S.

DOLMAN—MASON.—On June 2, at St. James's Church, Rigsby, Arthur Henry Dolman, Surgeon, Derby, to Charlotte Maria, eldest daughter of the late James Mason, Esq., of Rigsby House, Lincolnshire.

LAWFORD—GREEN.—On June 2, at St. John's, Lewisham-road, Kent, James, third son of the late James Lawford, Esq., formerly of Holmfield-lodge, Heavitree, Exeter, Devon, to Mary Harriet Drake, elder daughter of Albert Green, M.D., of Lewisham-road.

PHIPPS—GAYES.—On June 2, at Monkstown Church, George Constantine Phipps, M.D., of Oxford-road, Manchester, to Dorcas, youngest daughter of the late Rev. Charles Robert Gayes, rector of Dingle, Co. Kerry.

TAYLOR—GALE.—On June 2, at the Parish Church, Goring, Oxon, Thomas Taylor, M.R.C.S., of Bocking, Essex, to Sarah Caroline, eldest daughter of Charles Gale, Esq., of Little Brickhill, Berks.

DEATHS.

BAILDON, ISABELLA, widow of Adam Baildon, M.D., H.E.I.C.S., on June 3, at Ramsgate.

BROWN, FRANCES EMILY, second daughter of R. Brown, M.D., at Kivernalls, near Lymington, Hants, on June 1, in her 18th year.

EMMERSON, JANE, the widow of the late Richard Emmerson, Surgeon, of Sandwich, on June 2, aged 86.

MANLEY, ANNE, wife of John Manley, M.D., at Westbury House, Barking, Essex, on June 5, aged 66.

WINN, JOHN ASHTON, Esq., the son of J. M. Winn, M.D., of London, at Yokohama, on April 13, aged 27.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BATH MINERAL WATER HOSPITAL.—Resident Medical Officer; must have both Medical and Surgical qualifications. Applications and testimonials to B. Starr, Registrar, on or before June 30.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Resident Medical Officer; must be qualified and registered. Applications and testimonials to the Medical Committee, Children's Hospital, Steelhouse-lane, Birmingham, on or before the 13th inst. Election on the 20th.

EAST SUSSEX, HASTINGS, AND ST. LEONARD'S INFIRMARY.—Assistant-Surgeon. Applications and testimonials to the Secretary on or before the 25th inst.

HAMADRYAD HOSPITAL SHIP FOR SEAMEN OF ALL NATIONS, PORT OF CARDIFF.—Resident Assistant Medical Officer; must possess a Surgical qualification and be registered. Applications and testimonials to the Secretary, 17, Church-street, Cardiff, on or before the 16th inst.

LINCOLN GENERAL DISPENSARY.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to James Ward, Esq., Secretary, on or before the 13th inst.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be duly qualified and unmarried. Applications and testimonials to the Secretary on or before the 22nd. Candidates to attend the meeting of the Board at 2 o'clock the following afternoon.

LUNESDALE UNION.—Medical Officers for the four districts of this Union. Candidates must have the qualifications prescribed by the Poor-law Board. Applications and testimonials to the Clerk, Mr. John Hoggarth, 142, Church-street, Lancaster, on or before the 13th.

MEDICAL SCHOOL, SURGEON'S-HALL, EDINBURGH.—Lectureship on General Pathology and Pathological Anatomy.

METROPOLITAN ASYLUM DISTRICT, ASYLUM FOR IMBECILES AT CATERHAM, SURREY.—Medical Superintendent. Candidates must have both Medical and Surgical qualifications. Applications and testimonials to the Committee, at the office, 37, Norfolk-street, Strand, on or before the 16th inst.

NOTTINGHAM DISPENSARY.—Assistant Resident Surgeon; must have both Medical and Surgical qualifications and be registered. Applications and testimonials to the Secretary on or before June 13. Election the same day at 12 o'clock.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before July 2. Election on the 19th.

STRAND UNION.—Dispenser; candidates must be properly qualified. Applications and testimonials to the guardians, at 6, Bow-street, W.C., on or before June 13.

SUNDERLAND INFIRMARY.—Two House-Surgeons; must have both Medical and Surgical qualifications, and be registered. Applications and testimonials to John Kitts, Secretary, on or before June 17. Election on July 8.

UNIVERSITY COLLEGE HOSPITAL.—Professorship of Practical Physiology. Applications, etc., to the Secretary on or before July 6.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Hunslet Union.—Mr. G. Handcock has resigned the Second District; area 2397; population 16,500; salary £60 per annum.

APPOINTMENTS.

Cheadle Union.—James Weaver, L.R.C.P. Edin., L.F.P. and S. Glas., L.S.A. Lond., to the Caverswall District.

Cranbrook Union.—Edward Young, M.R.C.S. Eng., L.R.C.P. Edin., to the Hawkhurst District.

Dover Union.—Edward Long, M.R.C.S. Eng., L.S.A., to the Second Division of the Haugham District.

Droitwich Union.—Sergeant S. Roden, M.R.C.S. Eng., M.D. Univ. Edin., to the workhouse. John C. Gibson, M.R.C.S., L.R.C.P., L.S.A., L.M., to the Droitwich District.

Fareham Union.—John S. H. Probyn, M.R.C.S. Eng., L.S.A., L.F.P. and S. Glas., to the Cosham District.

Guildford Union.—George F. H. La Farque, M.D. St. And., M.R.C.S. Eng., L.M.R.C.S. Eng., to the Farncombe District. Wm. Parson, M.R.C.S. Eng., L.S A., to the Godalming District.

Halifax Union.—Francis E. Macauley, M.R.C.S. Eng., L.S.A., to the Halifax District.

Lexden and Winstree Union.—Edward L. Fenn, M.R.C.S. Eng., L.R.C.P. Lond., M.B. Univ. Edin., to the Eighth District.

North Witchford Union.—Henry Barry, L.R.C.S. Edin., L.R.C.P. Edin., to the Fourth District.

Salford Union.—John Francis W. Tatham, L.R.C.P. Edin., L.F.P. and S. Glas., L.M., at the Workhouse.

Sevenoaks Union.—Charles D. Pearless, M.R.C.S. Eng., L.R.C.P. Lond., L.M., L.S.A., to the Second District.

Ticehurst Union.—Donald Mackeith, M.D. and C.M. Glas., to the Bodiam District.

Tiverton Union.—Wm. Gribble, M.R.C.S. Eng., L.R.C.P. Edin., to the Bradninch District.

Wigton Union.—Henry Miller, M.B. and M.C. Univ. Edin., to the Aspatria District.

The St. Thomas's Hospital old students' biennial dinner was held in the large hall at the Cannon-street Hotel on Monday, May 31. The chair was occupied by Mr. Solly. Upwards of 200 gentlemen sat down to dinner, which was served *à la Russe*. After the usual loyal toasts, Mr. Solly proposed "Prosperity to St. Thomas's Hospital." He referred to the labours of Sir Astley Cooper, Travers, Cline, South, and others in connection with the Hospital, and to the great promise which the future of St. Thomas's held out to intending students at their new Hospital at Stangate.

Annual Dinner of the Public Medical Services.—The annual dinner of the Army, Navy, and Indian Medical services was held at Willis's rooms, on Friday evening, the 3rd inst., Sir T. Galbraith Logan, K.C.B., Director-General of the Army Medical Department, in the chair. Dr. Armstrong, Director-General of the Navy Medical Department, and Sir David Deas, K.C.B., and Inspectors-General Forbes and Maule, of the Indian Medical Service, with a large number of other officers of all ranks, amounting to about eighty, fully represented the three public Medical services. Sir Charles MacGregor, Bart., and Mr. Donald Dalrymple, M.P. for Bath, a member of the Profession, who had at an earlier period of his life been for five weeks an "acting assistant-Surgeon," were private guests. We hear that Mr. Dalrymple made a most humorous speech, and was unanimously elected there and then as the member for the public services, as soon as they obtain the privilege of direct representation in Parliament. The entertainment altogether was very agreeable, and we have no doubt that the bonds of fellowship between old friends, who had then an opportunity of discussing past scenes and times, will be all the stronger.

The Boarding out of Pauper Children, England.—From the reports of the various Poor-law Inspectors, in reply to a recent circular of the Poor-law Board, it appears that this system has been already adopted by the following unions—viz., Altrincham, Bath, Berwick-upon-Tweed, Caistor, Chorlton, Christchurch (South Hants), Colchester, Dartford, East Preston, Eton, Evesham, Garstang, Highworth and Swindon, Horncastle, Leominster, Ludlow, Macclesfield, Merthyr-Tydvil, Ringwood, Swansea, and Warminster; and the guardians of the following unions—viz., Carlisle, Pottersbury, Warwick, and St. Ives, have since determined to adopt the system.

New Hospital at Liverpool.—The foundation stone of a new Hospital, to be named the Stanley Hospital, was laid at Stanley-road, Liverpool, on Monday, the 6th inst., by the Earl of Derby. The site had been munificently given by his lordship, who, in an eloquent address, delivered at the conclusion of the ceremony, pointed out the peculiar claims of Medical charities to public support, and hoped for a long career of usefulness to the one that formed the subject of the day's proceedings. Over a cavity in one of the foundation stones was the following plate:—"This foundation stone of the Stanley Hospital was laid on June 6, 1870, by Edward Henry, 15th Earl of Derby—founded 1867. Committee: Rev. T. Major Lester, M.A., chairman; George Fowler, Esq., vice-chairman; J. K. Archer, W. T. Brunt, George Dyke, D. Grannell, R. O. Evans, C. J. Perry, R. W. Richardson; J. E. Bennett, honourary treasurer and secretary. Medical Officers: Consulting Physician, J. Birkbeck Nevins, M.D., London; consulting Surgeon, Edward Parker, F.R.C.S., England; Physician, D. Dunlop Costine, M.D.; Surgeon, E. Mason Sheldon, M.R.C.S. England; dentist, Henry Newman, Esq."

Royal College of Surgeons in Ireland.—On Saturday, the 4th inst., the Vice-President and Council entertained the President, Mr. Rawdon Macnamara, at a banquet in the College Hall. On Monday, the 6th inst., at the annual meeting of the College, the following officers were elected for the year 1870-71:—President: Albert J. Walsh; Vice-President: James H. Wharton; Secretary; William Colles; Council: William Hargrave, Robert Adams, James Barker, William Colles, Hans Irvine, Richard G. H. Butcher, Rawdon Macnamara, George H. Porter, Hamilton Labatt. Benjamin M'Dowell, Edward Ledwich, William Jameson, Alexander Carte, George W. Hatchell, William A. Elliott, Archibald H. Jacob, John Morgan, Edward Hamilton, and Edward J. Quinan.

Irish Medical Association.—The members attending the annual meeting of this Association were entertained at breakfast on Monday, the 6th inst., by Mr. Tufnell, Chairman of Council, at the Shelbourne Hotel. The meeting was held at 12 o'clock, at the Royal College of Surgeons. In the unavoidable absence of the President, Dr. Martin, the chair was taken by Mr. Tufnell, by whom, on the part of the Association, an address, with a cheque for £100, was presented to Dr. Quinan, in recognition of his disinterested, zealous and efficient services as Honorary Secretary, a position which he now resigned, having held it to the satisfaction of all during a period of nineteen years. The President's address, which advocated the holding of the annual meetings of the Association, from time to time, in some of the large provincial towns, the division of the meetings into sections, and the reading of papers on Professional subjects in the various sections, was read by Dr. Quinan, as was also the annual report. A committee of seven was appointed to consider a scheme suggested by Dr. Darby, for the establishment of a fund for the relief of the widows and children of deceased workhouse and dispensary Medical officers in Ireland, and to report to a special meeting of the Association at the end of three months. Several resolutions, framed with a view to the improvement of the status of the Profession, having been passed, the meeting adjourned. The annual dinner of the Association took place in the evening, in the Albert Hall, Royal College of Surgeons.

Royal Medical Benevolent Fund Society of Ireland.—The annual meeting of this valuable Society was held on Monday, June 6, in the Hall of the King and Queen's College of Physicians, Kildare-street, Dr. Banks, President of the College, in the chair. A second donation of £100 from Dr. Banks was announced; also the receipt of a legacy of £100 from the executors of the late Dr. Mackesy, of Waterford, and of £961 9s. 4d. consols from the Council of the Royal College of Surgeons, in accordance with certain conditions under which a bequest was left in trust to the Council by the late Mr. Carmichael. Mr. Carmichael had thus been a benefactor to the fund to the amount of upwards of £6000. The number of applicants for relief this year exceeded that of any former year. Fifteen of these were Medical men, seventy-two were the widows, and ten the orphans of Medical men, making in all ninety-seven applicants. Seventeen anticipatory grants, made in consequence of the urgency of the embarrassments of the applicants, amounted to £154 10s., and the sum given at the present distribution was £745, making the total disbursements of this year among the recipients of the fund £899 12s. 9d. The President referred in eulogistic terms to the exertions of Dr. Marks, the active Secretary of the Society, through which several new branches had during the past year been established. Various resolutions proposed and seconded by Dr. Browne, Mayor of Belfast; Dr. Stokes; Sir Dominic Corrigan, Bart; Sir William Wilde, etc., having been passed, the proceedings terminated with a vote of thanks to Dr. Banks for his conduct in the chair, and for his liberal donation to the funds of the Society.

Death of M. Auzias-Turenne.—This celebrated *savant*, or *pseudo-savant* as many considered him, died on May 29, aged 59. He was the original introducer of syphilitic inoculation as an agent as surely protective as is vaccination in small-pox, and to the last he continued its ardent advocate. Another of his peculiar doctrines was the communicability of syphilis to animals. The genuineness of his belief in the protective power of syphilisation is proved by the statement in his will that he had syphilised himself, and by the discovery of innumerable inoculation cicatrices on his body. He has bequeathed his skeleton to the School of Medicine of Christiania, where his friend, Professor Boeck, still maintains the truth of his syphilisation doctrines. M. Auzias was a man of great ability and erudition and possessed of a prodigious

memory, and it is much to be regretted that his great acquirements were devoted to purposes of no utility.

ARMY CLOTHING IN INDIA.—We observe that the second prize offered by the Indian Government for the best essays on the above subject, has been allotted to Assistant-Surgeon L. Corban, M.D., 21st Hussars, the first having been obtained by the Hon. Colonel Massey, 95th regiment, commanding the depôt at Poonah.

THE CATHOLIC HIERARCHY.—This is composed of the pope, cardinals, patriarchs, archbishops, and bishops. According to rule, there should be 70 cardinals, but that number has been rarely attained. At present there are but 57, besides two hats which are reserved *in petto*, but the names of whose future wearers are not known. The oldest cardinal is 89, and the youngest 42. Four of them are above 80, 13 above 70, 25 above 60, 10 above 50, and 5 above 40. As the Vatican does not acknowledge the suppression of the Italian bishoprics, it counts rather more than 1100 sees or dioceses. In reality, however, official documents show that there are not a thousand —viz., 747 patriarchal sees with residence and 234 sees *in partibus*, total 981.—*Journal de la Soc. de Statistique*, April.

NOTES ON WINES.

Styrian Champagne.

THIS is a wine little known in the London market, although it obtained a prize at the Exhibition of 1862, and is really well worth the medal it then secured. The wine to which we allude is that produced by the Brothers Kleinoscheg, at Graz, and is imported into this country by Bergmann, Kern, and Co., 32, Great Winchester-street, Old Broad-street, E.C. In making it more generally known, we are doing a real service to our readers, for there is no other wine with which we are acquainted which combines its excellences with its lowness of price. Some little time ago we had occasion to notice some cheap champagnes, which were merely effervescing solutions of spirit flavoured and sweetened. These may have their uses, but this is a pure and unadulterated wine, its flavour is good, and it is rather dry than sweet; it is decidedly dryer than ordinary Clicquot. Of course we cannot expect the qualities of Perrier-Jouets' best dry champagne, but the prices are not to be compared. This wine, as we have said, is a thoroughly good one, such a one as you could drink with pleasure yourself and would not be ashamed to give to a friend, and its cost is 4s. a bottle. There is one thing to be noted with regard to the samples of the wine now in this country. Its effervescence is soon over, but this, we are assured, depends—and very likely the assertion is true—on the corks which have hitherto been in use in Styria. They are much shorter than we are accustomed to see, consequently do not take the same hold of the bottle, and in course of time a proportion of the carbonic acid escapes, and effervescence, when the cork is drawn, is soon checked. The fact that the wine is a dry one rather than a sweet one will also favour the speedy escape of the gas. In point of fact we are only beginning to tap the wine supply of Hungary and Southern Austria, wines which have long been favourably known in their native country, but which commercial restrictions or difficulties of transport have hitherto prevented from reaching us. And an effervescing wine, clean, palatable, and wholesome, above all a wine obtainable at a cheap rate, has long been a desideratum among us. This will, we think, suit the stomachs and pockets of most who desire to use such a wine.

Graz is the most westerly of the wine-growing districts in Austria and Hungary, the centre of which might be said to be the district round the Platten See. Its latitude is about the same as that of Ofen and Pesth. The district is hilly, and consequently considerable care has to be taken in selecting proper spots for vineyards. Some of these produce grapes with the true Muscat flavour, and a Champagne with this flavour is also exported by the Brothers Kleinoscheg. Its price is 4s. 6d. a bottle. Those who like this flavour will find the wine excellent.

Since writing the above we have seen a new importation, in which the corks are decidedly improved, but they might still be better in several ways.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. Alex. D. Davidson.—The paper is in the hands of the printer, and shall appear very shortly.

R. C. Veritas.—It is not a question of *etiquette*, but it is unusual for a Medical Practitioner to attend his own daughter in her confinement when there is another respectable Practitioner in the same place and on intimate and visiting terms with the family.

Morbid Orthography.—Visitors to the incipient pathological museum of a certain special Hospital not very far from Oxford-street may be interested in learning that some of the jars containing preparations in that institution present externally specimens of spelling—as, for instance, "opperation" and "fillopian"—diverging nearly as far from the rules generally accepted in such matters as do their internal contents from the standard of healthy structure. It is due to the Medical staff to state that we understand that the labels have not been inscribed by any of their number. We would, however, recommend revision and correction of such errors for the sake of appearances.

A WARNING.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you warn your readers against an agent of a life assurance office who is actively engaged in calling upon Medical men and chemists about London and requesting them to become Medical referees or local agents, as the case may be, for a particular district, making it a *sine quâ non* that a policy of insurance be effected upon the life of the party elected? Medical referees and local agents having paid their fees, will soon learn, as I did myself, that they have been defrauded.

My own case will shortly come publicly before the law courts, but in the meantime I feel it a duty to give this warning, more especially as I learnt, a few days ago, that the agent in question was using my name as a guarantee of the trustworthiness of his office. I am, &c. A VICTIM.

A Suburban Member.—Mr. J. W. Hulke, F.R.S., will commence his course of lectures on the Minute Anatomy of the Eye on Monday next.

Chirurgien, Liverpool.—Your inquiry on collegiate examinations should be addressed to the journal in which the communication appeared. The statement alluded to is a mistake; write to the secretary of the College.

A Fellow by Election.—We shall be able to comply with your request next week, and, having signed the bye-laws on the 9th inst., you can record your votes for the gentlemen named at the annual meeting in July. Thursday, the 9th inst., was the last day for the admission of Fellows before the next election.

A Fellow.—Not having signed the bye-laws, you are ineligible for voting at the annual election of Fellows into the Council of the College in July next. You are admissible, however, to the Fellows' festival on the day of election, and, by applying at once to Mr. Carr-Jackson, the Hon. Sec., will no doubt be appointed a steward. Mr. John Hilton, F.R.S., will be the chairman.

THE BATHS OF RAGAZ-PFÄFFERS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Allow me at the commencement of the summer season to draw your attention to the mineral water establishment of Ragaz-Pfäffers, a place in many respects worth the interest of therapeutists—doubly so since the recent improvements, which have quite changed its internal and external aspect. It combines not only all the usual comforts of similar establishments, but in addition, since last autumn, automatic arrangements for the raising and lowering of weak or paralysed patients, a swimming bath, the use of the cooled thermal waters, and circular and universal douche baths.

Few bathing places can boast of such a quantum of water (2280 gallons per minute) as Ragaz-Pfäffers. The temperature is 30° Réaumur (100° Fahrenheit), and it belongs to the same category as Plombières, Teplitz, Gastein, Wildad (Wurtemberg). The waters contain in the pound only 2·9 grains of solid constituents (sodium chloride, carbonic and sulphuric acid salts.) They have been used with great success in cases of atonic gout, chronic rheumatism, debility (especially that kind formerly called marasmus præcox), and more particularly after chronic nervous diseases of a gouty, rheumatic, anæmic, and hysterical character; also in cases of protracted convalescence from severe illnesses.

Much has been said and written as to how such a neutral, an almost distilled water (for it contains fewer mineral constituents than spring water) can perform the wonderful cures it does; the reason must, I think, be attributed to its penetrating the skin easier and quicker than other waters, and the diasmosis with tissues, blood, and lymph vessels being therefore more perfect. For all particulars, I must refer you to the very valuable work by the resident Medical officer, Dr. Kaiser.(a)

Still more surprising is the increased diuresis and diaphoresis which, after two or three weeks' use of the waters, is known to reduce gouty concretions, uric acid infarcti, and chronic rheumatic swellings. The mucous membranes of the intestinal canals, respiratory and urogenital organs, seem to be particularly benefited when the waters are taken in combination with a mild diet. We may at any rate draw this conclusion from the favourable results in cases of dyspepsia, cardialgia, and catarrhal affections of the bladder, kidneys, and bronchial tubes.

I will not intrude any further upon your valuable space, although there are many details I should have wished to give you. Should you, however, or any of my English colleagues require further information, I shall be glad to be of service. I am, &c.

Zurich, May, 1870. FR. GOLL, M.D.

(a) T. Fr. Kaiser, M.D., "Die Therme von Ragaz-Pfäffers," 5th edition, 1869, St. Gallen, in 8vo, 210 pp. mit Abbildung, Karten und Plänen.

Mesnier.—In 1837. The particulars respecting Baron Dupotet are acknowledged, with thanks.

J. F. C.—Mr. Cline filled the office of "*Master*" to the Royal College of Surgeons in 1815, and of President in 1823; he was elected a member of the Court of Assistants in 1800, and delivered the Hunterian Oration in 1816. He practised in the large house at the north-west corner of Lincoln's-inn-fields, and, at his death, bequeathed a large sum of money to the College of Surgeons, payable on the death of some of his descendants, who still survive. Mr. J. F. South will no doubt be able to give you much valuable information.

Recrystallised Chloral Hydrate.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—Many complaints of imperfect and unreliable effects of chloral hydrate having been noticed in its therapeutical application, a natural doubt has been cast upon the very numerous preparations which, tempted by profitable prices, have for some time made their appearance in the chemical market. Dr. Liebreich has succeeded in obtaining a form of chloral hydrate in transparent crystals, somewhat of the average size of fine Epsom salt crystals; and in introducing this article into the English market, we need not draw the attention of the scientific chemist to the self-evidence of its chemical superiority and purity, but simply wish to observe to the Medical Profession that this is the only reliable form for the regulation of the exact dose. The difference in price is comparatively nothing, not exceeding at most 3d. per ounce.

We are, &c. A. and M. Zimmermann.

7, Fen-court, Fenchurch-street, London, June 6.

COMMUNICATIONS have been received from—

Dr. Goll; Mrs. Baines; Dr. Haldane; Mr. A. D. Davidson; Mr. J. W. Marsh; A Victim; Mr. H. F. Nathan; Dr. Powell; Dr. W. J. Moore; Dr. McEwen; Mr. Walter Tyrrell; Dr. J. Rogers; Mr. J. Andrews; Mr. A. Rivington; Messrs. A. and M. Zimmermann; R. C. Veritas; Mr. W. Carter; Mr. W. Wotherspoon; Mr. H. Stoddart; Dr. A. E. Sanson; Dr. Althaus; Dr. Letheby; Mr. Arnott; Dr. Beigel; Mr. P. J. Hayes; Mr. J. Chatto; Mr. Hulke; Mr. W. M. Ord; A Scientific and Practical Pharmaceutist; Dr. J. W. Moore.

BOOKS RECEIVED—

Report of the State of the South Staffordshire General Hospital and Wolverhampton Dispensary—Monthly Homœopathic Review, June—The Seat of the Soul Discovered, or the World's Great Problem Solved, with objections to the same answered, by James Gillingham, Surgical Mechanist, Chard—The Irish Poor-law Medical System, by Dispensarius—Transactions of the Odontological Society of Great Britain, May—Practitioner, June—Monthly Microscopical Journal, No. 18—Holmes's System of Surgery, 2nd edition, vol. iii.—Dr. Seguin's New Facts and Remarks concerning Idiocy—Correspondence concerning a Fatal Case of Placenta Prævia, prepared by Dr. C. E. Buckingham—Tyndall's Notes on Light—Tyndall on Diamagnetism and Magne-Crystallic Action.

NEWSPAPERS RECEIVED—

Nature—Edinburgh Evening Courant—Medical Mirror—Liverpool Mercury—Margate and Ramsgate Gazette—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

June 11. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

Royal Institution, 3 p.m. Prof. Grant, "Comets."

13. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

14. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

Anthropological Society, 8 p.m. Meeting.

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Mr. Henry Lee, "On Removal of Subcutaneous Tumours without Hæmorrhage or Loss of Skin." Dr. Meryon, "On the Functions of the Sympathetic System of Nerves." Mr. Spencer Watson will exhibit a New Ophthalmoscope.

15. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1¼ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

16. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

17. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 4, 1870.

BIRTHS.

Births of Boys, 1101; Girls, 1049; Total, 2150.
Average of 10 corresponding weeks, 1860-69, 1972·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	644	588	1232
Average of the ten years 1860-69	638·7	586·3	1225·0
Average corrected to increased population	...	...	1348
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	8	12	1	6	...	4	1	8
North ...	618210	8	8	27	2	8	1	3	1	5
Central ...	383321	1	11	8	2	...	1	...	1	3
East	571158	3	4	13	...	6	1	2	6	3
South	773175	...	3	31	2	4	...	8	5	3
Total	2803989	12	34	91	7	24	3	17	14	22

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·847 in.
Mean temperature	58·1
Highest point of thermometer	78·7
Lowest point of thermometer	45·5
Mean dew-point temperature	50·7
General direction of wind	S.W. & W.S.W.
Whole amount of rain in the week	0·16

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 4, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending June 4.	Deaths Registered during the week ending June 4.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2150	1232	78·7	45·5	58·1	14·50	0·16	0·40
Portsmouth ...	122084	12·8	75	40	74·3	42·6	57·5	14·16	0·12	0·30
Norwich	81087	1·09	54	25	73·0	45·8	56·2	13·44	0·00	0·00
Bristol	171382	36·6	105	81	69·7	45·7	55·2	12·89	0·19	0·48
Wolverhampton ...	72990	21·5	44	28	74·0	44·7	58·0	14·44	0·06	0·15
Birmingham ...	369604	47·2	234	108	74·0	35·5	57·2	14·00	0·00	0·00
Leicester	97427	30·4	81	26	...	...	...	...	...	...
Nottingham ...	88888	44·5	46	43	77·0	43·3	57·9	14·39	0·00	0·00
Liverpool	517567	101·3	341	226	69·0	48·4	56·5	13·61	0·16	0·40
Manchester ...	374993	83·6	285	168	77·0	43·0	58·2	14·55	0·19	0·48
Salford	121580	23·5	89	48	75·4	40·9	56·5	13·61	0·17	0·43
Bradford	143197	21·7	123	61	71·3	46·2	55·6	13·11	0·11	0·28
Leeds	259527	12·0	177	132	74·0	46·0	55·5	13·05	0·10	0·25
Sheffield	247378	10·8	192	97	72·0	46·2	57·2	14·00	0·09	0·23
Hull	130869	36·7	83	51	...	...	...	...	...	...
Sunderland ...	94257	30·5	114	22	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	94	62	66·0	46·0	52·0	11·11	0·32	0·81
Edinburgh	178970	40·4	141	94	68·7	47·0	56·3	13·50	0·50	1·27
Glasgow	468189	92·5	390	231	...	...	...	...	...	...
Dublin (City, etc.*)	321540	33·0	166	118	77·0	41·5	58·0	14·44	0·17	0·43
Total of 20 Towns										
in United Kingd'm	7209603	33·8	4984	2893	78·7	35·5	56·6	13·66	0·15	0·38
Paris—Week ending June 4	1889842	242	...	1174	...	...	...	...	...	...
Vienna—Week ending May 28 ...	605200	167	...	453	...	...	62·2	16·75	...	...
Berlin—Week ending June 2 ...	702437	128	...	...	...	...	...		...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·847 in. The highest barometrical reading was 30·23 in. on Saturday, and the lowest was 29·61 in. on Tuesday.

The general direction of the wind was S.W. and W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

DR. HASSALL'S FLOUR OF MEAT,

FOR THE IMMEDIATE PREPARATION OF BEEF-TEA,

CONTAINS THE WHOLE OF THE CONSTITUENTS OF THE MEAT,

Including Fibrin, Albumen, and Gelatine; is more nourishing than many times its weight of Raw Meat, requires no mastication, and is easy of digestion.

Invaluable for use to Travellers and Tourists, and it is of vital importance to all Hospitals and Asylums in which the Sick are congregated, and to Invalids generally, especially those suffering from Dyspepsia and Debility arising from Defective Assimilation and Nutrition. The BEEF-TEA made with the FLOUR of BEEF is FULLY EIGHT TIMES STRONGER AND MORE NOURISHING THAN BEEF-TEA MADE in the ORDINARY MANNER, and far more nutritious than the Beef-tea (so-called) prepared with LIEBIG'S EXTRACT, which does not contain Fibrin, Albumen, Gelatine, or Fat—the very principles which give the body its size, weight, and strength.

"Impossible to over-estimate the importance of the Concentrated Flour of Meat."—The Lancet.
"The Committee has every reason to believe that this is a preparation of considerable value."—Society of Arts.

FLOUR OF BEEF FOR BEEF-TEA, Packages 2s. and 4s.

JOHN BELL & CO., OXFORD-STREET; AND ALL DRUGGISTS.

DR. HASSALL'S MEAT COCOA.

MANUFACTURED ONLY BY

DUNN & HEWETT,

In Packets, 1s. and 2s. each.

This article, prepared with the finest ingredients, is warranted to contain at least 33 per cent. of Dr. Hassall's Flour of Meat, one pound of which is guaranteed to contain the nutritive constituents and properties of nearly four pounds of English-fed lean Beef. Cocoa contains Carbon and Nitrogen in nearly the exact relative proportions required for the nutrition of the human body; the union of the two substances therefore offers a highly concentrated form of food, which is of the greatest value to invalids, more especially those suffering from Dyspepsia or Defective Teeth.

HUNTLEY & PALMERS' PATENT MEAT WAFERS.

These WAFERS contain DR. HASSALL'S FLOUR OF MEAT and LIEBIG'S EXTRACT. One Pound of the first is equal to 4 lbs., and one Pound of the Extract to 32lbs. of well-fed beef. Of these the Wafers contain about 14 per cent. In boxes 1s. each, to be had of all Druggists and Grocers; and wholesale of

CROSSE & BLACKWELL, Soho-square, W.C.

SPIKING & CO.'S MALT BISCUITS

FOR INFANTS AND INVALIDS.

Messrs. S. and Co. beg to call special attention to these Biscuits, and to recommend them most confidently to the notice of the Profession and the public, as having been proved to be of the greatest benefit both to Infants and Adult Invalids.

In an able article on "The Art of Feeding Babies," attributed to Dr. Druitt, it is said:—"We must notice the very ingenious MALT Biscuits made by Spiking, of Dover-street; these contain the malt and wheaten flour in the form of a biscuit; they keep any time, and require no more cooking than any other nursery biscuit. When mixed with milk-and-water they dissolve into a smooth, custard-like mass, with nothing lumpy or pasty about them. We have known them eagerly used by adults troubled with great irritation of stomach and bowels. They make capital imitation of custard."—See "Medical Times and Gazette" of August 24, 1867.

Price 8d. per lb., or 4s. 6d. per box.

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HALFORD'S WHOLE WHEATEN PERISTALTIC BREAD AND BISCUITS.

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For Invalids, Persons of Sedentary Habits, and Children. These Biscuits act as a stimulant to the intestines, causing them to move with regularity; they also supply the earthy phosphates which give firmness to the bones, are pleasant to masticate, and relishing with wine or cheese.
Plain or Sweetened, in Boxes at 1s., and Tins 2s. 6d. and 5s. each; the Bread in Loaves at 4d.
See "Medical Times and Gazette" of 25th December, 1869.

DIABETES.

BONTHRON'S DIABETIC BREAD AND BISCUITS

have been approved by the Profession and by Diabetic patients, contain no starchy matter, and are highly palatable and agreeable.
Country orders punctually attended to.
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SOLUTION OF BIMECONATE OF MORPHIA.

(*VIDE "LANCET," MARCH* 4, 1839.)

This preparation has been used by the leading Physicians and Surgeons for the last thirty years.

Dr. MACLEOD stated that it rarely produced headache, and has repeatedly answered where opium has disagreed, and succeeded in cases where the other salts of Morphia had failed to give relief.
Dr. A. T. THOMSON said it possessed anodyne properties superior to any of the salts of Morphia in ordinary use.
Dr. ROOTS states that he had taken every other preparation of Opium, but from none of them had obtained the same degree of quiet rest that he enjoyed from this Bimeconate of Morphia.

P. AND P. W. SQUIRE, 277, OXFORD-STREET, LONDON, W.

ORIGINAL LECTURES.

LECTURES ON OPHTHALMIC SUBJECTS.

SELECTIONS FROM LECTURES GIVEN WEEKLY TO THE STUDENTS IN ATTENDANCE AT THE OUTDOOR OPHTHALMIC PRACTICE AT ST. MARY'S HOSPITAL.

By HAYNES WALTON,
Surgeon to the Hospital, and Surgeon in charge of the Ophthalmic Department of the same; late Surgeon to the Central London Ophthalmic Hospital.

CATARACT.

(*Continued from page* 601.)

Disease of the optic nerve and of the retina must be tested subjectively.

Cataract alone never shuts out the light. An amount of retinal discernment, varying in persons, it can be hardly called seeing, exists in all uncomplicated cataractous eyes during the most advanced states of the disease.

It is not always possible to say with certainty whether in any particular case the undue faintness of the perception of light be owing to the opacity of the cataract, or to a diseased retina.

Something, such as a penknife, or the finger, should be passed between the patient's eye and the light, as a test of sight: if he perceive the shadow, the retina may be considered sound. Unhealthiness may be suspected in proportion as only larger bodies can be discerned. An operation undertaken when the membrane evinces decided feebleness must ever be attended with doubtful results. With total loss of power, any practical Surgical proceeding is inadmissible.

The lamp-test is very much used by some Surgeons, and, although not generally required, it is not without value. A small lamp—that is, a lamp with a small flame—is placed in a dark room, and, according to the distance at which the flame can be seen, is the integrity of the retina judged of. A gas flame will answer well enough, and it possesses the advantage of admitting of being increased or reduced. Incomplete cataract will allow a longer view range than total, and soft total cataract than hard. With complete soft, a healthy eye should see the light at fifteen feet, or more. Many ways of varying the examination will suggest themselves. With complete hard, it can be observed from ten to fifteen. With disease of the retina the distance is decreased, and in proportion to such disease is the space shortened.

The volume of the cataract should be taken into account in this quantitative trial, as, with absorption of the cortex, the light is less veiled.

Capsulo-lenticular cataract darkens the eye more than the lenticular.

An opaque capsule, with fluid lens degeneration, darkens the most.

It is said that loss of perception of a portion of the retina, arising especially from detachment, may be judged of by moving about a lighted candle or taper near the eye, in different directions, and noting that position in which it is the fullest seen.

The arrest of developement of some of the internal ocular tissues, sometimes present with congenital cataract, may much interfere with the sensitiveness to light. So often is there an imperfection of some other part of the eye, that such should be sought for. There may be full evidence of intra-uterine disease.

The chief complications that have been met with are these:—Division of the iris, or cleft. Imperfect developement of all of the tissues of the eyeball. Absence of the iris. Conical cornea. The lens not fully formed, and irregular in outline. In one case of supposed deep-seated opacity of the lens, an opaque substance was found from which passed backwards a fibrous cord through the vitreous body to the retina and was there attached. It enclosed bloodvessels. The preparation is in the Moorfields Museum. High near-sightedness. Adhesion of the iris to the surface of the cataract. Atrophic changes in the choroid and the retina. Partial persistence of the pupillary membrane. Corneal opacities.

The perception of colour is a deceptive test.—A cataractous person may see bright colours, and shades even of them, when his retina is so diseased that there is not any useful sight after his cataract is removed.

Certain conditions of the globe of the eye, indicative of pathological changes in the posterior parts, go so far towards rendering operations abortive that their detection is very essential. These are softness or flaccidity, and the opposite state, unnatural hardness. The first is due to deficient quantity of the vitreous humour, with which there is associated a diseased retina, and commonly detachment. The second arises from an increase of the humour, with a dissolved state of the hyaloid membrane.

Tremulousness of the iris is frequently seen in connexion with an unhealthy condition of the vitreous humour, and it is sure to exist in a marked degree if the humour be fluid. But it may be owing to another cause, as I have already mentioned—that of reduced volume of the cataract, by which the iris loses support. In such a case the shaking is but slight.

Unusual vascularity of the selerotica, with discoloration, especially if the vessels that emerge from it near the cornea in the ciliary region, are large and tortuous, is a very unfavourable complication, because it indicates a diseased circulation of the choroid, and a glaucomatous tendency.

Tenderness of the eyeball, especially in the ciliary region, in connexion with vascularity, will confirm the premise of internal disease.

As cataract is often the result, the common and last, of chronic glaucoma, the connnexion of the two must be noticed. Only the most inexperienced men can blunder here. In glaucoma, with all the usual symptoms well marked, the eyeball is hard, and not elastic, as in health. The sclerotic coat is discoloured, with, perhaps, dark patches, and large tortuous dark-coloured veins, ramifying about, and passing to within a short distance of the cornea, the spot where the blood is returned from the anterior part of the eye. The cornea loses its lustre, and always, more or less, its transparency; looks uneven or rough, of a ground-glasslike appearance. The iris is in part or entirely discoloured, being dark and convex, apparently in contact with the cornea. The motionless pupil is dilated, perhaps to a degree that shows only a mere ring of iris, and it may be round, or irregular, frequently transversely oval. The lens is opaque, and striæ may be seen, but it never exhibits the characteristics of uncomplicated hard cataract, nor those of soft, except when there is a breaking-down of the superficies, or actual fluid degeneration. It rather presents hues peculiar to this general invasion of disease. A sea-green state of pupil, which, in fact, means a green lens, is so commonly described as the chief feature in glaucoma, that Surgeons are apt to disregard all other evidence of the disorganisation if this be wanting. Any actual shade of green is really very rare. The common appearances, which cannot be well expressed in words, are nearest represented by the expressions dirty-white, dirty-yellow, copper-brown, greenish-drab. They often resemble the darker shades that are seen during the decline of a cutaneous ecchymosis.

If it were possible for anything more to be wanting to confirm the existence of glaucoma, it may be gathered from the subjective symptoms—flashes, coruscations, and bright colours are seen. Intense pain and loss of sight complete the catalogue. Added to these, the history of a case must afford the fullest conclusion; for whether acute, and with such intensity of action that blindness ensues in a few days, or chronic, that weeks, or months, or years, are required to extinguish sight, opacity of the lens is the last result.

There are inflammatory complications of the retina, and of the optic nerve, that may not be detected except by subjective symptoms of flashes, sparks, shining appearances as from bright metals, bright rings, and spectra of various kinds. I always inquire about these, and if it be said that there is anything peculiar in this way which has attracted attention, I know that there is disease in the deep parts of the eye, sufficient in all probability to spoil the organ.

A caution must be given here to prevent mistakes. Crystals of cholesterin in the cataract may cause somewhat similar effects to those of morbid sensations of stars, and bright specks.

Muscæ alone, matter nothing. All cataractous patients have them, and complain much. The subject has been already noticed. This has long induced me to suspect that there is no such thing as purely uncomplicated cataract. No such thing as atrophy of the lens alone, while the rest of the eye is perfect. This is the more impressed on me as the muscæ are so large and so numerous.

The history of a case should be carefully inquired into, and relied on when any tests are insufficient to give assurance of the state of the eye.

Without proceeding further in detail respecting symptoms, it may be stated that any deviation whatever from what would be considered a state of health, in any of the textures com-

posing the globe of the eye, except the lens, is a complication, according to its kind and degree, rendering an eye more or ess unfit for any operation.

These considerations of complications would be imperfect, if the alterations in the nutrition of the tissues, consequent on old age, were forgotten. The eye decays, like all other organs and parts, and shrinks. The eye of a very old man is less likely to resist the effects of an operation, and meet the repair, like that of a young one. The difference in loss of force is seen in diseases, and still more in the healing of wounds. Senile degeneration and its disadvantages must be remembered.

It would be imprudent to operate on an eye that had been recently inflamed from any cause. A very long interval should be allowed to pass, after the last trace of such disturbance.

Complications of cataract with extra-ocular disease, which interfere with treatment.

Success will seldom be obtained from extraction, when there is chronic inflammation of the surrounding parts, or chronic ophthalmia tarsi, or chronic conjunctivitis, or chronic inflammation of the lacrymal sac. Perhaps it is that these interfere with the nutrition of the cornea.

The truth of this was forced on me at an early period of my career, from the results of my own practice, and from watching that of others. With such complications I suspect that the operation for depression is better suited. These may interfere somewhat with the operation for solution.

Mechanical changes in the eyelids from accident or disease, that in any way interfere with their proper motions, or produce irritation of the cornea, may be a bar to successful operating, especially when extraction is applied. Entropium, ectropium, and trichiasis mostly offend. Many of these may be removed, as a preliminary measure.

Decided emaciation of the body, with a dry and harsh skin, is unfavourable for the operation of extraction. The corneal round is unlikely to heal. Such patients lose much of the orbital fat.

(To be continued.)

LECTURES ON DERMATOLOGY,

DELIVERED IN THE

Royal College of Surgeons

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Lecture IV.

I.—DISEASES OF INFLAMMATION.

(Continued from page 629.)

Inflammation from Specific Constitutional Causes.

There are certain states of the constitution in which there exists a spontaneous tendency to disease; I may use the words "constitutional tendency," or I may employ a more technical expression, and speak of *diathesis* and *diathetic diseases*. The diathetic diseases of the skin are three in number—namely, *Lepra*, *Struma*, *Cancer*.

Lepra is a constitutional tendency to the production of *spots* or *blotches* on the integument consisting of *a base of inflamed skin, more or less red, circumscribed and thickened, and covered by a white and spongy cuticle or scale.* The patch of lepra begins as a point or punctum, corresponding with the aperture of a follicle; it may first be perceived, either as a red spot or as a white spot, according to the predominance of the vascular element, or of the epidermic element. Both of these increase in bulk, the former to the extent of producing a small prominent tubercle; the latter to that of a snow-white scale. The next thing that happens is, that a similar action takes place in the immediately adjacent follicles; the red bases of several tubercles unite, and a common scale covers the whole. The spot, at this time, instead of being a punctum, *lepra punctata*, or a papula, *lepra papulosa*, has grown to the size of a drop of water, *lepra guttata;* the energy of growth has also rapidly increased, and in a short interval the spot has increased to the diameter of half an inch, of an inch, or even more, and forms a disk which is perfectly circular in figure, *lepra orbiculata seu diskoidea*. The spot or disk is now at its height; the scale is laminated, and, in consequence of its peripheral growth, is also imbricated. Moreover, the centre of the scale is somewhat depressed below the level of its circumference, and if the scale be removed, a corresponding inequality of surface will be perceived on the derma. The surface, deprived of its scale, is red, and somewhat tumid, and smooth towards the circumference, and pressure with the finger tells us that the disk of morbid skin, although it occupy only the surface of the derma, is considerably thickened.

After an uncertain period of growth, the scale disappears from the centre of the disk, the skin recovers its normal character, and the circumference continues to grow; the disk is now converted into a ring, *lepra circinata*, with a greater or less breadth of border; next, the ring breaks at one or several points, and slowly and by degrees the segments of the ring disappear, and nothing remains of the eruption but a brown stain, and sometimes neither discoloration nor trace of any kind. In the progress of growth it is not unusual for a ring of this description to run over a considerable extent of surface; sometimes two rings meet in their growth, and form a figure of eight; or three in like manner may come in contact, and the figure produced be a trefoil; or there may be a confusion of circles and broken circles, giving rise to an appearance which is denominated *lepra gyrata*.

The form of lepra now under consideration may be termed *figurata*, and is by far the most common mode of manifestation of the disease; but occasionally larger irregular patches are produced, which are diffused over a greater extent of surface, *lepra diffusa*, sometimes covering an entire limb, the whole of the scalp, or a very considerable expanse of the surface of the trunk. Lepra is also remarkable for having its special seat of selection; it is rarely met with on the uncovered parts of the skin, with the exception of the nails, where it is common, and possibly you may consider the nails a sort of clothing, for the disease is equally common on the scalp, where it is favoured by the protection of the hair. But its most frequent seat of occurrence is the convexity of the larger joints, as of the elbows and knees, the external and muscular portions of the limbs, and the trunk of the body.

Lepra acquires additional interest from the fact, first pointed out by myself, that the disease is the homologue of tubercle of the lung. A careful inquiry into the antecedents of the patients affected with lepra shows that it is frequently hereditary, and that in cases where it is not hereditary, phthisis, or struma, or cancer, may be discovered to exist in the parents or blood relations. And, again, that the children of leprous parents are liable to phthisis as well as to lepra. In these facts we have an explanation of the diathetic nature of the disease, and of its very common outbreak in persons who are sound and healthful in every other particular; in fact, the presence of lepra would seem to carry with it an immunity against either phthisis or cancer.

Viewed after this manner we may regard lepra as the consequence of a nutritive debility, and we may be led on from it to the consideration of another nutritive affection which is generally hereditary and often acquired, and which gives rise to those pathological phenomena which are known under the name of struma and scrofula. Struma manifests itself in the skin by indolent ulcers and by a form of degeneration of the cutaneous tissues which is termed lupus.

Dermato-struma, or dermato-scrofula, generally makes its invasion of the skin by abscess; the skin covering the abscess becomes red and tumid; the abscess breaks, and an indolent ulcer is left in its place. The abscess often becomes sinuous. The ulcer is covered with fleshy indolent granulations, the edges are raised and also fleshy; the surface secretes a serous or sero-purulent fluid, and so it goes on for months without showing a disposition to heal. At a later period when it does heal, either spontaneously or under the pressure of treatment, a thin, unhealthy, depressed, or puckered cicatrix is left behind, possibly an irregular accumulation of white fibrous tissue from hyperplasia and that state of hypertrophy of the white fibrous tissue, which has received the name of "false," or, more properly, of "traumatic" cheloma or cheloides.

I may call to your mind that the nutritive debility of lepra exhausts itself in hyperæmia of the derma, in hypertrophy of the papillæ cutis and of the epidermis, and possibly in the production of abnormal cell-tissue in the substance of the thickened skin; but there is no destructive change, no loss of substance, and lepra may endure for a lifetime without leaving behind it any trace of a cicatrix, and indeed any trace of its existence; but the strumous and scrofulous affections are noted for their tendency to the production of tissues, which from the very first are destined to destruction. Such is the case in the instance of dermato-struma, to which I have just drawn attention; and, more conspicuously still, in an affection, which from its more destructive nature has gained for itself the name of *lupus*. Thus we have lupus exedens or vorax, lupus non exedens, and a third form admitted by courtesy only into the same group, namely, lupus erythematosus.

The leading characters of *lupus* are, the production of a new cell-tissue, which takes the place of the skin and subcutaneous tissues, which, by excessive and uncontrolled growth, gives rise to tubercles and granulations, and which, as a consequence of enfeebled vitality, softens and breaks up, which is removed by discharges and sloughs, and so produces ulcerations; the ulcerations extending deeply into the immediately affected, as well as into the surrounding tissues. In this way a lupus exedens of the nose may destroy the whole of that member and the neighbouring part of the face; and cartilages and bones fall equally under its destructive progress.

Lupus non Exedens is more superficial and slower, limiting its destructive action to the upper layer of the derma, and leaving the deeper fibrous layer as the chief constituent of the cicatrix. It is termed "non exedens," from the fact that it is capable of effecting all this mischief, of producing a life-long cicatrix, that may seam the whole cheek with a white fibrous-looking web, that may nibble away the edges of the nose and produce permanent deformity, without ever once having exhibited a solution of continuity; the destruction has all been carried on under the unbroken cuticle. It begins very commonly as a small round tubercle in the middle of the cheek of a healthy-looking child, most frequently a girl; it very slowly enlarges in diameter; it is yellowish in tint of colour, probably without hyperæmia, resembling a bleb of jelly under the cuticle, but nevertheless firmer than jelly, and traversed by a minute venous radicle. From this small beginning all the serious consequences may proceed to which I have just alluded, an annoyance of many years' standing, probably a deformity for life, and, moreover, on a face that nature intended to be beautiful, and, but for so serious a drawback, would indeed have been beautiful. Just as the crude, bloated and fungus-like tissues of lupus exedens break down and dissolve, leaving in their place cavities and chasms, so the degenerated cell-tissue of lupus non exedens gradually disappears, and only a scar remains behind; the papillary layer of the derma is slowly undergoing a process of devitalisation, a new and temporary material is deposited in its place, this temporary material is withdrawn, and the deep layer of the corium is seen through the transparent epidermis, as though it were dissected, as though the surface had been shaven away with a sharp blade.

Just as lupus non exedens may be regarded as a milder type of lupus exedens; so, *lupus erythematosus* may be looked upon as the least destructive form of lupus non exedens. It begins with hyperæmia, hence its subjective name, erythematosus; is very slow in its progress, lasting many months and even years, and is apt to fix itself upon the nose, upon the cheeks, or upon the head; and is very commonly associated with a similar state of disorder of the fingers. After a while, where there was previously nothing but redness and some degree of thickening of the skin a differentiation may be noted between the longest standing portion of the complaint—namely, the centre, and the circumference. The peripheral border has a fresher and more active-looking tint of redness, while the centre is covered with a concretion of desiccated epithelial and sebaceous substance, the concretion thinning as it approaches the peripheral border. Moreover, a very curious feature of the disease is the prominent and dilated state of the follicles that are obviously filled to distension with dry epithelial exuviæ. And, furthermore, the papillary layer of the derma is gone; while the fibrous network of the corium is clearly visible, as are the sebiparous glands surrounding the follicles. It is evident that the sebiparous glands are enlarged, possibly from detention of their secretion, and a vascular plexus is apparent, spreading like a network between the follicular pores. It is obvious that the function of the follicles is suspended; that the corium is thinned; and, when the disease occupies a region furnished with hairs, another phenomenon is apparent—namely, the loss of the hair.

In lepra, I assume that a morbid action, the consequence of nutritive debility, is set up in the corium, equivalent to that which in the lungs would produce tubercle, but which, in the derma issues simply in hyperæmia with an excessive production of altered epidermis. In dermato-struma and lupus the morbid change takes place in the tissues of the derma, possibly in the connective tissue, and results in the formation of a substance of low organisation and low vitality, incapable of higher transformation, and wanting in the power necessary to maintain and preserve its own integrity. In the next place I have to direct your attention to another consequence of lowered vitality and defective nutrition—namely, the production of cells similar to those of the epithelium, but in inordinate quantity and in a situation calculated to interfere with the normal integrity of the derma; the small globular masses developed in the skin under this abnormal process are termed *epithelioma*. The first impulse to the morbid operation is very probably given by the cells which constitute the epithelium of the follicles or of the sebiparous glands; for it is there that the morbid change would seem to begin and thence to spread superficially into the surrounding tissues. At first and for a considerable time an epithelioma is a small transparent nodule or tubercle streaked by the ramifications of a minute venule. Later in its history the nodule has the appearance of being lobulated and indented in the centre; and at a period further advanced the central umbilication is occupied by a small scab. The scab indicates a softening and breaking up of the central portion of the epithelioma; this process goes on increasing and at the same time the rounded and nodulated border creeps further and further upon the neighbouring skin. The area of the ulcer covered by the scab increases with the peripheral growth of the prominent transparent border, the surface of the ulcer when the scab is removed is pale and smooth, it bleeds easily and exudes a serous or sero-sanguinolent fluid, and the desiccation of this fluid constitutes a scab of continually enlarging dimensions. A special characteristic of epithelioma is its extremely slow growth and the indolence of the ulcer; it is many months before it has advanced to the softening stage and forms a scab; and it is equally slow in its gradual propagation to the surrounding healthy integument. Its favourite seat of development is the face; sometimes on the cheek or nose; and sometimes beneath the lower eyelid or at the inner angle of the eye.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

ON THE UTILISATION AND PURIFICATION OF THE SEWAGE OF PARIS.

By SANDFORD MOORE, B.A.,
Assistant-Surgeon 4th Dragoon Guards.

Being lately in Paris on leave, I took the opportunity of visiting the works at Asnières, where the sewage of Paris is now being applied to land. The officers in charge were most obliging in explaining the method, and presented me with a comprehensive report for 1869, which is illustrated by careful drawings of all the arrangements. Partly from this report, and partly from my own observation, I have drawn up the following sketch, which will probably be interesting at this time, when so much discussion on this point is going on. It should be premised that the sewage water of Paris is not supposed to contain the solid excreta; these are for the most part retained in receptacles in or near the houses, and from these receptacles the liquid excreta and the house-water pass into the sewers; the sewers also receive the rain-water and the water used in watering and washing the streets.

There were only 130 kilometres (78 miles) of sewers in Paris in 1850; in 1870 Paris possesses 600 (360 miles).

The main sewers, called *collecteurs*, are three in number:—

1. That of the right bank of the Seine.
2. That of the left bank of the Seine.
3. The departmental collecteur of Bondy and St. Denis.

No. 1 commences at the Place du Chatelet, passes along the Quais, Rue Royale, and Boulevard Malesherbes to Clichy, and just before entering the Seine is joined by No. 2.

No. 2 begins at the Jardin des Plantes, passes along the Boulevard St. Germain to the Pont d'Alma (at which point it passes under the river by a syphon), over the rising ground of the Arc de Triomphe. 500 metres (1640 feet) from the river No. 2 joins No. 1, to form "the Asnières general collecteur."

No. 3 clears the northern side of Montmartre, La Chapelle, Belleville, and St. Denis. It commences at the exterior boulevards, passes by the Canal de Loureq and Route St. Denis to St. Denis. In addition it also receives the waste waters of Bondy. Part of the sewage of No. 3, as well as part of the sewage of the "Asnières general collecteur," is allowed to escape into the Seine without any attempt being made to purify or utilise it. The engineers, however, entertain a hope of removing all the sewage of Paris at no distant date for distribution on land, even as now they remove a part, and with a like successful issue.

	Cubic Metres.
In 1869 the average total daily delivery at Clichy was	=220,000
" " " " at St. Denis	= 40,000
Total sewage . .	=260,000
The maximum daily delivery took place at Clichy in March and May	=260,000
The minimum daily delivery took place at Clichy in July	=172,000

Analyses of the Sewage at Clichy.

Composition chimique :—

	1867-1868 gr.	1869. gr.
Azote par mètre cube . . .	37	43
Autres matières organiques . .	770	757
Acide phosphorique	15	17
Potasse	30	35
Autres matières minerales . . .	1948	1448
Total . .	2800	2300
Composition physique :—		
Matières suspendues	2000	1·15
Matières dissoutes	800	1·15

Sewage is a sort of liquid dung, for taking the respective values of its essential elements, 130 or 140 cubic metres at Clichy=1000 kilogrammes of dung; and as for the sewage of St. Denis, it is still more rich.

Prices of commerce : of azote=2 francs; potasse=0·60 franc; acide phosphorique=1·40 franc; and 3·50 kilogrammes of sewage at St. Denis=140 grammes azote + 1·50 kilogramme organic matter; therefore it follows, one cubic metre of sewage at Clichy=0·11 franc (one penny), and at St. Denis 0·35 franc (threepence), or the total worth of all the sewage of Paris, calculated at this rate, is about equal to 14,000,000 francs a year.

In winter the temperature of the sewage is 4° or 5° C. hotter than the Seine, and in summer it is colder.

The concentration of all the sewage of Paris at two points has led to two things :—

1. An increase of subsidy for the dredging of the Seine from 9000 fr. in 1849, to 100,000 fr. in 1870.

2. The production of many kilometres of pollution on its right bank; thus the analysis of the water of the Seine gives very various results according to the locality from which it is taken.

Analyses of various Cubic Metres of Seine Water.

	Right Bank. Azote.	Left Bank. Azote.
1. Above the collecteur .	1·5 gr.	1·5 gr.
2. In front of collecteur . .	30 "	1·5 "
3. Between Clichy & St. Denis	2·5 "	1·5 "
4. Below St. Denis . . .	3·5 "	1·5 "

M. Mill, the Engineer-in-Chief of the Ponts et Chausses, after visiting Edinburgh, Milan, and Valencia, came to the conclusion that the best way to purify the river from this pollution was to devote the sewage to purposes of agriculture; not exclusively for topsoiling meadows, as in the two former cases, nor for the cultivation of vegetables as at Valencia, but for both. Hence the adoption of the present experiments at Gennevilliers and the Valley of Montmorency. To this idea of his certain objections were advanced—puerile ones, such as "the special taint or savour" which it was supposed the edible products "would have;" and more serious ones, such as "the length of time requisite to transform the habits of the cultivators," and to get them to adopt the irrigation with the fertilising sewage. Moreover, "the vicissitudes of the seasons and the wants of farming did not permit one to count on a continued distribution of the whole of the sewage." What was to be done with the surplus? was it to be cast unchanged into the Seine?

M. Chatelier, the engineer-in-chief of the Ecole des Mines, now suggested the chemical purification of the surplus with sulphate of alumina. This, when it meets with the alkalies of the sewage, is itself decomposed, and gives a gelatinous bulky precipitate of alumina, which, by a sort of pasting process (collage) combines all the solid matters, and throws them down to the bottom of "the bassins," where they settle.

Influenced by these considerations, the administration of the city of Paris commenced a series of experiments in the year 1867-8 at Clichy. Half a hectare (one acre and a quarter) of land was rented there. It was situated about 400 or 500 metres (1600 feet) from the mouth of "the general collecteur of Asnières." At the mouth itself, on the river bank, a small steam-engine of 4-horse power was erected; this lifted and drove 500 cubic metres daily to "the Champ d'Essai," or sewage farm, giving a total of 200,000 cubic metres in 1867-8. The arrangements at "the champ d'éssai" were very simple.

As for farming, the sewage was distributed on the farm in two ways, for which I retain the French names, as I find it difficult to give their English equivalents. 1. By colmatage. 2. By arrosage. The former was the winter distribution, and took place from October to March; the latter was the summer distribution, and took place from March to October. In summer "arrosage" was thus practised. *Little ditches* (rigoles) a few centimetres deep, supplied the *furrows* that were carefully drawn between the several ridges (billons), on the summit of which ridges vegetables shot up without the leaves ever being even wetted by the liquid. Sods of turf were placed at the point of juncture of the furrows and ditch, and with the assistance of a little flood-gate ("planchette"), helped to regulate the flow. When it became necessary to arrest the flow down any *furrow*, the sod was dropped into its place at the head of *the furrow*, and "the *planchette*" removed, then no obstacle remained to the onward flow along *the ditch; vice versâ*, to re-establish the lateral current, the sod was removed, and "*the planchette*" dropped into its place—viz., across *the ditch*, just beyond the point of contact of furrow and *ditch*. In winter "colmatage" was practised, the ridges and beds of the different gardens and fields were first levelled, and then the entire surface was thoroughly soused, or submerged, and a thick deposit thereby left all over the land, which of course was ploughed up with the soil the following spring.

Such sewage as was not used by either of these processes passed along to the two "bassins," deep trenches dug in the soil of the farm nearest the river, 30 metres long, 10 wide, and 2 deep. A dam bounded each of these "bassins" in front. The sewage before reaching the "bassins" received a thread-like stream of alum, when a simple cock, or valve, communicating with a cistern full of the reagent, was turned. A deposit accumulated at the bottom of "the bassins," whilst the clear water escaped by jutting over the dam. More complicated arrangements, such as filtering dams with holes, or "the flacon of Mariotte," for the distribution of the reagent, were successively tried, and abandoned.

Very convincing results were obtained in both cases. As for the farming, various products were grown. Thanks to the co-operation of a neighbouring market gardener, the vegetables grown were taken and sold at the Halles. They fetched a rough gross product of 4400 fr. the hectare, from a total consumption of 40,000 cubic metres per hectare. The attempts at "extensive cultivation" (farming proper) of beet, potatoes, maize, and of meadows, succeeded equally. The edible quality of the products left nothing to be desired. Moreover, in winter, "colmatage" went on, and prepared the soil for the abundant production of summer and autumn. Nor was the neighbourhood less salubrious. The thin bed of deposit left rapidly oxidised on the surface, and offered no appreciable bad odour.

As for the "bassins," more than 100,000 cubic metres were treated by the alumina. The deposits were extracted without inconvenience, employed on the spot or at a distance, and presented volume for volume nearly the value of ordinary dung. The clarified water, still rich in useful matters, was returned into the Seine or to water ("arroser") the meadows. The expense of the reagent necessary to purify a cubic metre began at less than two centimes and fell to one.

The experiment at Clichy led to this double and practical conclusion :—

1. The employment of sewage for farming in the vicinity of Paris is possible, and can also be safely used for the production of vegetables, etc.

2. The purification by sulphate of alumina is a success on the large scale, without requiring exceptional manual labour or enormous expenditure. The deposit it furnishes, without being a manure of a high order, is as useful as dung for a short time.

The engineers were much struck with their success, and determined to extend their field of operations.

In front of Clichy lies the plain of Gennevilliers, with 2000 hectares of permeable land, and behind Argenteuil extended other excellent land for colmatage and arrosage. It became quite natural to direct the sewage towards these places, taking care at the same time to erect "bassins." But this canal for the sewage required a very considerable sum for its execution. Moreover, if a certain number of well-informed persons were convinced of its propriety, there still remained the mass of the country people whose land was to be traversed by the canal imbued with the most deeply rooted prejudices on the subject.

In point of fact, it remained but to try the last resort—viz., that of patronage—to induce the farmers to try for themselves this new experiment on their lands; so a fresh effort was made. A loan of 800,000 fr. was raised in order to originate this really practical work on the plain of Gennevilliers. The works commenced on October 12, 1868, and were finished by June 1, 1869. Two steam engines, 40-horse power, lifted each day (of ten hours), and with the aid of centrifugal pumps, 6000 cubic metres of sewage. This sewage was driven along a cast-iron conduit (0·60m. in diameter and 2000 metres long) to a reservoir of masonry. This reservoir gave a pressure of 3 or 4 metres from its height above the highest points in the plain. It is situated between Asnières and Gennevilliers, at a little distance from the Seine, and is surrounded by the 6 hectares of land (14⅓ acres) purchased by the city of Paris. A conduit of grey Dalton stone (0·45 m. in diameter) takes origin from the bottom of the reservoir, and opens 500 metres away for distribution on the land. A masonry canal, fed by the surplus of the reservoir, traverses the lands belonging to the city, and terminates in "the bassins," which are close to the Seine. It will be seen these are the same sort of arrangements as those at Clichy, but on a larger scale. Thus the sewage can be sent either to the city land, to the adjoining land, or to the bassins. Now the object the engineers proposed was to invite the greatest number of farmers they could find to try the new experiment. First of all, they gave the cultivation of the six city hectares to the neighbouring well-disposed market gardeners. About forty of these last came to the work. The sewage was delivered gratis to them. They were asked only to give their labour, and were to be paid by the products obtained.

The soil of the new "champ d'essai" was exceptionally poor. It included only one-thousandth part of nitrogen and 80 or 90 per cent. of sand. At the end of two months (July and August) it was, nevertheless, transformed into a splendid garden. Many visitors, amongst whom the engineers had the honour of including the Emperor and Prefect of the Seine, proved the splendid quality of the products. The market gardeners drew a gross value of 8000 or 9000 francs the hectare. With regard to this question, then (the vegetables), the point was decided; but perhaps a more decided result was at the same time obtained for "farming proper" (*la grande culture*). The neighbours, struck with the green aspect of the crops resulting from the distribution of sewage, which told so plainly on the dried-up plain, had learned their own lands would gain more by submitting to this new régime. In July ten or twelve, in August twenty, in September and October thirty hectares had accepted the sewage distribution. The result was surprising even to the promoters of the scheme. In two crops there were given by

	Kilos.
1. Potatoes	40,000
2. Beet	200,000
3. Luzernes	80,000

And then when autumn arrived, when the harvests were over, their habits were noted, the farmers continued to pour the sewage over their fields, the subsoil of which offered a precious permeability. By making colmatage on a grand scale, the earth impregnates itself with fertilising matters, whilst the solid detritus accumulates in layers or beds analogous to dung. The 6 hectares of the city have become 40, freely submitted to sewage, which is carried along by little ditches to more than 2 kilometres (2¼ miles) from the reservoirs.

During all this time what part have the bassins played? They have acted like a balancing, or supplementary, system to the experiment. In June and July they received the two-thirds of the sewage sent by the engines, because the tillage of the six city hectares was not commenced; from the month of October they were closed, because the total surface "arrosée" consumed daily every single cube sent.

The expenses of the town are in consequence reduced now to those of elevation of the sewage—viz., a little more than one centime per cubic metre; the other centime, which, in the early days of the experiment, purification cost, is now saved. But "the bassins" are always there to reply to any question as to the salubrity of the system, and a thorough independence alongside tillage. The deposits extracted (more than 600,000 kilogs.) have been, moreover, immediately removed by the farmers of the neighbourhood, who have substituted them for night-soil and dung on the forty hectares. The result obtained at Gennevilliers after some months can be summed up in a word or two. What was only an experiment, thanks to the co-operation of the farmers, has become a regular, useful, practical work. The whole of the sewage raised is employed on forty hectares. The engineers thus think they have solved the great question before them.

At a meeting of the Society of Civil Engineers, M. Durand-Claye, the engineer of the municipal service, stated, on February 4, 1870:—

1. He could see no objection to all the night-soil of Paris being mixed with the ordinary sewage. The present occupants, who have adopted "the tinettes fixes" system, would object at first. There are more than 300,000 cesspits: if each paid thirty francs yearly, this would give a total sum of nine million francs a year. At present, the proprietors only give a hundred thousand to the company, and seven or eight millions to the vidange companies, whilst, at the same time, they submit to the horrid system of removal by night. The value of the sewage would be increased, and the expenses of the system covered.

2. He hoped that all the sewage of Paris would eventually be removed for distribution on land. A conduit, laid across the Seine, would convey all the surplus sewage from Gennevilliers to Sartrouville and Conflans, and thus extend almost *ad infinitum* the present system.

Ten millions of francs would be required at first to remove all the sewage of Paris to a champ d'essai, and one million yearly, even supposing half the sewage had to be purified. This would be balanced by:—

1. The complete purification of the river.
2. The restoration of a large quantity of sewage to the soil.
3. The increased facility offered to the city for the transformation of its present system of sewage removal.

THE ORGANIC GERM THEORY OF DISEASE.(a)

By JABEZ HOGG, M.R.C.S.

"Dust and Disease" was the somewhat sensational title of a lecture recently delivered by an eminent Physicist, intended to show the connexion between minutely divided particles of matter diffused through the atmosphere and their supposed relation to the production of disease. Before, however, we proceed to discuss a question of so much importance, it is absolutely necessary to clear the ground of anything having the semblance of an ambiguous meaning, such as is likely to occur by blending together the terms "organic germs" and "organic particles." I am ready to admit that dirt is always floating about in the air of towns in pretty considerable quantities, but I am not prepared to look upon this as "organised matter"—at all events, the two terms are neither synonymous nor convertible, for, although there are many particles floating about in the atmosphere, it has not been proved that "organic germs" (that is, seeds of living organisms, because that is what we understand by this term) enter very largely into the composition of the air, still less has it been shown that they bear any direct relation to zymotic or other diseases.

It is not my intention on the present occasion to attempt a refutation of Professor Tyndall's method of demonstrating the presence of organic germs in the air, because, although he looks upon his experiments as exact, he thoroughly ignores the physiological aspect of the question, as well as those of a more palpable nature—such as the large amount of organic life, spores, etc., held in solution in all our potable waters, and that to these, among other causes, we had far better look for a solution of the difficulties which surround diseases of the class mentioned. The Professor's statements, in short, appear to me to be a series of bold assertions, wanting in exactness or put forth by a newly converted enthusiast, whose notion of dealing with facts is to square them with his own theories. I cannot believe that Professor Tyndall is ignorant of a series of valuable experiments made by Dr. Angus Smith, who, it is well known, has been long engaged in determining the relative condition of organic and other matters in the air of towns, and its probable effect upon the health of the inhabitants. This chemist and physicist has found that the chief cause of the insalubrity of the air of towns consists, not in "organic germs," but in the emanations from human beings too closely packed together, the presence of noxious gases generated by coal or thrown off by large manufactories. These tend to saturate the air with matters of the most injurious kind—as sulphuretted hydrogen, sulphuric and hydrochloric acids, ammonia, chlo-

(a) Read before the Medical Society of London, March, 1870.

ides, and albuminoid matters—which are far more injurious to health and life than "organic germs." Dr. A. Smith therefore withholds his assent to anything like an "organic germ" theory, because he believes it has not been shown by its advocates to have any relation whatever to disease, and is likely to divert attention from causes far more important. Professor Wanklyn has also proved by his ammonia process that the total quantity of organic nitrogenous matter passing out of the lungs and held in solution in the form of watery vapour during the space of twenty-four hours in health amounts to about three grains. In disease it increases; but even in health the quantity of free ammonia varies considerably, and Dr. Ransome has ascertained that a larger quantity of organic matter is thrown off in Bright's disease and some others, while in catarrhs, measles, diphtheria, etc., a great deficiency takes place. This fact scarcely chimes in with the "organic germ" theorists, who have asserted that large quantities of albuminoid matters, vibrios, etc., are found in the air-passages in catarrhs. Then, with regard to the filtration of air through cotton wool, does this do more than arrest the moisture given off from the lungs and saturated with ammonia and other salts? I believe not; it simply frees the expired air from all ammonia. The Professor's idea, however, is by no means new either to the chemist or physician. It is now several years since Professor Tomlinson, of King's College, showed how impossible it is to keep any vessel chemically clean, or even decently free from the dust floating about in a closed-up room. He found that corking up bottles did not prevent the entrance of particles of organic matter. After many trials to exclude the dirty atmosphere he tried cotton wool, and found by placing a pledget of this material quite losely in the necks of bottles or glass tubes they remained perfectly clean for many days. Professor Tomlinson by employing flasks or bottles thus prepared was also enabled to delay the crystallisation of saturated solutions of salts to an almost indefinite period. He excluded in this way all particles of inorganic matter which at once form a nucleus of crystallisation, but such particles of matter are easily detected, and are certainly not to be confounded with "organic germs." The members of our Profession have not lagged behind in a matter of this kind, but on the contrary have taken the initiative in the use of cotton wool inhalers for those engaged in deleterious manufacturers, or in places where a large amount of organic or mineral matters are given off. Dr. Angus Smith in his report upon the air of mines, 1854, particularly dwells upon the danger to the health of the miner, produced by taking into the lungs through the open mouth of a large quantity of coal-dust and other matters. "If," he says, "as you approach the entrance of a pit, a gleam of sunlight happen to play across it, you will at once perceive an immense quantity of solid matters issuing forth in an endless stream. The impure air of the mine is loaded with these solid particles, which, when caught and submitted to microscopic examination, are found to consist of fine particles of coal, crystalline bodies, etc., and when issuing from iron mines in addition to the fine metallic atoms, have the solid products from gunpowder explosions, arsenic in small quantities, and sulphides of various metals. With a given quantity of inspired air the miner takes into his lungs from sixty to eighty grains of such impurities each day, so that it will be readily understood that such dust and dirt must in a very short time exert a very injurious effect upon the lungs and other organs of the body." To prevent the entrance of such matters into the mouth and lungs Dr. Smith proposed the use of a simple respirator, made of a layer of cotton wool, placed between wire gauze, which could be made for a few pence. But it would be an idle waste of time to dwell upon anything so palpable, and which bears no proportion to the ordinary condition of the atmosphere. There is another point I must say a word upon: it is the physiological part of the question which, as I have already said, has been entirely ignored in this discussion. Professor Tyndall has failed to notice the important fact that the respiratory tract is well taken care of, being freely supplied with cilia and ciliated epithelium, which remain in action, sleeping or waking; by their agency a sort of churning process is carried on amply sufficient not only to arrest the further progress of any foreign body, but probably to kill "organic germs," and effectually prevent their germination in any of the internal organs. Or when particles of matter enter in large quantities, have we not additional means provided for their expulsion, in the act of either coughing or sneezing? Much of even coal-dust inhaled collects in the throat, there becomes entangled in the mucous secretion, and is ultimately expelled by expectoration. I therefore very much doubt whether the change observed by Professor Tyndall, when he exhaled through cotton wool, was due to the cause he ascribed it to—namely, filtration of the air from organic germs; it was undoubtedly due, as I have before said, to a retention of moistnre, carbonic acid, etc., which under ordinary circumstances is thrown off from the lungs; at all events the conditions of saturation would be so materially changed by the interposition of cotton wool, and so arrest the salts of ammonia and sodium chloride, held in solution, that a different luminous cloud would certainly result. Indeed he seems to feel this difficulty, for he says, "that the condensation of the aqueous vapour of the breath is shown by the formation of a luminous white cloud of delicate texture. It is necessary to abolish this cloud, and this may be done by drying the breath previous to its entering the beam."

Towards the close of forcible expiration the breath would be drier and freer from moisture as well as the salts of ammonia and other salts usually given off, and this should be taken into account. But would it be possible to judge in this way, when all organic germs were filtered out of the air? Are there not some so minute that they cannot be filtered out? We shall presently see.

Those who know little of the microscope and the perfection to which the modern instrument has attained believe that organic germs such as Tyndall spoke of in his cloud of dust cannot be seen by its aid, nor appreciated in any way, except by watching their play across the path of a ray of solar or electric light. This is not the fact; it has long been a practice with microscopists to expose glass slides in suspected places or atmospheres, and, in a very short time, a large crop of various minute particles are deposited. If I take an ordinary slip of glass, and smear it over with glycerine, and expose it for a moderate space of time either in my room or in the open air, I find, when examined under the microscope, a quantity of small particles deposited thereon, such as articles employed and in domestic use at the moment of exposure would threw off, chiefly consisting of mineral and vegetable substances—as fragments of coal, granite, brought in on the dress or shoes from the street, vegetable hairs, cotton, as well as wool fibres detached from the clothing; these are often mixed with a few starch granules from the bread, and occasionally a few spores of fungi. In the house the latter form but an inappreciable proportion, while in the open air we often take a good deal, and during the warm damp weather peculiar to some periods of the year a larger quantity of fungus spores and particles of vegetable hairs will be deposited on the slides. If I expose a glass slip over a sewer, I sometimes obtain a variety of spores, circular, ovoid, and jointed, or dissepimented, and mixed with ammonia nitrate, which crystallises out after the glass has stood by for a few days. By employing a more scientific method as an aspirator, which draws in a larger quantity of air in a given time, Pasteur and others collected the same kind of substances. If I put a small quantity of distilled water into the bottle before the air is drawn through by the aspirator, I also get, in the course of a few days, some of the lower forms of animal life developed in the fluid. This experiment, as you know, seems to prove the spontaneous generation theory, heterogenesis, of animal life.

The microscope has clearly demonstrated the nature of these various substances floating in the air, and it is more than probable that a few escape detection, either from their extreme minuteness or transparency; but those who have investigated the subject will agree with me that it by no means follows that the air is filled with organic particles, or contains more than a very small proportion of "organic germs." Dr. Angus Smith determined the relative proportion of organic matter in pure air to be 1 grain in 200,000 cubic inches, while the most impure air of towns contains often as much as 1 grain in 8000 or 10,000 cubic inches of air. For weeks together, at particular periods, organic germs, as the spores of fungi, will be almost absent, or, at all events, they are so extremely difficult to trap that we fancy them absent. Some twelve years ago, when I was engaged with my friend, Mr. Hunt, in an investigation of the so-called fungoid diseases of the skin, in a very large proportion of the cases I discovered evidences of sporules and mycelium of fungi. During a later investigation conducted about two years afterwards, I noticed a remarkable absence of anything approaching to fungus spores. A very few cases were discovered, most of which were old, one a persistent case of favus, which had, for a long time, been under treatment. I know not what explanation to offer of such a fact, except that there appeared to be a change in the type of diseases under treatment at the time; probably, due to the state of the atmosphere. Every step in such an inquiry

is often surrounded by the same incomprehensible difficulties. We can no more understand these floating germs than we can how the perfume of a flower is diffused through the air, or how a grain of musk should give off its peculiar odour for the space of twenty years, and not become perceptibly diminished in bulk. We are equally unable to explain why out of twenty persons breathing a loathsome air one will breathe in a fatal dose, and nineteen escape the malarious poison. I must confess I do not believe that if the twenty were breathing through cotton wool filters the relative conditions of health and disease would been in any way disturbed. Aristotle found no difficulty in believing, and inducing others to believe with him, that worms and insects were generated by dead bodies, and it was only towards the end of the seventeenth century Redi succeeded in demolishing this theory, and proving that worms and insects which appear in decaying bodies are produced from the ova deposited there by the mature parent. It was, however, thought to be altogether preposterous to suppose that putrefaction could produce an insect (neither could it), and this explanation was at the time utterly rejected as fallacious. Driven from the insect world where such an hypothesis could have no chance of success, the disciples of Aristotle sought refuge in the world of fungoid life, or "organic germs." But here we arrive at an immense gulf, which requires to be bridged over before we come to the portal of truth. I have no doubt that the hypothesis of the production of disease by "organic germs" first obtained credence simply because we know of something analogous occurring in the flight of insect life, and the propagation of swarms which inflict blight on vegetable life. To associate such a phenomenon with the occurrence of disease in animal bodies is most unreasonable and unsatisfactory. From an "organic germ" to a "specific germ" theory seems to be a natural transition, and certainly the most plausible affiliation of a disease with the "specific germ" theory is cholera; but even here we find opinions becoming more and more divided. With those who have given time and attention to the subject, it is quite a matter of uncertainty whether the infection is conveyed in the air, held in solution, in the potable waters, or taken in with the food, such as rice, the staple commodity of the native population of India, which is sometimes attacked by a fungus. If we assign a specific germ theory to cholera, we have to deal with a migrating malaria, a wandering cause of disease not confined to hospital, house, or district, capable of being diffused through the atmosphere and conveyed along vast tracts, affecting different places with a varying intensity, which no known conditions of earth or atmosphere will explain; but nevertheless possessing the power of reproducing itself, so as to spread the disorder by fresh creations of the original conditions which produced it. Microscopical and chemical examination of the atmosphere of the wards of Hospitals in which large numbers of cholera patients have been treated, has afforded no reliable solution of the question. Mr. Rainey and Dr. Thomson, in 1855, made every attempt to isolate the supposed cholera contagium in the wards of St. Thomas's during the epidermic visitation of that period, but without success. They only discovered particles of vegetable hairs, coal dust, epidermic scales, starch, with occasionally a few spores of fungi; but the results obtained were thought to be unsatisfactory, nor did there appear any grounds for the belief that these organic germs had anything to do directly or indirectly with the prevailing disease. The remarkable coincidence of the prevalence of "rusts" and other fungi, noticed by many observers during the first outbreak of rinderpest, led many to suppose that this disease was due to the spores of fungi; but this opinion was soon exploded.

Dr. Tytler, I believe, first attempted to connect cholera with diseased food, during an epidemic visitation at Jessore in 1817. He asserted that it was occasioned by the consumption of unsound rice. But when, in 1833, he exhibited his specimens to the Medical Society of London, they proved to be "ergoted rice." Now, although rice infected with ergot has been known to produce fearful results, the symptoms of poisoning, as you are aware, differ widely from those of cholera. In 1861 a gentleman lost six horses in a very sudden and suspicious manner. His belief was that they had been poisoned, and the veterinary Surgeon agreed in this; but upon making a careful post-mortem, he could find no trace of poison. The food was then examined, and some oats attracted attention. My friend, Professor Tuson, received a supply, and sent me some for examination. I noticed that the grains were matted together in lumps, by a sort of cobweb-like material. Upon breaking them up a blackish-looking powder was deposited on the paper; placing some of this under the microscope, "bunt" and other spores were detected, and I was able to help in clearing up the mystery, and confirm the suspicion, that death was due to a cumulative poison swallowed in large doses in food, which starved, instead of nourishing the animals. Numerous well attested instances of a similar kind might be given if it were necessary, but it would be merely a reiteration of a well known fact, that toadstools are poisonous, and mushrooms edible and nourishing.

(*To be continued.*)

OBSERVATIONS ON

DR. BUCHANAN'S LECTURE ON PROFESSOR VON PETTENKOFER'S THEORY

OF THE

PROPAGATION OF CHOLERA AND ENTERIC FEVER.

By Professor MAX von PETTENKOFER.

(*Continued from page* 632.)

SEIDEL has already in his "Comparison of the Fluctuation of the Rainfall with the Fluctuation in the Typhus-rate"(a) laid it down "that observations on the ground-water fluctuations gained significance, not because of an immediate action proceeding upwards from the level of the ground-water, but because they give us a measure of the humidity of the higher soil strata." I have again recently in vol. v. p. 179 to 191, and p. 209 to 213 of the *Zeitschrift für Biologie*, stated repeatedly what I understand by ground-water and its level. I mean by the position of the ground-water level, as is well known, the position of that degree of moisture in a porous soil stratum at which the pores are permanently and completely filled with water to the exclusion of all air. Between this degree and absolute dryness there are all those intermediate degrees in which the pores are filled partly with air partly with water in variable proportions, and in which the strata are said to be moist or wet. The position of complete closure of the pores with water permits of ready and accurate observation. I have therefore selected the level of the ground-water as a clearly visible gauge or index for the periodical rhythm in the succession and duration of certain states of moisture of a porous, water-percolated stratum lying above the ground-water. Now, whether this gauge moves a few feet nearer or further from the surface, does not alter the value of its indication, which only consists in its showing the change in the moisture of the over-lying strata from natural influences, rain, introduction of water from other sources, and evaporation. The fluctuations in the position and change of the ground-water level have an etiological importance only in so far as they affect the proportion of air and water occupying the pores of an impregnated soil. In Munich no variation in the frequency of typhus was found according as the mean level of the ground-water was 20 feet below the surface, Landwehrstrasse, Sonnenstrasse, etc., etc., or 17 feet, Turkenstrasse, Schellingstrasse, or 14 feet, Carlstrasse. From the similarity in the constitution of the soil in Munich, it would not materially affect the typhus frequency in the Carlstrasse, if the ground-water level, instead of 14 feet, were lying 17 or 20 feet below the surface when the effect of the rains, evaporation, and of other causes of change in the moisture of over-lying strata would be seen. One might therefore in Carlstrasse lower the ground-water level 3 or 6 feet by draining without particularly affecting the frequency of typhus; nay, were this reduction of level to take place not in dry but in wet years, the typhus frequency must even be reduced.

Observed by itself, the ground-water level is as meaningless as are the hands and face of a clock when separated from the works to which they belong. If the index of a clock show no longer the regular action of the works, but is moved to and fro by the human hand, its indication loses all value. If in the morning I set the hand of a clock at the midday position, I must not expect the sun also to be guided by it, nor that the clock will go quicker on account of my setting forward the hands. Thus in the seven towns which Buchanan brings forward the engineers have, by the construction of drains, placed the gauge of the Munich typhus clock always at typhus, but the disease need no more be guided thereby than the sun in the firmanent by the clock, or the pendulum beat of a clock by the different settings which one gives to the hands.

(a) Vergleichung der Schwankungen der Regenmenge mit den Schwankungen in der Haufigkeit des Typhus in München. *Zeitschrift für Biologie*, Bd. ii. p. 174.

I admit the old saw, that every simile halts, and so also this, but it shows well enough the point on which turns the controversy between the followers and opponents of the ground-water theory. There are different causes which move the ground-water level as an index backwards and forwards, thereby leading to false inferences; there are causes which can raise or depress the ground-water level in the soil without on that account having any important influence on the process of permeation of the overlying strata. I might compare such influences to the disturbances which affect the movements of certain clock works, although the length of the pendulum remains unaltered, in consequence of which disturbances every clock does not go equally correctly and well. The Munich typhus clock, to which Buhl had first drawn attention, has in the main gone rightly now for fifteen years; it goes sometimes too quick or too slow only in consequence of disturbances, yet to be more clearly ascertained. The gauge was disturbed this winter, 1869-70, in one part of Munich, as in the seven English towns, for several months, and with the same results as in England. The valley and a part of the Isar suburbs were drained, and on this occasion the part of the Isar stream dammed up west of the island of Prater was drained off on the lowering of the eastern bed of the river. In the part of the town at which the ground-water level lay within the usual height of the river, the ground-water sank by more than a metre in a short time, but without the development of any epidemic of typhus, and when after a few months the stream again became restored to its usual channel, and to its usual height, the ground-water of the above mentioned portion of the town rose also again to its wonted level. But such fluctuations of the ground-water level have in the present condition of the soil of Munich, and at this time of the year, scarcely any influence on the degree of permeability of the overlying strata.

How much the position of the ground-water level is comparable to the index, and the permeability of the soil of Munich to the mechanism, of a clock, appears from the excellent paper of L. Seidel upon the influence of the monthly rainfall, on the monthly typhus-frequency in Munich(b), from which paper the propositions 6 to 11 in my treatise, "Boden und Grundwasser,"(c) are taken, and these propositions, with their justification in Seidel's treatise, I earnestly recommend to the careful consideration of every one intending to combat the ground-water theory.

The position of the ground-water does not, indeed, under all circumstances, coincide with the degree of permeation of the soil as loosely as the hands of a clock with its works. To a certain degree the ground-water level determines also the degree of moisture of the overlying strata, and can take the place to a certain extent of rain. But in this case the constitution of the soil is very definite, and contains sand, loam, and concrete formations, as well as various mixtures of these three kinds of soil. Different soils behave very differently, not only to the water, but also to the organic matters conveyed into them with the water; two instructive examples of which occurring in Munich and Erlangen, I have related in my paper upon the drainage system in Munich(d) in which it appears that the soil of Erlangen favours destruction or complete decomposition much more than that of Munich. Very little can at present be said upon the influence of the constitution of the soil on the organic processes going on therein, and nothing of a negative kind, for researches on this point as yet have scarcely begun and are making but feeble progress. I have often cautioned against the observations made by me in Munich under particular local circumstances being applied without proper adaptation to other places under different circumstances, and against considering, if things do not immediately harmonise, the observations made at Munich together with the conclusions drawn from them as untrue, instead of endeavouring to ascertain the cause of this want of accordance, of continuing the observations, and completing them. There are no doubt places where not much can be done with the ground-water level, and in all cases one must take into consideration the quantity and variation of the rainfall in the same month through a series of years. The soil and condition of drainage are not everywhere as in Munich, where the ground-water level bears to the change of moisture in the soil a much more certain testimony than to the amount of rain. If Buchanan, in Cardiff for instance, where the typhus mortality during the three years' draining work sank from 17½ to 4½ per 10,000, had looked sufficiently to the condition of the soil between the surface and the ground-water level, and had compared, as has now been done in Munich for fifteen years, the varying frequency of typhus and the varying level of the ground-water—making allowance for such arbitrary change in the gauges as had resulted from the draining—he would have arrived at results very much in accordance with those at Munich, and at any rate it would have been impossible for him to have explained the fluctuations of the typhus frequency by the variations in the quality of the drinking-water.

I do not think that Buchanan has made good his objection in the case of the seven towns, nor can I agree with his explanation of the causes by which in two other towns—Croydon and Worthing—the draining was followed by an increase in the frequency of typhus. The cause of this increase is stated to have been that in these two towns, which previously were provided like the other towns with pure drinking-water, before the outbreak of the epidemic, sewer gas forced its way into the houses.

I, too, regard human excrement as something pernicious, which we ought to have carefully put away, because it may favour the arising of typhus, but not by decomposing in cesspools or sewers and spreading evil odours, but by passing into the soil and manuring a ground also in other ways fit for typhus. If one must have typhus always when privies stink, epidemics could never cease. It is to me inconceivable how great variations in the typhus frequency can be directly due to an influence which is so constant. Munich has, in comparison with English towns, such defective privy arrangements that Buchanan could trace typhus in Munich to this source much more easily than in Croydon and Worthing; and as in Munich some cases of typhus are constantly occurring, therefore the germs are always present, and the disease should always be present too. But we had in the entire year 1867 only 96 fatal cases of typhus (6 per 10,000 inhabitants), and on the whole had no other privies and drains than in 1868, when we had in the single month of January 97 fatal cases of typhus, and in the whole year 535—*i.e.*, 39 per 10,000 inhabitants.

Battalion Surgeon Dr. Port (e) has recently carried on a most instructive inquiry as to the appearance of typhus in the twenty-three different garrisons of the kingdom of Bavaria. The soldiers and their mode of life, and the barracks and privies, are very much alike throughout the country, and yet such a difference exists between the separate garrison towns that during a period of ten years, in one garrison, 10 per 1000 have died of typhus, in another garrison from 10 downwards to 0 per 1000. Who could after this be credulous, and still think the typhus-frequency dependant on sewer gas! I am moreover convinced that the air examined by Buchanan at Worthing, which gained access to the houses through the shallow closet-pans during a violent rainstorm, and concerning which it is mentioned as somewhat curious that it had scarcely any odour, did not come at all from the drain, but from the gutter. The rain-water violently rushing through the gutter, carried much air along with it, which it compressed, and in consequence the tube from the closet and that from the gutter being united into one, which opened into the sewer, the air carried by the heavy rain into the gutter was partially forced by the water enclosing it into the closet. This also explains why the air had no bad odour.

Buchanan attempts finally an interpretation of the researches of Wagner upon the increase and diminution of the residuum in different wells at Munich by the rise and fall of the ground-water, an interpretation in which I again cannot agree. For notwithstanding the result of Wagner's observation, that with the increase and elevation of the ground-water level, the water of wells give more, and on the falling and lowering of the level less, solid residue, Buchanan believes that when the ground-water is sinking the drinking-water in the wells is more impure. The work of Wagner is now continued by my present assistant, L. Aubry, and still with the same result. I must, therefore, still provisionally dispute Buchanan's views, but should be very much obliged to him if he would tell me how I am to arrange inquiries to show a *deterioration* of the drinking-water in Munich by a *sinking* of the ground-water.

However much we differ theoretically in our views as to the effects of drinking-water and drainage, I most cordially agree with Buchanan concerning the great hygienic value of good drinking-water and good drainage. To preserve the water and

(b) *Zeitschrift für Biologie*, Bd. ii., p. 145.

(c) *Zeitschrift für Biologie*, Bd. v., p. 307 to 309.

(d) "Das Canal- oder Siel-system in München," Herm. Manz, 1869, p. 20.

(e) The publication of Dr. Port's paper has hitherto been unfortunately prevented by official difficulties, which however can perhaps be removed, a thing much to be desired in the interests of science.

soil of our dwelling-places in as pure a state as possible, is, apart from the consideration of any special disease, obviously of general value in fortifying our health against any disease, and not in merely guarding us from a few temporarily specific local infectious diseases. Abundant water supply and good drainage regulates moreover the ground-water relations of a place, making them in a great degree more equable, no longer permitting so great a difference and fluctuation, limiting the impregnation of the soil, and so on.

The drinking-water hypothesis has, as regards cholera, already become very uncertain from the course taken by this disease in many places in the year 1866. Letheby by his account of the course of cholera in East London (f) has done the hypothesis irreparable mischief. I have always followed the drinking-water question with great attention, having never shunned it, but have never, however, been able to get an undoubting answer to my question as to its relation to cholera and typhus. Of all conceivable hypotheses there has remained for me only one possible, and even this a very doubtful one: just as men spread germs which do not as yet produce infection, but which on being given the conditions of time and place develope into an infection-material at a given spot, so the conduits might, acting the part of human intercourse, convey the germs into the house with the water. In this case, however, the germ would still require the soil or some product of the soil for its development into the infection-material giving rise to the epidemic: but this view has also become, by the course of the last epidemic of cholera in London, in 1866, very improbable; since, as I said before,(g) "districts, as large as those attacked, supplied with the momentarily contaminated water remained free, while other portions of the town, supplied with other water (*i.e.*, from the New River Company and from an artesian well), but which were situated in the cholera district, became most virulently attacked." Buchanan remarks—"Any one who reads Pettenkofer's account of the cholera in Malta and Gibraltar, noting the careful statement of the height of the water in the wells, will be, however, surprised at the absence of any mention of the quality of the water regarded as a drink." This objection is unjust. I have in the *Zeitschrift für Biologie*, Bd. vi. p. 102-104, stated very clearly the quality of the drinking-water of Gibraltar, even communicating four analyses, but at p. 108 have come to the negative conclusion "one has therefore never attempted to explain the extension of cholera in Gibraltar by the drinking-water." In the subsequent number, p. 153 to 155, also at p. 165 to 179, I have spoken at length of the drinking-water of Malta. Thanks to the friendly reception and support which were extended to me during my visit to Malta and Gibraltar by the English authorities, and to the instructive reports which I found of Dr. Sutherland's, I have gained sufficient information concerning the water relations of these two English Mediterranean stations, but without finding the least support for the explanation of the cholera epidemics there by the drinking-water, so that I again had to say at p. 165 as regarded Malta, supporting myself by the statements and analyses in Sutherland's account, "this is again one of those cases which come more and more frequently under observation where with the purest water the most violent outbreaks of cholera take place;" and p. 179, "In Malta the drinking-water hypothesis is particularly incapable of application." I doubt whether another would succeed better than I did in discovering any influence of the drinking-water on the epidemic of cholera in Malta and Gibraltar.

(*To be continued.*)

SALT AND MUSTARD THE BANES OF LIFE.—At a meeting of the Philadelphia Odontographic Society, Dr. Pike read a paper on "Chloride of Sodium as a Condiment," in which he said:—"While I would not wish to be understood as believing that common salt is the sole cause, I do believe that it is one of the great evils that are tending so remarkably to undermine the health of man, and with the health the mind." As pertinent to this matter, and highly corroborative of Dr. Pike's views, we may add that, at the recent Temperance Convocation held at Buffalo, a lady, with that charming reliance upon illogical reasoning which is so characteristic of the sex, stoutly maintained that the long category of sin and crime which is so rife in the world to-day may be traced directly to the immoderate use of mustard.—*New York Med. Jour.*, May.

(f) *Zeitschrift für Biologie*, Bd. v. p. 219.
(g) *Zeitschrift für Biologie*, Bd. v. p. 233.

ON THE

REACTION OF AORTIC ANEURISMS ON THE HEART.

By Professor AXEL KEY, of Stockholm.

Translated from the "Nordiskt Medicinskt Arkiv," vol. i. part 4, 1869. By J. W. MOORE, M.B., Ch.M. Dub.; Ex-schol. Trin. Col. Dub.

(*Continued from page* 635.)

11. A SPINDLE-SHAPED aneurism (No. 449, in the older collection), commencing immediately above the sinuses of Valsalva, and extending throughout the ascending and transverse portions of the arch, and 10 centimetres down its descending portion, engaging the vessel's entire circumference, but particularly its convex aspect. The atheromatous degeneration ceases at the upper border of the sinuses of Valsalva. Aortic valves healthy. The heart of ordinary size, with a somewhat rounded apex, which is composed principally of the left ventricle. It measures from the apex to the left border of the pulmonary artery 8 centimetres, to the right 10 centimetres, in breadth 10 centimetres. The left ventricle, of whose wall a part has been cut away, seems to have a somewhat larger cavity than usual. The muscular wall, attenuated, measures at an incision near the border, at the base, 7 millimetres; at the middle point, 8 millimetres; at the slightly rounded apex throughout a considerable area, 3 to 4 millimetres. The curtains of the mitral valve rather thickened at their extremities, otherwise healthy. The right ventricle somewhat hypertrophied; its muscular wall measures 2 to 3 millimetres. The opening of the pulmonary artery 9 centimetres in circumference.

A trifling dilatation of the left ventricle, with thinning of the muscular structure rather more marked than it should proportionably be, was, besides some dilatation of the right ventricle and of the pulmonary artery, the only point worthy of note in this case.

12. A tolerably small, spindle-shaped aneurismal dilatation (No. 451 in the older collection), especially involving the convexity of the ascending portion of the arch, cylindrical dilatation of the transverse and descending portions. Very extensive atheromatous degeneration, with closely coalescing bony laminæ. This change is continuous in its full intensity down to the sinuses of Valsalva, but it terminates abruptly at their upper border or in their highest portions. The aortic valves much thickened at their edges and considerably retracted, particularly the anterior flap, so that they were in a high degree insufficient. The heart much elongated, having the apex composed exclusively of the left ventricle. It measures from the apex to the left border of the pulmonary artery 14 centimetres. The cavity of the left ventricle much enlarged, with tolerably coarse carneæ columnæ and musculi papillares, but excepting this with great thinning of the muscular structure. At a section along the middle of the anterior wall the latter measures near the base and at the middle point 7 millimetres; near the apex 4. Mitral valve healthy; the left auricle small. The right ventricle barely as large as usual; its muscular wall in general 2 millimetres thick. The pulmonary artery seems not to be dilated.

The considerable dilatation of the left ventricle which was present in this case has clearly been caused by the insufficieney of the aortic valves, not by the aneurism.

13. An aneurism (No. 1310 in the older collection), in size nearly equal to a child's head, commencing close to the sinuses of Valsalva, projecting from the convexity of the ascending aorta, covers the largest portion of the right auricle. The transverse and descending portions of the arch uniformly dilated, the latter measuring 10 centimetres. A partial aneurism, the size of a goose egg, is situated immediately behind the left subclavian artery. The great atheromatous degeneration which is present almost entirely ceases at the upper border of the sinuses of Valsalva, in which the internal coat is smooth and even. The aortic opening dilated 9·5 centimetres. Aortic valves in the same proportion large, healthy, except that they are slightly thickened at the corpora Arantii. The heart rather large; from the apex to the left border of the pulmonary artery 9 centimetres; to its right border 10 centimetres; the breadth 12 centimetres. The left ventricle slightly dilated down towards the apex. The muscular wall measures in the conus arteriosus 11 millimetres; midway down at the middle line 10 to 11 millimetres; near the apex 3 to 5 millimetres. At the left border of the ventricle it measures near the base and midway down 9 to 10 millimetres. Mitral valve healthy. The right ventricle considerably dilated, especially transversely.

Its muscular structure at the conus arteriosus and at the middle point 3 to 4 millimetres; at the border about 2 millimetres. The opening of the pulmonary artery 10·3 centimetres in circumference.

The muscular structure of the left ventricle was in this case attenuated to a degree corresponding to the slight dilatation down towards the apex. The right ventricle was hypertrophied, with a relative increase of the muscular wall.

14. The aneurism, which occurs in a man aged 48, is of the size of a new-born child's head, begins some centimetres above the sinuses of Valsalva, arises from the convexity of the ascending and transverse portions of the arch as far as the left subclavian artery, after whose origin the vessel contracts rather abruptly. The extensive atheromatous deposit in the aneurism becomes less down the ascending aorta, is continuous into the upper parts of the sinuses of Valsalva; but in their lower parts the internal coat is smooth and even. Aortic valves healthy; their opening 8·5 centimetres in circumference. The heart, not increased in size, of ordinary shape, measures from the apex to the left border of the pulmonary artery 8 centimetres, to the right 10 centimetres, in breadth 10 centimetres. The cavity of the left ventricle appears rather large. The muscular structure in a corresponding degree attenuated; its wall measures in the conus arteriosus 10 to 11 millimetres, at the middle point near the septum 8 millimetres, from this it decreases extremely, measuring nearer the apex only about 5 millimetres, and at the apex itself, over a tolerably large area, only 1 to 2 millimetres. Mitral valve healthy. The right ventricle of ordinary size. Its wall is pretty uniformly 2 millimetres thick. Valves healthy. The opening of the pulmonary artery 9·5 centimetres.

A very trifling increase of the cavity of the left ventricle, with thinning of its muscular structure is, besides a dilatation of the pulmonary artery, the only circumstance that is to be noticed in connexion with this heart.

15. A colossal aneurism (No. 1677 in the older collection) which, consequent on erosion of a rib, burst through the chest-wall to the right of the sternum, and which, with a portion of the size of a fist, lies external to the thoracic wall itself. The portion which is situated in the chest is the size of a newly-born child's head. It arises with a slightly contracted base from the convexity of the ascending aorta. In the transverse portion of the arch also an aneurismal dilatation, the size of half an orange, arising from the concavity, is found. The atheromatous degeneration is continuous down into the upper part only of one of the sinuses of Valsalva, beneath which it terminates with a sharp border at the superior edge of the remaining two sinuses. The aortic orifice 8·5 centimetres. Aortic valves healthy. The heart is smaller than usual—the apex composed exclusively of the left ventricle. From the apex it measures to the left border of the pulmonary artery 7·5 centimetres, to its right border 8 centimetres. The breadth is not quite 9 centimetres. The cavity of the left ventricle is of ordinary dimensions. Carneæ columnæ and musculi papillares particularly fine. The wall, much attenuated, measures at a section in its anterior surface at the base and middle point 7 millimetres, just below this only 5 to 6 millimetres; it then becomes extremely thin down towards the apex. Mitral opening healthy. The right ventricle is considerably diminished, especially in length—6 centimetres. Its carneæ columnæ and musculi papillares of usual size. The wall measures at the base 3 millimetres, elsewhere about 2. Valves healthy. The orifice of the pulmonary artery 9 centimetres.

This is a case deserving of particular attention, since the extreme atrophy of the muscular structure in the left ventricle occurred without any dilation; and apart from this, notwithstanding the obstacle to the pulmonary circulation which this particularly large aneurism must have produced, an especially well-marked diminution of the right ventricle, without thickening of its muscular structure, existed.

16. A partial aneurism, a little larger than a walnut, occuring in a man aged 30. It begins near the bottom of the right posterior sinus of Valsalva, with an orifice of about 2 centimetres in diameter, which runs close to the right attachment of the corresponding valve. It projects just to the right of the pulmonary artery, deeply indenting its right wall. Bursting through a fine opening into the pericardium, another aneurism, smaller, the size of a bean, is situated in the upper part of the right anterior sinus of Valsalva, and in the left sinus there is also found a slight commencing bulging of the arterial wall. The aortic orifice somewhat over 7 centimetres. The valves, a little thickened throughout, are in the closing thicker portions rather atrophied. The lunulæ not increased in size. Both the right anterior and the posterior flaps are at their extremities more markedly thickened and slightly fastened together; besides, their common attachment to the vessel's wall, close to which the aneurismal opening is situated, is strained. It seems doubtful whether the valves with these changes could have been fully competent. The heart rather large; the apex composed almost exclusively of the left ventricle. From the apex the measurement to the left border of the pulmonary artery is 9·3 centimetres; to the right border the same; in breadth 11 centimetres. The left ventricle is somewhat dilated. Carneæ columnæ and musculi papillares of ordinary size. The muscular wall, attenuated, measures near the septum, in the conus arteriosus, 9 millimetres; at the middle point, 8 millimetres; near the apex, 5 to 7 millimetres. Mitral valve healthy. The right ventricle not dilated; its muscular structure, thickened to a considerable degree, measures near the edge at the base 4 millimetres, at the middle point and down to the apex pretty much the same, and near the septum, in the conus arteriosus, fully 6 millimetres; from the middle point down to the apex about 3 to 4 millimetres. It is marked throughout by numerous yellowish-white radiating streaks. The orifice of the pulmonary artery is, as already mentioned, considerably compressed by the aneurism; it measures, if the aneurism be pressed back, only 6 centimetres. The valves healthy.

How far, in this case, a trifling insufficiency in the aortic opening shared in the production of the moderate dilatation of the left ventricle, or did not, is a difficult question to answer. At all events, no hypertrophy was discovered, while the muscular structure was attenuated in a greater proportion than the ventricle was dilated. On the other hand, hypertrophy was found in the right ventricle without any dilatation, and it was plainly caused by the great pressure excreised by the small aneurism on the orifice of the pulmonary artery.

17. A partial aneurism, the size of a walnut, from a man aged somewhere about 50, arises immediately above the right anterior sinus of Valsalva, by means of a rounded orifice 1·5 centimetre in diameter, which projects somewhat down into the sinus and runs close to the attachment of the corresponding flaps of the aortic valves at one end. The aneurism projects at the right border of the pulmonary artery, without, however, compressing this vessel. The entire ascending aorta is uniformly, but not very considerably, dilated, with tolerably extensive atheromatous deposit, which is continuous a little way down into the sinuses of Valsalva. The orifice of the aorta 8 centimetres. All the aortic valves are, in the parts whose function is that of closing the opening, diffusely thickened. The thickening is yet not very considerable, but, on the other hand, is combined with retraction, so that these parts are very much atrophied. The lunulæ are, on the contrary, considerably hypertrophied and pierced through by numerous large apertures. The heart pretty much enlarged, extensively covered with fat; the apex composed exclusively of the left ventricle, which likewise includes more of the anterior surface than it normally does. From the apex the heart measures to the left border of the pulmonary artery 11·5 centimetres, to its right border 12 centimetres; in breadth it measures 12 centimetres. The left ventricle very considerably dilated, with a much attenuated wall; it measures near the septum in the conus arteriosus only 7 millimetres, at the middle point 8 millimetres, near the apex 5 millimetres. At the edge the measurements are—near the base 9 to 10 millimetres, at the middle point 8 millimetres. The carneæ columnæ fine; musculi papillares elongated; mitral valve healthy. The right ventricle is also rather large. Its muscular structure, which at the base measures 3 to 4 millimetres, is elsewhere about 2 millimetres thick; in its outer strata marked throughout by whitish-yellow streaks.

In this case, where an aneurism, the size of a walnut, is situated close to the aortic valves, we have a pretty considerable simple dilatation, without hypertrophy of the left ventricle. The dilatation has, so far as we can judge, chiefly been caused, not by the aneurism, but by the insufficiency of the aortic valves, which was without doubt present. The water-test could not be applied to confirm the existence of insufficiency, but that the retraction of the closing parts of the valves actually produced such, appears among other things from the fact that the lunulæ, as usually happens in similar cases, were extremely strained and hypertrophied, in order to supply the defect. This great straining has, lastly, led to their frequently breaking through and becoming cribriform. The changes which the heart has undergone, are also perfectly in accordance with those that depend on insufficiency of the aortic opening.

[*To be continued.*]

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF MENINGITIS.

(Under the care of Dr. REYNOLDS.)

For the following notes we are indebted to the kindness of Mr. Carter, late Physician's Assistant to the Hospital:—

A. B., aged 25, was admitted under Dr. Reynolds, November 10, 1869, complaining of intense pain all over the head and down the back; to the touch, forehead intensely hot; his temperature was 102°, pulse 64, respiration 24. A spot about upper lumbar vertebra was painful on pressure; he had no pain on moving his lower limbs; no paralysis; had great difficulty in turning in bed from pain in the back; on sitting up the head was forcibly retracted; tongue slightly furred; appetite moderate; no strabismus; no paralysis of muscles of face; pupils slightly dilated, but acting well to light; ophthalmoscope showed hyperæmia of both retinæ, more marked in the left; he is deaf, but answers intelligently questions put to him in writing.

His history is as follows:—He had scarlet fever when 7 years old, and has been rather deaf in both ears since. At 22 years of age he suffered from severe headache and pains in back, which continued to increase in severity. He became violent, and lost his senses, and was removed to Colney Hatch Asylum. He was there for six months. He remained in good health till December, 1869, when he was troubled with pains in the head night and morning. This continued for three weeks, the patient losing strength and pains increasing in severity. He then took to his bed, and it was noticed that his memory began to fail. His appetite began to fail, which before had been enormous. His bowels are habitually relaxed.

January 11.—Patient passed a restless night. The pain in head somewhat relieved by cold applications. Temperature, 102°; pulse, 58; respiration, 20. A blister was applied behind left ear and to nuchæ. 9 p.m. Very restless; twitchings of upper limbs; buries his head in the pillow; apparently dozes for a few minutes, and then wakes up with a scream. On being touched, he draws the head forcibly backwards, and his face is convulsed. No twitching or convulsive movements of lower limbs; he says his head is very painful; tongue dry, furred; complains of great thirst. Liq. morphiæ mxx., statim. 12 p.m.: Patient more restless. Temperature, 103·2°; pulse, 64; respiration varying between 20 and 40. Complains of head and back; given calomelanos, gr. ij., as bowels had not yet been opened; up till this time he has passed water freely.

12th, 6 a.m.—Patient comatose; nurse reports that he became quieter about 1.30 a.m., and appeared to be asleep, but on trying to awake him, to give him his draught, found he was unconscious. Temperature 104°, pulse 80, respiration 50; ordered icebag to head. He was found to have passed a stool in bed. 9.30 a.m.: Temperature 105·5°, pulse 84, respiration 64, loud, stertorous. This began about 8.30; the twitchings of upper limbs still continue, with rigidity; the thumbs of both hands clenched in palms; sweating profusely. Tâche cérébrale very characteristic; comes slowly, and lasts more than three minutes. Urine drawn by catheter, faintly acid; sp. gr. 1025; no albumen; no sugar. 6 p.m.: Remains as above; same rigidity of upper limbs; urine drawn by catheter; temperature 103°, respiration 68, pulse 136. Patient died at 9.45, remaining in same state of unconsciousness, and breathing stertorously.

Autopsy, 40 hours after death, by Dr. Bastian. Rigor mortis well marked. On opening head, no undue adhesions between calvarium and dura mater. Surface of dura mater presents natural appearance. Longitudinal sinus empty. On removing dura mater, surface of arachnoid dry and sticky. Convolutions of vertex notably flattened. Some small yellowish white patches of lymph here and there along vessels; very slight, however, on vertex, but more marked on vessels emerging from each sylvian fissure. Base of brain lined by a thick layer of greenish yellow lymph, from optic commissure back over pons and whole of medulla oblongata, laterally to adjacent surface of cerebellum. Anterior and middle lobes closely united. No obvious tubercular granulations seen on vessels. White substance of both hemispheres softer than natural, and showing excess of red points. Both lateral ventricles notably distended, containing more than four ounces of a somewhat turbid fluid. Corpus callosum and fornix in semi-diffluent condition. No very notable thickening of anterior portion of vellum interpositum, but posterior part adjacent to cerebellum most markedly thickened—the tissue here being about a quarter of an inch in depth, and very hard and firm. A considerable layer of yellowish lymph also extends from this part over upper portion of cerebellum. Both lungs much congested and pulpy, coloured also from post-mortem staining. No evidence anywhere of grey granulations. Heart healthy. Liver: Some putrefactive colouring of organ, which was generally flaccid. No evidence of tubercular granulations on surface or in substance of organ. On section pale light fawn colour; consistence unduly soft. Kidneys natural size; capsule tears off easily; tissue too pale. Spleen smaller than natural. Solitary glands of intestines markedly enlarged.

GREAT NORTHERN HOSPITAL.

OVARIOTOMY—TUMOUR WITH UNUSUALLY LARGE AND SHORT PEDICLE—RECURRENT HÆMORRHAGE.

(Under the care of Mr. CARR JACKSON.)

On Wednesday, May 31, there were two cases of ovarian tumour operated upon at this Hospital, and as each possessed certain characters of interest, they may be briefly noted here. The first case was a patient sent up to Mr. Jackson from Kent, with a tolerably clear history of ovarian tumour, but with not very distinct physical signs. As both cases may be published at another time, however, we need not dwell here on more than the actual operations. The diagnosis had been carefully made, and the tumour was so large as to distend the woman's abdomen to an enormous size, and so thin-walled, that the hand placed on one side of the belly felt the faintest touch of the finger on the other, giving the impression of a single large thin-walled cyst with fluid contents. Mr. Jackson was assisted in the operation by Dr. John Murray and Mr. Henry Arnott. Making an incision some three inches long between the umbilicus and pubes the cyst was reached and tapped easily, twenty-four pints of clear straw-coloured fluid issuing. The wall was so thin and transparent that as it clung about the trocar, as the cyst emptied, one could hardly detect its presence, and considerable care was required to prevent its rupture. On introducing his hand and sweeping it round the tumour, Mr. Jackson found only a few adhesions about the pelvic portion, but a large solid mass the size and shape of a placenta in the wall of the tumour necessitated an extension of the first incision; and when the whole bulk was drawn out of the abdomen, it was seen that the pedicle was very large and fleshy, and so short as to apparently consist of the elongated right cornu of the uterus. And now came the interesting stage of the operation. What was to be done with the pedicle? It was too large to be included in a clamp, and seemingly too short for its stump to be brought to the surface, as such a step would cause much displacement of the uterus. After some consultation, it was decided to ligature the pedicle by passing a strong needle armed with stout cord two or three times through its substance, and then to endeavour to keep it in the wound by means of a couple of strong hare-lip pins passed through it and kept outside the belly-wall. This was accordingly done, free bleeding from the stump being arrested with a ligature and the application of the actual cautery, sutures put into the upper part of the wound, and the woman returned to bed with the usual cotton-wool and flannel bandage. Three or four hours afterwards, however, the dressings were found stained with blood, and, on removing them, a good deal of blood was found soaking the cotton-wool and bandages. Careful search failing to discover the source of hæmorrhage, all the dressings were removed, the wound opened up, and the stump of the pedicle and remains of the adhesions in the pelvis examined. One or two spouting points in the stump rendered an additional stout ligature necessary, and then, a hot iron having been freely used over the cut surface, the whole was allowed to drop back into the belly, the threads being cut short, and all bloody fluid being gently sponged out from the cavity, the wound being closed as before, and supported by fresh strips of plaster. All this time the pulse had kept of fair strength, and no more symptoms of bleeding followed. On examination of the tumour, it was found to be an ordinary instance of a multiple cystic growth, one of the cysts having attained a huge size, whilst the others, remaining small and squeezed aside by the growth of the large one, seemed as

though developed in its wall. The large solid mass was found to consist of decolorised blood-clot, the fibrinous remains of a hæmorrhage, which had filled a cyst, probably the size of a cocoa-nut, some long time previously. Besides this, there were projecting into one of the smaller cavities bean-like nodules of a solid fleshy consistence, made-up, under the microscope, of a spindle-cell tissue, exceedingly rich in oval and elongated nuclei, staining deeply with carmine, and showing some tendency to develope into more mature fibrous tissue. This patient has since died with peritonitis.

OVARIOTOMY—UNUSUALLY LARGE PEDICLE.

(Under the care of Dr. JOHN MURRAY.)

This case resembled in many respects the previous one, but in some points was even more troublesome to deal with. The tumour was not quite so large, and it presented a somewhat lobulated surface on manipulation of the abdomen. The tapping drew off a large quantity of dark green viscid fluid, and subsequent pricks of other cysts brought away in all about twenty pints of fluid of varying colour and consistence. When many adhesions had been torn through, and the mass cleared out, it was found that the anterior portion ran down the front wall of the vagina, firmly adherent to it and to the bladder, and continuous with the very broad and short pedicle. It was, therefore, impossible to clamp the pedicle, although a large-sized instrument was applied; and in this case, again, it became necessary to tie the pedicle piecemeal with stout cord. A staff was introduced into the bladder to make sure that none of this viscus was included in the ligature, and as much of the growth as possible cut away. Here, also, the stump of the pedicle obviously could not be brought out to the surface of the abdomen; it was therefore well seared with the hot iron, the threads cut short, and the whole returned into the abdominal cavity when all bleeding had been arrested. The wound was then brought together, closed with sutures, and supported by straps and bandages in the usual way, and the patient put to bed. On examining the tumour, this was found to be of a more composite structure than in the former case, for, besides a large number of cysts, one of these, the size of a hen's egg, was filled with sebaceous matter, in which was coiled up a bundle of fine hairs of considerable length, and another smaller cyst had a thick and laminated wall of gelatinous substance closely resembling the wall of a true hydatid cyst. The patient in this case made capital progress towards recovery without a single serious symptom. She is still in the Hospital, of course, but may be said to be thoroughly convalescent.

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Medical Times and Gazette.

SATURDAY, JUNE 18, 1870.

PROFESSIONAL MORALS.

As the 17th of this month was appointed for the consideration of the Medical Act (1858) Amendment Bill in Committee of the House of Lords, we gave last week a summary of the various alterations, additions, and omissions which are required to make the measure in any degree satisfactory or useful; but we had not space then to dilate on one weak point in the Bill, which deserves much more consideration than it has yet received.

Among other amendments, the Lord President proposes to insert, after clause 17, a clause providing that any registered Medical Practitioner who has been either before or after registration "convicted in any part of her Majesty's dominions, or in any foreign country, of any offence which, if committed in England, would be a felony or misdemeanour, or, if committed in Scotland, would be a crime and offence, or has been guilty of any infamous or disgraceful conduct in any Professional respect, such Medical Practitioner shall be liable to have his name erased from the register under the principal Act;" and, further, it is proposed to enact that "the General Medical Council may, and upon application of any of the Medical authorities shall, cause inquiry to be made into the case of any person who is alleged to be liable to have his name erased under the provisions of this section, and on proof of such conviction or infamous or disgraceful conduct, shall cause the name of such person to be erased from the register." Now, the provision thus made for "erasing name of Practitioner from register," is very good as far as it goes, but that is not saying much. For it is to be observed first, that the Medical Council is not required to take action in the case of any person alleged to be liable to have his name erased under the provisions of the section, except upon application of the Medical authorities; and secondly, that as under the Amended Act a person may become a legal and registered Medical Practitioner without application to any of the Medical authorities; there will be a yearly increasing number of persons, against whom no Medical authorities may care to set the Medical Council in motion under this section, while no power except the Medical authorities can make the Medical Council act. This is a most grave and serious blot in the Government Bill. Perhaps it will be said that the Medical authorities may be expected to be sufficiently jealous for the honour and purity of the whole Profession, to induce them to keep watch and guard over even the non-affiliated licentiates in Medicine and Surgery. But which of the Medical authorities is to take action in such case? "What is everybody's business is nobody's business," and therefore a non-affiliated licentiate may remain on the register even after conviction of a felony or misdemeanour, or of a crime and offence, because it will not be the business or interest of any special Medical authority to procure the erasure of his name. This, perhaps, might be remedied by enacting that any such conviction shall *de facto* erase a person's name from the register; but then there would remain the case of those who may be guilty of any infamous or disgraceful conduct in any professional respect. How are they to be dealt with? They may be unconnected with any Medical authority, and therefore none of those authorities may care to be at the trouble and expense of bringing them before the Medical Council. No other means is provided for compelling the Medical Council to take notice of them, and we have certainly no security that that body will be ready to expend any of their funds in voluntarily proceeding against such offenders. Perhaps a provision for compelling the Council to act on a memorial or petition signed by a certain number of Medical Practitioners, or some other device, may be among the future Medical Acts Amendment Bills which the Lord President hints at as in store for our happy Profession; but even a certainty of any such amendments in the future would be very poor consolation for the imperfection of the present Government Bill in this respect. It is of the gravest importance that there should be some means provided by which punishment shall certainly follow any offence against the honour or ethics of the Profession; some tribunal before which any Medical Practitioner guilty of outrageous quackery, of using secret remedies, or of "any infamous or disgraceful conduct in any Professional respect," may be brought without

difficulty and without much expense. For the high sense of honour pervading its life, and the high tone of morality ruling and guiding its conduct, the Medical Profession stands second to none; but a body of men counting its tens of thousands must contain not a few weak members, and may contain some who are deliberately and wilfully evil. The former would be strengthened and helped through the trials and temptations of life, and the latter might be deterred from evil, by the existence of such a tribunal, and, at least, actual offenders would meet with speedy and just retribution. Help, and security of this kind against Professional misconduct, the Government Bill wholly fails to give, and any one who will endeavour to amend the measure in this respect will deserve the thanks of the public as well as of the Profession.

THE OBSTETRICAL SOCIETY AND THE AMALGAMATION SCHEME.

The Obstetrical Society have rejected the scheme of amalgamation offered by the Royal Medical and Chirurgical Society by an overwhelming majority. However in some respects we may regret this result, we can by no means say we are surprised at it. To say the truth, the scheme offered by the Royal Medical and Chirurgical Society is not one which the Obstetrical Society could be expected to accept. The scheme undoubtedly fixes a stamp of inferiority on the members of the proposed sections who may not be Fellows of the proposed Royal Society of Medicine. Such members are by the proposed scheme debarred from holding the office of President in the section to which they belong, and from being chosen to represent their section upon the General Council of the Royal Society of Medicine. In fact they would be placed in their own section in an inferior class, cut off from its higher offices and highest honorary distinction and separated from the rest of their brethren by what in the first instance, at least, would be a mere pecuniary distinction. It was hardly to be expected that a young flourishing successful association of six hundred members who in their society are on a perfect equality would assent to a scheme of which this was one of the leading provisions.

But the Obstetricians have another and graver objection to the scheme, which, in our opinion, is an equally valid one. In our last number we stated the general objections to the union of Medicine and Surgery in one section in the new society. Such union, whilst every other department of Professional work is erected into a separate section, is an anomaly which can only be advocated on the ground that hitherto there has existed in England a Medical and Chirurgical Society. We venture to say that, were there a *tabula rasa* of all existing institutions, and did the leading Medical men of London and the provinces meet for the purpose of establishing a Royal Society of Medicine, the two first sections which would be proposed would be a Medical one and a Surgical one, and the third would be an Obstetrical. The history of Medicine from the time of the Trojan war bears witness to the division of the art into Medicine and Surgery. But, like other powerful majorities, the members of the Medical and Chirurgical Society can perhaps afford to ignore history. If so, the existence of Colleges of Physicians and Surgeons at the present day, the separation of Surgical and Medical patients in every Hospital in the kingdom, and the common consent of the Profession and the public throughout the civilised world, prove that the ancient division is one of convenience and utility. We repeat that it is not for the benefit of Surgeons and Physicians to be obliged to listen to each other's papers and discussions, or to forego attendance at their society's meetings. To the Obstetrical Society, however, the union of Medicine and Surgery insisted on by the Medical and Chirurgical Society has a still graver importance. There can be no doubt that if Medicine and Surgery be combined in one section, that section would tower far above any of the others in rank, *prestige*, and probably in numbers. The importance which would be accorded to the Medical and Chirurgical section would proportionately depress the other sections, and reduce them to a secondary and inferior position. Now, we acknowledge that, considering the importance which obstetrics have assumed in the present day, and the enormous benefits which Obstetric Medicine confers on society, the Obstetrical Society, now in a vigorous and flourishing condition, with funds, library, and museum of its own, may reasonably demur to accepting any such inferior status. If Medicine and Surgery were, as they ought, we think, to be, disunited in the scheme, the acknowledged *prestige* which attaches to each of these branches of Medical practice would not be blended together to cast all other sections into the shade, and obstetrics would then take its place on an equal footing with its older sisters.

Another valid objection which the Obstetrical Society has taken is a pecuniary one. That Society is possessed of a considerable capital—upwards of £1100—a library, and a museum. This property is to be handed over entirely to the Royal Society of Medicine, the library and museum indeed being maintained at the expense of the Obstetrical Section, the members of which are to appoint a librarian, and are to have the privilege of access to their own books. The only return proposed for this large property is the admission of any of the present members of the Obstetrical Society to be Fellows of the Royal Society of Medicine on the payment of three guineas per annum.

For these reasons we are not surprised that the Obstetrical Society has almost unanimously rejected the scheme offered by the Royal Medical and Chirurgical Society. It is difficult, indeed, to believe that such a scheme was intended to be accepted. But whilst we can hardly blame the Obstetrical Society for the resolution to which it has come in reference to this particular scheme, we hope that the movement for a united institute or academy of Medicine will not be allowed to stop. If the present Bill before Parliament become law, the necessity for a common association of Medical Practitioners will be greater than ever. There can be no doubt that the powers, privileges, and attractions of the old corporations will be enormously lessened by this Bill. The new licentiates of Medicine and Surgery will have no common home, no centre of attraction or influence. It will, then, be far more necessary than even at present to make one. We say, let the promoters of amalgamation not rest because this particular scheme has failed, but let them persevere to bring about union on a broader and, we may add, a fairer basis. The Medical Profession will never exercise its legitimate influence in public questions over society at large and over its own members without union. Our various Medical societies present a machinery through which such union may be brought about. But this cannot be done without some sacrifice, and the exercise of mutual trust, forbearance, and goodwill. Partial and distrustful union would be evanescent. To be lasting and useful, it must be voluntary, hearty, and complete.

LIEBIG ON THE SOURCE OF MUSCULAR FORCE.

There are at present two theories of the source of muscular force: (1) that it arises from decomposition of the nitrogenous substance of the muscle, in which decomposition oxygen plays a part—though not an essential part; (2) that it is due to the combustion of non-nitrogenous material.

The former theory is that maintained by Liebig, the latter is denied by Liebig, who urges objections to it in the third section of his recent memoir.

This theory was propounded by Fick and Wislicenus a few years ago, and developed by Frankland, whose statement of the *modus operandi* during muscular action is as follows:—

Both the oxygen and the combustible nutritive material are contained in the blood which circulates through the muscle.

So long as the muscle is at rest they do not act chemically upon one another, but so soon as the brain sends an impulse to the muscle through the nerves, so soon oxidation begins. In this oxidation potential force becomes actual force, part of which takes the form of mechanical motion, and part the form of heat. Such is the source of the muscular power and of the heat which accompanies muscular exertion. The muscle itself is somewhat analogous to the piston and cylinder of a steam-engine, and the urea formed during muscular action is to be looked upon in the light of material which has degenerated by friction, being the index to the mere wear and tear of the instrument.

This view owed its origin to the now well known ascent of the Faulhorn by Fick and Wislicenus, which was performed on a strictly non-nitrogenous diet, and during which the excretion of urea was determined, and found not to be increased above the average.

Fick and Wislicenus argued that inasmuch as they took no nitrogenous food, and excreted no more nitrogen than usual in the form of urea, and yet performed an excessive amount of muscular work, it is impossible that muscular forces can be the result of decomposition of muscle into urea and other products, and that therefore muscular forces must have another source, and that source they declared to be the oxidation of non-nitrogenous matter which they received into their bodies in the shape of the non-nitrogenous diet indulged in during the memorable Alpine journey.

Liebig points out that they omitted to determine the quantity of nitrogen passed in the fæces, and that they did not weigh themselves before and after the journey.

If the animal economy were like a gun instead of being like a watch, reasoning such as the above might be valid. Quoting some experiments by Dr. Parkes, he shows that the increase in the excretion of urea is to be observed a *few days after* violent muscular exercise. He further points out that the production of urea in the body is not exclusively due to muscular action, and cannot therefore be looked on as the measure of muscular decomposition. Liebig's own account of muscular action is that during it the products of metamorphosis accumulate in the structure of the muscle, and that this accumulation occasions the well-known sense of muscular fatigue. After the muscular exertion is over there is gradual cleansing of the muscular structure, and with this cleansing the sense of fatigue goes away also. Against the theory that oxidation of non-nitrogenous material in the circulating fluid is the cause of muscular action, he adduces the fact that isolated pieces of muscular structure which have been washed with a weak saline solution exhibit muscular action when properly stimulated.

CHARLES DICKENS.

Apoplexy has claimed another victim from among our intellectual ranks. The gap left by the fall of Dickens in the foremost van of thought, and labour, and human sympathy, will long remain to remind us of what we have lost. A chill dark cloud casts its saddening influence over us, when we think that the busy brain, the warm heart, and kindly hand of Dickens, shall no longer in fresh manifestations of his genius, by moving pathos, innocent and genial fun, appreciative wit, and kindly satire, appeal to all that is good within us, for the confirmation of that good, and the abolition of all that is vile, selfish, and false. His wonderful knowledge of human nature, his power of delineation, and by his master-touch of giving life and expression to all his characters and their surroundings, are perhaps nowhere more evident than where he introduces subjects connected with the Medical Profession. While recognising the truthfulness of his sketches of the Medical student of former days, we shall not delay upon the description of the little weaknesses of Messrs. Bob Sawyer and Ben Allen, further than to express our conviction, or at least our hope, that among students of the present day, the genus of which those gentlemen were such well marked types, is now almost extinct. The death-bed of Mrs. Dombey has, in its sad details, no more strikingly realistic incident than is conveyed to us by the solemn race of ticking audible in the hushed room between the watches of the two Medical attendants, while the child Florence Dombey sobs on her mother's bosom, and the practical strong-minded sister-in-law calls in vain upon the dying lady to "make an effort."

To Physicians and psychologists, what could be more strikingly truthful than his tracing of the gradual progress of the overstrained conscience, heart, and brain, to crime, insanity, death, or suicide, in the instances of Mr. Dombey, Lady Dedlock, Carker, Mr. Merdle, Jonas Chuzzlewit, Ralph Nickleby, and Quilp? In the unfinished "Mystery of Edwin Drood," we have also dread foreshadowings of similar catastrophes, and of the self-inflicted sufferings of the opium-smoker. These and others of his characters, no less by the power and truthfulness of description in their main subject, than by the care and minute accuracy with which all minor details are filled in, establish for Dickens in the roll of fame a place hardly below Goethe or Scott as a delineator of mental phenomena. The intellectual breakdown of Doctor Blimbers' favourite pupil Toots, to those who read the moral aright, conveys in every incident of his life a strongly warning protest against the psychical and physical errors in the training of youth which, through unnaturally forced development, can eventuate in the fatuity and semi-idiotcy into which the early promise of poor Toots degenerated. Physicians, in their efforts to restrain the injudicious anxiety of parents to urge to unnatural effort the excitable brain and nervous system of a promising child—how often, alas, exerted in vain—have a powerful ally in the history of Mr. Toots; in contrast with which, the dull boyhood, the plodding youth, the struggling manhood, and the ennobling love of Traddles, who, even after having attained the position of a judge, was suspected of adhering to his early habits, and of drawing skeletons on the Bench, afford an equally strong instance of the advantage of not forcing the intellectual at the expense of the physical powers of children. When parents learn and thoroughly apply this lesson, they will spare themselves many a cruel pang, and their Medical attendants many of their saddest and most disheartening duties.

On all social topics Dickens took just and generous views. He laid bare with an unsparing hand, in all their hideous deformities, the glaring evils of our Poor-law administration, the cruelties of the debtor's prison, and the heart and soul wearing delays of our courts of Chancery. He at the same time portrayed—with a supreme delicacy of touch which has gained for him the proud position of the purest of English novelists, and most heart-winning of moralists—the existence of those social sores which are in their nature so difficult to treat, and which depend so much upon the misdirection of uneducated affections and uncontrolled passions. He had the satisfaction of seeing the removal of many of the evils which he had described. We have not yet, however, reaped the full fruit of his labours.

The interment of his remains in Westminster Abbey was the first and most natural tribute of respect which England would pay to the "apostle of the people." The simplicity and privacy of the ceremony were in complete accordance with his own wishes on the subject, and a characteristic protest against the ostentatious display which, as a supposed means of honouring the dead, in reality feeds the insatiable trade instincts of a class which, in the persons of Mould and others, Dickens had freely satirised.

It has been already declared from more than one pulpit that as a teacher of man's duty to man, as a sympathiser with all forms of human suffering and joy, such was the natural instinct of purity in Dickens's mind, that he may be regarded

as little else than a teacher sent by God, and that he has inculcated the practice of Christianity with much greater effect than many priests have done. No other writer of fiction has ever with such observant care and such gentle sorrow depicted the "old, old fashion death"—especially of the young—or has with such grateful and glowing hope declared his faith in the "older fashion still—of immortality."

In every future advance which the world may make, and in every victory gained over meanness, avarice, fraud, sensuality, and self, we and our children's children, while and wherever the English tongue is spoken, will keep Dickens's "memory green."

THE WEEK.

TOPICS OF THE DAY.

The following letter from the Duke of Argyll to Sir Walter G. Simpson contains a gracious recognition by her Majesty of the services to science and the public performed by the late Sir James Y. Simpson:—

"June 9, 1870.

"Sir,—I have received an order from her Majesty the Queen to convey to the family of Sir J. Simpson an expression of her Majesty's warmest sympathy in the loss they have sustained, and an expression also of her Majesty's own sorrow on account of the loss which the country has sustained in the death of so great and good a man.

"Although I have only just received this command, it was the Queen's intention that it should reach me some time ago. Accidental circumstances occasioned a delay.

"I now obey her Majesty's command, and I need hardly add on behalf of the Duchess and myself, that we both mourn the loss of a very dear personal friend.

"I am, &c. "Argyll."

A meeting of representatives of the University of Dublin, the College of Physicians of London, the College of Surgeons of England, and the Irish College of Surgeons, took place on Wednesday, for the purpose of considering certain amendments in the Lord President's Medical Act (1858) Amendment Bill, proposed by the College of Surgeons of Ireland. A draft of those amendments is before us. The first is an amendment on Clause 12, paragraph 3, which enacts the toleration of all theories of Medicine and Surgery in the examinations. We confess that the proposed amendment seems to us rather confused. It proposes to enact that, "if any attempt has been made by any Medical examining board to require any candidate to adopt or abstain from adopting, subsequent to obtaining his licence to practise Medicine or Surgery, or both Medicine and Surgery, the practice of any particular theory of Medicine and Surgery, as a condition of admission to or of passing any such examination, or otherwise," the General Council is to interfere and to order the Board to desist from such attempt; and in case of refusal to dissolve it. This resolution is undoubtedly well meant, but it is open to the objection that it is impossible to make a course of conduct subsequent to passing an examination a condition of passing such an examination. The general feeling of the meeting we understand to have been that clause 18 of the Bill as originally drawn should be reintroduced entire, or, failing this, that only the graduates of those universities that require graduation in Arts prior to Medical graduation should be exempt. As such a regulation would effectually exclude the University of London, as well as, we believe, the University of Cambridge and all the Scottish universities, we do not believe it has much chance of being adopted. If universities only are exempt, they at least must be submitted to a very rigid control by the Medical Council or some other body. But it would be far better, as we have always maintained, that university graduates should be obliged to enter at the common portal, entrance being made as easy to them as possible. In this way the main principle of the Bill would not be infringed. We hear that the Government are unwilling to expunge the obnoxious majority clause. In our opinion this is one of the most objectionable clauses in the whole measure, and it is unnecessary, as in the case of the Medical authorities not being unanimous the business of settling a scheme for an examining board would devolve upon the General Medical Council in which all parties are represented.

The adjourned special meeting of the Pathological Society for the consideration of the details of the scheme of amalgamation proposed by the Royal Medical and Chirurgical Society will be held on the evening of Monday, June 20, at half-past eight. The vote at the last meeting, which pledged the Society to the acceptance of the principle of amalgamation, left it perfectly free to discuss the details of the plan proposed for its acceptance. As the determination to which the Society may come on Monday will not only necessarily affect very seriously its future course and interests, but will also exert a great influence on the chances of establishing a national and comprehensive Institute or Academy of Medicine upon a broad and firm basis, we trust that the members will assemble in full numbers and will give the proposals submitted to them their calm and unbiassed consideration. We discussed the position of the Pathological Society in reference to this matter last week, and we have nothing to add to our remarks but this: that the Pathological Society has so little to gain by change and may lose so much that it has a right to insist upon the fullest security possible being afforded it against the latter. The only motive which can actuate its members to quit the position of prosperous independence which the Society has attained is the good of the common Profession, the advancement of Medical interests and science. But if the members of the Society act thus loyally and disinterestedly, they have a perfect right to be protected as far as possible against the loss of prestige, funds, and utility which threaten their Society when it takes the rank of a section.

We are glad to announce that Mr. John Adams has, in the exercise of a wise discretion, declined to be put in nomination for one of the vacant seats in the Council of the Royal College of Surgeons. In saying this we would entirely disclaim all personal reference. Mr. Adams stands so high in the Profession of Surgery and is so high in the esteem of his Professional brethren, that personally we, and we believe the major part of the Surgical Profession, would gladly see him receive any honours for which he may be eligible. But we think that it is a mistake for gentlemen who have completed a term of office on the Council, and then from any cause have been passed over when they have offered themselves for re-election, to come forward again as candidates after a longer or shorter interval of time. Such a line of procedure is not likely to secure the votes of the younger Fellows, and must generally lead to failure and disappointment. With regard to the four candidates—Mr. Erasmus Wilson, Mr. Lee, Mr. Spencer Wells, and Mr. Holmes Coote—the Fellows have had ample opportunity of estimating their claims and qualifications for office. Mr. Holmes Coote, of course, has the prestige of holding office in one of the great Hospitals—a fact which will undoubtedly secure him many votes. Mr. T. Spencer Wells has the merit of having established a dangerous and difficult Surgical operation amongst the legitimate proceedings of Surgery, and, by thus doing, has founded a claim to be one of the chief improvers of Surgery in the present century. It would be out of place for us here to discuss his claims to a seat in the Council of his College as an enlightened Medical politician and statist. The fact that, for a number of years, he conducted the *Medical Times and Gazette* with success remarkable as it was uninterrupted, with unblemished reputation and even-handed impartiality, is known in all Medical circles. It seems unnecessary to show that such public services deserve the recognition of his Professional brethren, but we may be permitted to say that such a career is one of the best possible guarantees of the

fitness of a Surgeon to discharge the duties of office in the Council Chamber of the College.

Mr. Hulke has resigned the Assistant-Surgeoncy of the Middlesex Hospital, and succeeds the late Mr. Moore as Surgeon. Mr. Henry Arnott, Lecturer on Pathology at the Hospital, and Surgeon to the Great Northern Hospital, is a candidate for the vacant Assistant-Surgeoncy.

On Thursday, last week, Dr. Lankester held an inquest on a child named Sleep, aged 20 months, who died of small-pox unvaccinated. It appeared that the parents had been travelling, and they pleaded ignorance of the law. The jury returned a verdict "That the deceased, who had not been vaccinated, died from small-pox, brought on by natural causes."

A bad case of baby-farming is being exposed at Brixton. A woman named Waters or Willis is charged with receiving children for a payment of £5, and then starving them with insufficient and improper food. The dead bodies of several children have been found in the neighbourhood. Paregoric elixir seems to have been the drug which was used for making and keeping the children quiet.

The effort of Mr. Raikes to draw the attention of the House of Commons to the case of the Medical officers of the army who are serving on the west coast of Africa deserved a better fate than to be stopped by a count-out. That a real injustice has been done to these officers we have no doubt. From a Parliamentary return moved for in the beginning of last month by Mr. Brady, we learn that between the first day of April, 1856, and the first day of April, 1867, seventy-six Medical officers served on the coast, and that of that number fifteen, or one in five, died. So much for the dangers of the service. By the Army Medical Regulations of 1859 every year's service on the west coast of Africa counted as two years for promotion and retirement. By the Royal Warrant of 1866 this provision was limited. The Warrant states that "each year of such service shall be allowed to reckon towards promotion and retirement as two years of ordinary service, but it shall not so reckon towards increased pay." But by the Royal Warrant of 1867 the limitation is carried still farther, and the Medical officers who voluntarily face the deadly climate are still farther mulcted of their hard-earned rewards. This Warrant provides that each year of such service shall be allowed to reckon towards promotion and retirement as two years of ordinary service, but it shall not so reckon towards increased pay or qualification for the rank of Surgeon-Major. Now this gradual diminution of the reward for what is confessedly in time of peace the most dangerous service on which a Medical officer can volunteer seems to us very mistaken policy. It inflicts injustice upon the officers who are now serving on the coast who may have volunteered under the old regulations, or at least it treats them worse than their predecessors, and it offers but scant inducement to young Medical men to face the deadly influences of the Gambia and Cape Coast Castle.

We are glad to announce that the Presidents of the Royal Colleges of Physicians and Surgeons have arranged to wait on Mr. Goschen for the purpose of urging on him the justice and expediency of supporting Mr. Brady's Bill for the Superannuation of Poor-law Medical Officers. On the same occasion the memorial of the Poor-law Medical officers will be presented.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

At the meeting of this Society on Tuesday evening last, two papers were read, one by Mr. Henry Lee, the other by Dr. Meryon. Mr. Lee dwelt with the practical subject of removing subcutaneous tumours without hæmorrhage or loss of skin; Dr. Meryon with a more abstruse one—the "Functions of the Sympathetic." Dr. Meryon's paper was an extremely careful compilation of all the physiological and pathological facts bearing on his subject—it was, indeed, so ponderous that the Fellows of the Society seemed afraid to approach it. Yet his mainstay were the researches of Claude Bernard, now many years old; they were published in this journal fifteen years ago. And it seemed to us that in his selection of a test object, so to speak, he was rather unfortunate. The nervous connections of the parotid gland are too complicated to allow of exact researches on the special effects of motor, sensory, and sympathetic nerves. Had he selected the submaxillary, his proofs would have been easier and more striking. Still, the laborious compilation will be useful, and it constitutes a sound groundwork for the doctrine that the sympathetic is the vaso-motor nerve; that its stimulation contracts, its section dilates, the bloodvessels throughout the body. After the meeting Mr. Spencer Watson showed an ophthalmoscope which might be used without darkening the room. Mr. Brudenell Carter also exhibited a kind of lens to be used with the ordinary reflector in ophthalmoscopy. It is constructed on something of the same principle as the binocular microscope, and enables two observers to study the fundus of the eye at the same moment. It promises to be exceedingly valuable in consultations.

THE EPIDEMIC OF SMALL-POX IN PARIS.

We proceed to give a brief account of the opinions expressed at the three meetings of the "Vaccine Congress" that have been held, though why this term should be attached to it it would be hard to say, seeing that it is a mere meeting of all persons, whether Professional or lay, who feel interested in the subject of small-pox. M. Tardieu, jun.'s theory that epidemic small-pox depended, just like affections of the respiratory organs, on meteorological causes, did not meet with much approval from the meeting. M. Lanoix observed that the epidemic did not, in fact, depend at all on local causes, but originated at a great distance. For several years past, small-pox has been propagated along the shores of the Pacific, extending over a space of 1800 leagues from Valparaiso. Hence has no doubt been derived the germ, and it is on the coasts of Europe that its epidemic influence has been first exhibited. M. Marchal de Calvi observed that, while the meteorological influences exerted undoubtedly an adjuvatory influence, by themselves alone they were inoperative. Small-pox is an essentially specific affection dependent upon a germ which you can no more beget by ozone and north-east winds than you can a child. M. Tardieu explained that he did not wish to imply this, nor did he did he deny the influence of vaccine in ordinary times. Epidemic variola, however, is a very different thing, and cannot be combated by vaccination as long as the atmospheric influences prevail. The various epidemics—variola, typhoid, cholera, scarlatina, etc.—succeed each other, and are transformed one into another; and if they are not always present it is that their germs, which always are so, require certain atmospheric conditions to call them into activity. M. Revillout remarked that the conclusions of M. Tardieu were based entirely on ozonometric data; but these are too uncertain to be relied upon, and often undergo great changes within a few hours at the same station, and quite independently of the direction of the wind. There can be no doubt that vaccination is highly useful during epidemic variola if not delayed until the person is already the subject of the disease. Among the patients in one of the special services for small-pox none were found who had been effectually revaccinated. M. Caffe observed that ozone has already been supposed to play an important part in the generation of disease; but some of those who have most especially been engaged in the investigation, like M. Scoutetten, have abandoned the idea, owing to the excessive and sudden variations observed in the proportions of this mysterious agent.

M. Lanoix, the introducer of "animal vaccination" from Italy into France, finds himself placed on his defence in the present congress, a strong party adverse to the practice having declared itself in Paris. In his present paper he recapitulates the reasons which rendered the new practice desirable—viz., the rarity of human virus, the difficulty of keeping up the supply in opportune time, the diminution of its power, the insufficiency of the organisation for its distribution, and the danger of transmitting diseases by it, especially syphilis. On the other hand, the advantages of heifer vaccination consist in the abundance of the virus produced, the facility and rapidity of such production, the greater intensity of the virus, the permanence of the service for its supply, and the absence of all risk of syphilitic infection. It is obvious that these propositions contain many debateable points; but in his present address M. Lanoix defers the consideration of all these except that of vaccinal syphilis, which is the great *cheval de bataille* of the heifer vaccinists. For the purpose of admitting this into an ampler field of operation than is generally done, he opens the door widely by maintaining that there are two forms of vaccinal syphilis—the one "evoked" in a subject the issue of syphilitic parents, and the other inoculated. The vaccine pustule on the former may not betray the slightest abnormal appearance until the twelfth or fourteenth day, so that at the time of vaccination from it there is no means of testing its genuineness, except from the history of the parents.

Of course such meetings as these offer good occasions for vaunting the value of specific modes of treatment, and accordingly M. Jaffin has one which he "has always found successful in every description of epidemic disease." This is to be comprehensive with a vengeance, and fortunately also the remedy is simple enough, consisting only in a gramme of quinine dissolved in 120 grammes of an opiated vehicle, of which a tablespoonful is to be taken every two hours!

The number of deaths from small-pox for the week ending June 11 were 165, in a general mortality of 1058, leading to the hope that the disease is on the decline, although at present this is very slow.

ROYAL IRISH ACADEMY.

On Monday evening, the 13th inst., Dr. Sigerson, F.L.S., read a paper before this body, in which he communicated the results of various examinations he had made of special atmospheres. On a former occasion the author had spoken of the ordinary atmospheres of the town, the country, and the sea. In his present paper he treated at length of the properties, chemical and microscopical, of the dust found in different factories, in stables, dissecting-rooms, and hair-cutting establishments. He also alluded to the presence of numerous small globules of nicotine in even a thin stratum of tobacco smoke, and to the existence of similar globules of a poisonous oil in the air breathed by professional tea-tasters. The revelations made by the microscope as to the composition of the dust found in the dissecting-room were of a particularly startling character. Literally speaking, it consisted chiefly of fragments of the different structures of the human frame; muscle, cuticle, epithelium, white and yellow fibrous tissue, were all recognisable to a greater or less extent. No stronger evidence of the necessity of adopting adequate means for disinfecting the air of our dissecting-rooms and Medical laboratories could be adduced. In the dust collected in an iron foundry this metal was present in the form of minute globules, translucent, and hollow. Dr. Sigerson believed this to be the only example of iron being pervious to light, and as such he regarded the examination as one of great interest. In the discussion that followed the reading of this valuable contribution to the study of a subject which has of late been attracting great attention, Professor Sullivan suggested that it was the magnetic oxide of iron, rather than that metal itself, which was present in the globules described by Dr. Sigerson.

GOOD ADVICE.

In a trial at the Old Bailey the other day, a Surgeon was indicted for having feloniously assaulted a woman whilst she was under the influence of chloroform. The evidence rested mainly on the statement of the woman herself, and the jury were evidently against the prisoner. The judge, however, fortified by Medical evidence, summed up in his favour, and the prisoner was acquitted. On leaving the bar, his lordship advised the prisoner never to administer chloroform to a patient unless in the presence of a third person, a piece of advice applicable to all members of the Profession.

LOOK TO YOUR ACCOUNT-BOOKS.

A case was tried in the Bail Court last week of some importance to Surgeons in general practice. Messrs. Garlick and Cuff, the plaintiffs, were Surgeons, and dissolved partnership in March, 1866. The partnership had lasted some years. In order to arrive at an accurate result, all the outstanding debts had to be collected, and the defendants, Messrs. Hain, were employed in the collection from 1866 to 1869. £1034 were collected, and of this £100 were handed to the plaintiffs, £906 being retained for their charge for collecting. When the action was brought, the defendants paid £200 into court, in addition to which the jury awarded the plaintiffs £286 8s. 6d., making a total of £614. The case was somewhat complicated, and witnesses were examined on both sides. Mr. Serjeant Parry, who was counsel for the plaintiffs, said, according to the defendants' statement, "they were themselves engaged upon this business 3809 half-hours, at three guineas a day—£333 10s. 1d.; their senior clerk had been engaged 93½ days at a guinea and a half a day; a second clerk 279¼ days, at one guinea a day; and a third clerk 18½ days at about the same sum." For the defence it was urged that the charges were fair and reasonable, that the defendants had been employed to make up and investigate the books from 1863, and that the books had been most irregularly kept. Many of the alleged debts had been received, but no credit had been given in the books. There were 1760 debtors, and nearly £6000 appeared as debts in the books, and all those matters had to be gone into. To add to the difficulties of the defendants, the two partners were so hostile that they did not even speak, so that the defendants had to communicate with them separately. Persons who undertook these duties could not be properly and honestly remunerated by a commission. The judge having summed up, the result was as stated above.

INSURANCE OF LIFE AND AGAINST ACCIDENTS.

Policies for the assurance of life or from accidents should be simple in their details, and, as far as possible, indisputable. Nothing has a greater tendency to shake the confidence of the public in the value of life assurances than disputes between the representatives of persons assured and the directors of assurance companies.

A case came before the Court of Exchequer, sitting *in banco*, last Saturday, which raised a very important question upon a policy of insurance against accidents. The insured Smith was washing his feet in an earthenware pan, when the pan broke, inflicting a severe wound on one of his feet. He was taken to an Hospital, and, after two or three days, erysipelas supervened, and, increasing in intensity, ultimately caused his death. Previously, he had effected a policy against accidents with the defendants (the Accident Insurance Company, Limited) for a sum of £1000, and it contained a clause stating that "it did not insure against death or disability arising from rheumatism, gout, hernia, erysipelas, or any other disease, or secondary cause or causes, arising within the system of the insured before or at the time or following such accidental injury (whether causing such death or disability directly or

jointly with such accidental injury)." The question now was whether the death of the insured came within that exception. It was contended on the one side that as the erysipelas was the result of the cut, the defendants were liable; on the other side it was submitted that death from erysipelas was expressly and directly excluded by the terms of the policy. There being a difference of opinion amongst their lordships, Mr. Baron Cleasby, as junior judge, delivered his judgment first. He said that although there could be no doubt the erysipelas was due to the wound, yet they would be departing from the clear and express language of the contract between the parties if they held that the defendants were liable. Barons Channell and Martin were also of opinion that the defendants were entitled to judgment. The Lord Chief Baron said the case was full of doubt and difficulty, and after the opinion delivered by his learned brethren, he could not but mistrust his own, but he thought that judgment should be for the plaintiff. He agreed with what had been said by the Court of Common Pleas, that in cases of insurances the tendency should be to hold rather with the insured than the company where any ambiguity arose on the face of the policy, and he would add that it was equally important where an insurance company thought fit to introduce an exception to the liability for which they contracted, that they should express that exception in clear and unambiguous language. In this case he thought the language used was ambiguous, because all doubt could have been removed by the defendants if they had said the policy was not to include erysipelas, "whether caused or brought on, or not brought on by accident." He arrived at the conclusion that cause of death came within the terms of the policy, and that the plaintiff was entitled to judgment. The majority being in favour of the defendants, judgment was entered for them.

We have entered at some length into this matter as it is impossible to overrate the importance of the question. Upon strictly legal grounds the majority of the judges were no doubt right, but taking a broad and equitable view of the case, we feel inclined to agree with the good common sense remarks of the Lord Chief Baron. It cannot for a moment be doubted that the erysipelas was in some sense a result of the wound, and it was against the wound accidentally inflicted that the insurance was effected. Taking into consideration the frequency of erysipelas following injuries and causing death or disability, the policies of the Accident Insurance Company have a less value than the insured has a right to expect. We assume, of course, that the insurer makes himself before insuring well acquainted with the terms of his contract. But these terms, as the Chief Baron observed, are ambiguous in the case of the Accident Insurance Company. There should be no such uncertainty in so important a contract. We are convinced that insurance offices effect more public good and serve their own interests most by making their policies "indisputable."

FROM ABROAD.—M. LE FORT ON WATER-DRESSING IN PARIS.

M. Le Fort recently read an interesting paper at the Academy "On the Employment of Continuous Baths in the Dressing of Wounds." He observes that the great mortality arising after operations in the Paris Hospitals is especially due to the occurrence of erysipelas or pyæmia. The liability to these affections not only constitutes a constant danger for the patients, but it interferes with the progress of Surgical science; for the Surgeon finds himself reduced to act with an amount of prudence and circumspection not called for elsewhere. Under these circumstances the first object must be to diminish as far as possible the number of cases of spontaneous erysipelas or purulent infection, and to prevent the general dissemination in the Surgical wards, which such isolated cases may give rise to. Three circumstances may influence this dissemination: the nature of the medium in which the person operated on is placed, the dietetic regimen he is subjected to, and the mode of dressing employed. The great attention which has been paid to Hospital hygiene during the last ten years, and the improvement which has taken place in the diet of the patients in the direction of rendering it more tonic and stimulant, have been attended with excellent results. These have diminished the occurrence of spontaneous purulent infection; and it is to the dressing employed that we should look to impede its dissemination, while as regards erysipelas, it may not only prevent its propagation, but even its appearance.

Most Surgeons, being now aware of the important part which atmospheric air plays in the propagation of these affections, whether this be explained by any hurtful properties of the air itself, or by its permitting the decomposition of pus and the production of septic matters, are anxious to prevent its gaining access to wounded surfaces. Some, pursuing the same object in a different way, have sought to prevent the absorption of infectious germs by inducing obliteration of the absorbent vessels which exist at the surface of the wound, sometimes by modifying the character of the operation, and at others by covering the surfaces with astringent or even caustic substances. The obliteration of the vessels has been sought by the aid of cauteries, especially galvanic, and by the operation of *écrasement linéaire;* but, after trying an infinite number of applications to wounded surfaces, Surgeons now seldom resort to other than simple cerates, which have rather in view preventing the dressing from adhering than that of modifying the character of the wound. Even these are now rejected almost everywhere, except in France; and M. Le Fort attributes a good share of the traumatic erysipelas still met with so frequently in Paris to persistence in this mode of dressing. Various, indeed, have been the endeavours of late years to supersede this. Thus, M. Laugier has employed occlusion by means of goldbeaters' skin; but, although access of air may be prevented effectually in small breaches of surface, this is far from being the case in amputation wounds with abundant suppuration. In M. Chassaignac's mode of dressing by occlusion, diachylon forms the basis, and, although this is excellent in granulating wounds, M. Le Fort believes that, in quite recent wounds, it may even be a dangerous application, and that it is not unfrequently the point of departure of an attack of erysipelas. M. Guérin's apparatus for "continuous aspiration" is a very effectual means for preventing the contact of air, and the complete removal of pus as it is formed; but although excellent results may be obtained from its use in the treatment of amputation wounds, it is a complicated instrument which is difficult of application. Mayer, Langenbeck, and Valette, have sought to isolate the wound and remove the pus by keeping the stump in a permanent bath of tepid water, and the want of success this plan has met with in Paris has no doubt been in part due to the faulty apparatus employed. Properly used, it furnishes good results in amputations of the leg and forearm, but is of very difficult application in those of the thigh. The escharotic effects of perchloride of iron, and the coagulation produced by alcohol, have disappointed the hopes once so warmly entertained concerning them—while the water-dressing as employed in England with so much general advantage has its inconveniences. Evaporation takes place in spite of the impermeable covering, especially at the edges, leading to desiccation and adhesion of the dressing, sometimes giving rise to a breach of surface that may be followed by erysipelas. Mr. Lister's antiseptic dressing does not seem to have been attended with the brilliant results once anticipated from it; but, although it does not prevent the spontaneous development of erysipelas, it certainly seems to be possessed of some advantage as regards the propagation of this disease and pyæmia by infection.

The indications, then, that Surgeons have in view in the different modes of dressing may be succinctly stated as—the protection of the wound from the contact of air; its modification when possible, by medicinal agents; the maintenance around

it of a certain amount of moisture; the prevention of the decomposition of the pus imbibed by the dressings; the keeping the wound in a state of extreme cleanliness; the prevention of the adhesion of the dressings, and the destruction of germs that may give rise to infection. M. Le Fort believes that these ends can be best attained by a slight modification of the water dressings now in use. He entirely proscribes the use of fatty substances, as also as regards recent wounds of diachylon, and never employs charpie, which by its absorbing power, may readily become the receptacle of germs. He covers the wound with one or several compresses, moistened with water mixed with a tenth part of alcohol or spirit of camphor, adding if additional stimulus be required a little sulphate of zinc, hermetically covering the whole with a large piece of oiled silk and some turns of a bandage, so that evaporation is effectually prevented. In this way moisture is retained equivalent in its effects to a continuous bath, without the inconveniences of this or of irrigation. The pus, it is true, remains in contact with the wound, but the experience derived from dressing by occlusion has shown that when it is unchanged such contact is innocuous. This seems so simple a modification of what has already been done, as to hardly justify a special communication, but in the hands of its author it has proved of signal benefit, erysipelas having become nearly extinguished in his wards at the Cochin Hospital, although the wounds treated there have been very serious. Purulent infection, too, when it has appeared in isolated cases, has been confined to such, and those melancholy series of cases met with in his former practice are no longer found to exist. The great operations, too, have recovered in a remarkable proportion.

"In conclusion," M. Le Fort says, "if this mode of dressing has any influence over the appearance of complications, which are so frequent in some if not all of our Hospitals, it is especially on erysipelas that it is especially exerted. Recalling the time when I officiated at La Charité for my masters, Velpeau and Denonvilliers, when I scarcely dared open an abscess for fear of erysipelas, I am naturally struck with the fact of finding more than two years pass away without a single case of erysipelas being met with, in a ward where a great number of men have been treated for wounds and lesions often of a very grave character. Formerly, when I practised an important operation, such as an amputation, my chief fear was lest purulent infection should supervene. Death was then a perpetual menace, whereas now recovery is the normal issue of active intervention."

PARLIAMENTARY—THE MEDICAL ACT (1858) AMENDMENT BILL—MEDICAL OFFICERS ON THE WEST COAST OF AFRICA.

In the House of Lords on Monday, June 13, the Earl of Kimberley presented a petition from the "Apothecaries' Hall of Ireland," against the amendments in the Medical Bill proposed by the Irish College of Physicians.

In the House of Commons, Mr. Raikes rose to call attention to the hardship inflicted on Medical officers serving on the west coast of Africa, by the War Secretary's determination to disallow their claims to promotion. Those Medical officers who went out in the first instance were encouraged by the military regulation, which informed them that they would have an opportunity of counting their service on that coast as of double value for promotion and retirement. Their position was, however, considerably modified by a subsequent warrant, which stated that their service would count as double for promotion, but not for increased pay, nor for promotion to the rank of Surgeon-major. He thought this was a great hardship, and begged to move:—"That in the opinion of this House it is undesirable to deprive Medical officers who volunteered for service on the west coast of Africa before April 1, 1867, of those advantages by the prospect of which they were induced to undertake that service."

On the motion of an hon. member, the Speaker again counted the House, and, it appearing that only twenty-four members were present, the House stood adjourned.

A COTTAGE INFIRMARY is proposed to be established in connexion with the Penzance Dispensary.

UNITED HOSPITALS ATHLETIC SPORTS.

ABOUT 3000 spectators were present at the fourth annual meeting of the United Hospitals Athletic Club, held at the A.A.C. Grounds, Lillie-bridge, West Brompton, on Thursday, June 9, a great number of ladies gracing the ground by their presence, and not a few of the leading Physicians and Surgeons from all the Hospitals adding to the *prestige* of the meeting by being present, and taking the greatest interest in the proceedings, especially when the representative of their own particular Hospital seemed likely to win. Sir W. Jenner, Bart., was president, and a Surgeon and Physician from each Hospital formed the staff of vice-presidents. A handsome cup was given to be competed for by gentlemen amateurs, and Mr. Williams won it from twenty-three starters. The King's College representatives succeeded in taking away the greatest number of prizes. C. E. Watson, though suffering from a sprained ankle, won the 100 yards challenge cup presented, in 1869, by N. Montefiore, Esq., F.R.C.S., of Guy's Hospital, for the second time; should he win next year it will become his own property. F. Richardson Cross was second, as he has been for three years. The latter, King's representative, won the 250 yard and 440 yard races, another King's Cross (H. R. O.) being second in both these, as well as in the 440 yards over hurdles; and Stevens, of King's, carried off second prizes in the 120 yards hurdle race and both jumps. Guy's Hospital, who are always very liberal in finding prizes and money, were more successful than they have been since the days of Nunn, and won both the jumps, and putting the shot, A. Brickwell, Ivor Lewis, and G. Power securing these events. Coombes was second to Power in putting the shot, whilst Hicks and Bayer were second in the two miles and throwing the cricket ball respectively. University College had a good steeplechaser in W. E. Koch, who secured both hurdle races without much difficulty, whilst Kellig won the mile challenge cup given this year by Guy's Hospital to replace their original mile cup, which was last year won for the third time in succession by G. A. Norman, of St. George's, and so became his own property. Harding, of University, obtained second honours for his Hospital in the half-mile race. St. Bartholomew's won the half-mile with W. C. Head, who ran with great judgment, the cricket ball throw with E. Tootell by a fine throw of 102 yards, whilst Payne threw the hammer further than the chosen of any other school. St. Thomas's Hospital had a good man in Coney, who stayed the long distance of two miles, and won, after a fine race with Hicks, of Guy's. C. W. Owen got second in the mile race, and Palmer second in throwing the hammer. There were no less than 127 entries for the different races, and large fields came to the post. The success of this year's meeting is mainly due to the efforts of Mr. J. H. Ewart, of Guy's Hospital, the honorary secretary, who has been well supported by Mr. Richardson Cross, treasurer, and Messrs. Boon, Brickwall, Wyndham Cottle, Gosse Major, Osborne, Roberts, Scobell, and Watson, members of the committee. J. G. Chambers, Esq., of Cambridge, and W. P. Bowman, Esq., of Oxford, kindly officiated on the day as starter and judge, and their management was most satisfactory.

THE UTILISATION OF SEWAGE.

(From a Correspondent.)

THE Committee on the Treatment and Utilisation of Sewage, whose circular to towns was noticed some months ago, has obtained more than £1500 for the purposes of the inquiry, and, as we gather from circulars which have reached us, now finds itself in a difficulty as to the proper application of that money. It appears to have been assumed that inasmuch as the British Association does not contemplate payment of personal expenses out of the grants from its own funds, the committee cannot apply the fund subscribed by towns to the special purpose for which it was raised—viz., to enable members of the committee to devote their personal attention to conducting the work. In our opinion this difficulty seems to be wholly factitious, for the fund in question is not a grant from the Association, whilst the rule which has caused apprehension applies only to such grants

Moreover, we learn that the subscribing towns have in many instances expressed their decided approval of the fund being applied for payment of personal expenses to enable members of the committee to do the work. So far, then, as the views of the subscribers are concerned there is no doubt; and it would appear to rest with the members of the committee to decide whether they will conduct the inquiry in accordance with those views and intentions, or whether they are so bound by the rules of the British Association as to render that impossible. If this be the case, the inquiry must be abandoned and the subscriptions returned. However, the committee appointed by the British Association has not scrupled to add to its number, though not empowered to do so, and we cannot see why it should now be afraid of applying its funds to the purpose for which they were expressly raised, whilst it has in the sanction of the subscribers so good an authority for doing so.

THE OUT-DOOR RELIEF OF ST. PANCRAS.

(*From a Correspondent.*)

The guardians of St. Pancras are now engaged in considering the question of out-door Medical relief, and all who take interest in that important matter will be anxious to observe the conduct of the board at this critical moment.

The parish of St. Pancras has for many years been divided into six Medical districts, under the care of six Medical men (at a salary of £150 per annum), who have discharged their duties in a manner to command the esteem of the poor and the respect of the directors, and latterly of the guardians. No complaint against those gentlemen has been or is now made by any one; yet the proposition now before the board which seems to find favour with many members is to dismiss the whole Medical staff summarily and without compensation, and to elect in their place four Medical officers at a salary of £200 each per annum, without liberty to practise. Let me examine the merits of this proposition, and also its cruelty and injustice in relation to the present Medical staff.

These six gentlemen are all middle-aged men, with families —men of good social status and Professional knowledge, enlarged by experience—men, in fact, whose known respectability and Professional reputation afford the best possible guarantee to the world that they will honourably and conscientiously discharge the duties of a public office. They have held these offices for many years, under the implied promise that nothing short of dereliction of duty would forfeit their appointment, and not even the proposers of the change venture to say one word against the way in which the duties have been performed.

Whom does the board propose to substitute for these six well-tried men? It is proposed to substitute four Medical officers at a salary of £200 per annum, without liberty to practise, and it is urged that the poor will be better attended to by men who have no other responsibilities. A greater fallacy was never entertained. No respectable man would condemn himself to the miserable drudgery of daily and hourly contact with misery, poverty, and crime, unrelieved by an occasional glimpse into brighter scenes, and none but very young men would be found to undertake such duties even for a time, and that only for the purpose of acquiring by experiments on the poor the knowledge necessary for private practice. In the department of midwifery especially, the midwives, who attend most of the cases, are empowered to call in the district Medical Officer in cases of difficulty and danger. The present Medical gentlemen, guided by an experience of years of general practice, are able to perform any of the difficult operations required. Will young men without experience be equally able to perform these duties? What an awfully miserable life is offered to the men who would undertake such an office, to toil on year after year upon a salary perfectly inadequate to maintain the appearance of a gentleman, to be in fact a miserable parish drudge. I am reminded of the inscription of L'Inferno —"Who enters here leaves Hope behind."

I do not know what can be done to prevent the guardians from perpetrating this egregious folly; public opinion, however, is all powerful, and even the guardians of St. Pancras may hesitate again to put themselves in opposition to the views of all sensible men; moreover, there is a safeguard, a brake upon the wheel of folly, the Poor-law Board. I have reason to think that the Board will at once put an end to this scheme; and believe that they are altogether opposed to the employment of Medical officers who are debarred from private practice—men who can have no ambition, no hope; and further, I do not for a moment suppose that Mr. Goschen will entertain the idea of permitting this foul injustice to a body of men who have for years discharged their responsible and disagreeable duties in a manner to deserve gratitude from all quarters.

REPORT OF THE SANITARY COMMISSIONER FOR BOMBAY FOR 1868.

The Sanitary Commissioner for Bombay is Colonel Bell, R.E., who had been acting temporarily during 1867, while Dr. Leith was absent from India, previous to retirement, and has been permanently appointed since January 1, 1868. Notwithstanding that we continue of the opinion that such appointments ought to be held by Medical officers, we must admit that Colonel Bell, in the report now before us, appears to entertain a more correct appreciation of the nature and scope of his duties than, as we have elsewhere pointed out, does his coadjutor the "Imperial Sanitary Commissioner" of Bengal. He contents himself with giving short but sufficiently comprehensive statistical details of the sickness and mortality of the British and native troops, with an appendix supplying such information concerning movements of troops, general orders on sanitary subjects, etc., as may be necessary to elucidate the various statements in the body of the report. A short abstract also contains all necessary information as to the sickness and mortality among the occupants of the various gaols in each district. The greater part of the report is devoted to the sickness, mortality, and sanitary condition of the general population, this being, in our opinion, as already stated with reference to the report from Bengal, the subject which, information concerning it having hitherto been so defective, demands the almost exclusive attention of the Sanitary Commissioners in each Presidency. We observe also that Colonel Bell, in his tables, appears—except, perhaps, in those referring to Abyssinia—to have given the average strength correctly, as calculated on the annual standard, thereby avoiding the source of error in this respect, which we observed in the Bengal returns.

Among British troops in an estimated total strength of 10,524, the loss within the year amounted by invaliding to 65·9, and by death to 15·6 *per mille*, showing a proportion of invaliding 5 *per mille* greater, and of mortality 1 less than in 1867.

The mean strength of men serving with their corps was 9691, among whom the total number of admissions was 11,125, presenting a ratio of 1147·9 *per mille*. The average number daily under treatment was 482, or 49·7 *per mille*. Comparing these results with those of the previous four years, as shown in the "Annual Sanitary Reports," it appears that they are the most favourable of any.

The deaths in the mean strength 9691 amounted to 135, which is in the proportion of nearly 13 *per mille*, only a little higher than the death-rate of 1866 (12·7 *per mille*). The lowest death-rate in Bombay (12·03 *per mille*) occurred in 1863. Eight of the 135 deaths were from cholera, and of these seven occurred among the artillery, among whom, with one exception, all the cases of this disease among European troops occurred. The sickness and mortality from all causes were, besides, greater in the artillery than in the cavalry or infantry.

The old nomenclature being still adhered to in this report, we must take it as it comes. Miasmatic diseases caused nearly 50 per cent. of the total sickness, but their prevalence has steadily declined from a ratio of 802 *per mille* of strength in 1865 to 492 in 1868.

Venereal diseases caused more than 20 per cent. of the total sickness, and 204 admissions into Hospital out of every 1000 men were due to it. These figures indicate a small diminution in the prevalence of this class of diseases, as compared with the preceding two years. A systematic and satisfactory supervision of the women with whom British soldiers consort, has not been attained in any of the large stations of the Presidency; but a favourable result is reported from the establishment of a Lock Hospital at Neemuch.

Drunkenness was the cause in 1868, as in the preceding year, of numerous admissions into Hospital, and the increase in both years was attributable to the same cause—viz., the distribution of bounty money. By the re-iteration of such facts from year to year, we trust the attention of Government may yet be directed to the necessity of devising some means of withholding from the soldier—to his own and the public advantage during his term of service—a source of temptation, the yielding to which entails such an amount of disease and military crime.

The sickness and mortality among officers, women, and children of British troops were as follows:—

	Strength.	Ratio per mille. Sickness	Mortality
Officers	466	929·2	12·9
Women	1085	1082·	20·2
Children	1779	712·8	83·2

Among the women three hundred and fifteen cases of childbirth caused only one death. The principal causes of mortality among the children were measles, dysentery, diarrhœa, fevers, convulsions, and teething.

Among native troops the loss by invaliding was 33·8, and by death 11·6 per mille. The former ratio has hardly varied during three years. The latter somewhat exceeds that of the preceding two years; the increase may be attributed to more numerous deaths from cholera, of which, however, there were only 29 cases and 17 deaths. About 40 per 1000 were constantly sick, which is rather more than during the preceding two years, and is probably to be accounted for by increased amount of sickness among regiments which had returned from Abyssinia.

Among the general population the number of inhabitants of the various districts is at present estimated by a very rough guess, and the death registration being effected by uneducated men, is generally admitted to be far from accurate; it is therefore evident that vital statistics drawn from such data are very erroneous, although they may serve to illustrate the prevalence of epidemic disease. Colonel Bell therefore gives a table comparing the numbers of deaths from 1865 till 1868, reported to have occurred from cholera, small-pox, accident or violence, and from all causes in each district, but admits that the actual figures are fallacious. Cholera appears to have been much more prevalent in 1865 and 1866, than in the two succeeding years. A great increase of mortality from small-pox was noted in 1867, and a much greater mortality has been ascribed to that disease in 1868; but it is believed that many deaths are erroneously recorded under that head. The Superintendent General of Vaccination has stated that he is "absolutely certain that many deaths are attributed to small-pox instead of to measles and scarlatina, as well as to some skin diseases." The number of vaccinations in the Presidency was considerably greater in 1868 than in any previous year. No information has been attained as to the relation between deaths from small-pox among the vaccinated and not vaccinated classes. Such an inquiry could only be conducted by specially instructed persons; as Colonel Bell remarks, the observation of men who are not even capable of distinguishing with certainty the disease of small-pox, could not be relied upon in such an investigation.

Cholera was present at some period of the year generally throughout the Presidency, excepting Sind. In the Kurrachee collectorate only of that Province a few cases occurred. The disease prevailed chiefly in Ahmednuggur and caused large mortality in the contiguous Khandeish district northward, and the Poona, Sholapoor, Sattara, Kulladghee, and Belgaum districts southward.

The state of health in assemblages of people at Fairs and Jatras during the year 1868 was satisfactory. Conservancy arrangements were enforced, and no special sickness seemed to have been propagated by the gatherings. The comparative death-rates of the general population throughout the whole Presidency were as follows:—

1865	22·9 per mille.
1866	13·6 „
1867	12·2 „
1868	14·4 „

The death-rates of 1868 vary from 21·2 per 1000 in the Canara collectorate to 3·3 in the Shur and Parkur districts, and Col. Bell remarks that the mortality "generally as shown is so small as to lead to the conclusion that the population must be considerably exaggerated or that the systematic registration of deaths is very imperfectly carried out."

In gaols during the period above noted the death-rates from all causes were as follows:—

1865	72·4 per mille.
1866	56·9 „
1867	23·4 „
1868	20·5 „

The improvement in the general health of the prisoners as indicated by the death-rates during the last three years is very apparent. "In the population of the established gaols of the Presidency in 1866 there were five deaths from cholera and a death-rate of 56·9 *per mille*; in 1868 the deaths from cholera were six and the death-rate was 20·5 *per mille*." In 1866, however, there was an exceptionally high mortality in the Hydrabad and Kaira gaols.

The amount of sickness and mortality in the British Troops, Abyssinian Expeditionary Force, during the entire campaign is shown as follows:—

Average strength	2688·8
Average daily sick	156·62
Ratio per cent. of sick to strength	5·8
Ratio per cent. of deaths to strength	1·3

The deaths of men were 37, of which 17 occurred in the highlands and 20 in the lowlands. Among officers there were 11 deaths, 7 in the highlands and 4 in the lowlands; only one death from gunshot occurred among the men, and two among the officers, one of the latter being accidental and one suicidal.

In the appendix containing these particulars Col. Bell, as above remarked, does not appear to have reduced the strength to its annual equivalent; the results therefore do not admit of comparison with those given in returns of sickness and mortality of troops in cantonments, of whom the annual average strength forms the standard of comparison.

REVIEWS.

The Medical Practitioner's Legal Guide; or, the Laws relating to the Medical Profession. By Hugh Weightman, M.A. Cantab., Barrister-at-Law, etc. Renshaw. 8vo., pp. 416.

Mr. Wilcock's treatise on "The Laws relating to the Medical Profession" has long been useless as a guide. Since its publication the legal position of the Medical Practitioner has altogether changed. Various alterations have been made in the regulations and bye-laws of the Colleges. Acts of Parliament bearing directly on the Profession have been passed. In fact, a new work on the subject was required, and in the volume before us we are pleased to see that desideratum. Mr. Weightman's book is altogether one of higher pretensions than was that of Mr. Wilcock. It embraces a wide field of inquiry and information. It not only gives a description of the Profession in its legal aspects in every way, and in a most able and exhaustive manner, but it embraces the laws of copyright, of partnership, and life assurance, as affecting Medical men. It gives various statutes lately passed relating to contagious and infectious diseases and vaccination. It gives an ample and learned digest of the laws relating to idiots, lunatics, and persons of unsound mind; the laws relating to coroners' inquests, and the registration of births, deaths, and marriages. It gives an admirable digest of poor-law legislation, as affecting Medical Practitioners; the law affecting chemists, druggists, and dentists. There is a good chapter on Medical Ethics and Medical Education, and another, very able and very erudite, on the title of Doctor of Medicine, or Doctor of Physic. Such is an abstract of some of the contents of Mr. Weightman's most important volume. It fills a hiatus which has been long severely felt by members of our Profession. It would be almost invidious to select certain chapters for approval where all is excellent, but if we were required to point out those portions of the volume which appear of singular value to the Medical Practitioner, we should select the articles on the subject of wills, coroners' inquests, defamation, and the title of Doctor of Medicine. Mr. Weightman's book will command a large and extensive circulation not only amongst Medical but also among legal Practitioners.

The Surgery, Surgical Pathology, and Surgical Anatomy of the Female Pelvic Organs, in a series of Coloured Plates taken from Nature; with Commentaries, Notes, and Cases. By Henry Savage, M.D. Lond., F.R.C.S.E., one of the Consulting Medical Officers to the Samaritan Hospital for Women. Second Edition. London: John Churchill and Sons. Plates xvi.

This really magnificent work is in every way worthy of author and publishers, whether we regard its style, finish, or careful handiwork. The last edition consisted of eleven plates, the present of sixteen, all drawn by Léveillé and printed by Lemercier, and the letterpress, which in itself is a work of no mean merit, has been greatly extended. The cases given are numerous and well selected; they include the experience of Bernutz and Goupil, McClintock, Le Fort, and Richet, appropriate selections from the *Obstetrical Transactions*, and the contents of Dr. Savage's case book.

The character of this book has been mistaken by many. In reality there is nothing in it that could shock the most delicate minded; but there is much which makes clear the obscure and intractable diseases of women.

The views of Dr. Savage have undergone some modification since his former edition, especially with regard to certain muscular fibres in the floor of the pelvis. In following out his researches as to the anatomy of these parts, the author acknowledges the able assistance of Mr. Bellamy, Demonstrator of Anatomy at Charing-cross Hospital. It is not perhaps, however, in the muscular arrangements of these parts, so much as in their vascular and nervous supply, and the erectile nature of the tissues in certain regions, that we are led to perceive the explanation of such obscure phenomena as those of ovulation and menstruation Surrounding the lower portion of the ovary, we see depicted an exceedingly close, mesh-work of vessels, intimately and directly connected with those of the uterus. We have here a light thrown upon the simultaneity of action so noticeable in these organs, and we get a glimpse of the mechanism intended for extruding the ovule from the ovarium. By this vascular arrangement we further are enabled to understand the enormous extravasations of blood in these parts, which sometimes threaten life. Plate viii. is one of great practical value; it gives the relations of the pelvic viscera to each other, and the position of the peritoneal, subperitoneal, and pelvic spaces, things essential to know if we would understand pelvic cellulitis and its allied maladies. From a somewhat similar point of view, plate ix., giving the pelvic fascia, is also important. The letter-press attached to plate viii. is peculiarly interesting. Plate x. gives the nerves of the pelvic viscera, and xi. the mechanical supports of the uterine organs; in xii. the lymphatics are figured; whilst the remainder are concerned with the Surgery of these organs, especially of vesico-vaginal fistula and ovariotomy.

On the Causes, Prevention, and Treatment of Infantile Diseases. By Selby Norton, M.D., etc. London: John Churchill and Sons. Pp. 75.

Dr. Norton has done good service to the cause of humanity in laying this little book before the world, for to the world at large rather than to our Profession ought he to address himself. His thesis is—"1, that at least 90 per cent. of infantile diseases—*i.e.*, of children under one year of age, arise from one cause—improper food; 2, that the poisonous agent is starch; 3, that the rejection of starch food from infant dietary and a strict adherence to natural food are all that we require to insure a rapid diminution of that excessive mortality which is so great a blot on the Medical skill and knowledge of the present day." While most heartily agreeing with the author in his first proposition and generally concurring with the others, we are not disposed to refer what is due to a multitude of unhygienic arrangements to a single source. Still, to enforce a single point which will tend to do away with so great a scandal, to do something to get rid of such a satire on our boasted civilisation, is a good deed.

The Food Journal, for June, 1870,

Is upon the whole fairly worth its sixpence. It contains among other matter a thoroughly appreciative article on Mr. Twining's Twickenham museum, an institution which cannot be over-commended, and a good account of cocoa and lard adulteration. A prime feature of the magazine for some time back has been a series of articles by "W" on London dinners. This month he deals with some of our West-end dining-rooms. With most of those mentioned we are familiar, and in many instances our own experience is antagonistic to that of the writer. So much so, that places he praises to the skies we have found unsatisfactory; places he condemns we have found all that could be desired—and we, too, have been curious in the matter of London dinners. We might give several instances, but one will suffice, and that appears to us a very extraordinary one—he finds fault with the Burlington, one of the great features of Regent-street. In this instance the author's experience is notably the reverse of our own.

The case of Edmunds *v.* Eyre, for an alleged libel, was tried in the Court of Common Pleas on the 10th inst., and terminated in a verdict for the defendant. The plaintiff, however, is endeavouring to get a new trial.

GENERAL CORRESPONDENCE.

ON THE FORMATION OF GASTRIC JUICE.

Letter from Dr. Wm. Murray.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your issue of to-day I notice a review of Dr. Thudichum's contribution to Mr. Simon's reports, in which you notice an original view of the formation of the gastric acids as propounded by Dr. Thudichum. As I have been in the habit of expressing the same view to various Medical friends and others, I should like to add a few words on the subject without any intention of interfering with or detracting from the merit due to Dr. Thudichum, who certainly has been the first to publish the theory.

I should not have troubled you with any remark had I not reason to suppose that Dr. Thudichum has scarcely pushed his theory to its logical result. This I shall endeavour to do. I have sometimes illustrated the formation of the gastric acids by comparing the stomach to the huge alkali works which abound on our river (the Tyne), where, on a large scale, men are making soda and hydrochloric acid from chloride of sodium by means of sulphuric acid, just as the stomach forms it by means of another organic agent—pepsine. It is in failing to point out the agency of pepsine in this process that I consider Dr. Thudichum has not pushed his theory to its legitimate result. He points out that chloride of sodium and water in the blood are the only sources of hydrochloric acid, which he properly says is produced in the gastric mucous membrane, but I ask further, what agent or agency exists in the gastric membrane to effect such a change? and I find none, except in the pepsine which resides in the gland-cells of the peptic follicles. The decomposition of chloride of sodium is therefore effected in these cells. It passes into them as NaCl, and it leaves them for the blood and for the stomach as NaO and HCl. As the only chemical agent present at the ceremony of this decomposition is pepsine, it seems to me to be a fair deduction to say that pepsine possesses (in the gastric glands at least) the inherent power of effecting this marvellous decomposition. It remains, of course, for physiological chemistry to imitate closely the conditions existing in the stomach, and to test by experiment the truth of this idea. On speculating more fully upon this subject, I have been led to form the opinion that pepsine is formed from some product of the retrograde metamorphosis of the albuminous tissues. In oxidation they yield a substance which, taken up from the blood by epithelial cells of the stomach becomes pepsine. The amount of pepsine in the stomach thus becomes dependent on the amount of nitrogenous waste going on in the tissues, and it is, threfore, provided in equal proportion to the amount of food required to repair the waste of the tissues. In this way we account for the digestive powers of many wasting patients, of convalescents, of children, and of those who exercise their muscles freely. The waste provides the material (pepsine) which determines the production of an acid (HCl), with which it unites to digest food for the repair of the wasted tissues. I need not say the amount of acid formed for the stomach will always be proportionate to the amount of soda set free for the secretions of the liver. I am, &c.

Wm. Murray, M.D., M.R.C.P. Lond.

Newcastle-on-Tyne, June 11.

UNEQUAL TEMPERATURE OF THE RIGHT AND LEFT SIDES OF THE BODY IN HEALTH.

Letter from Mr. Edward T. Blake, M.B.

[To the Editor of the Medical Times and Gazette.]

Sir,—Could you or your readers tell me whether any observer of blood temperature has noticed that the heat of the two axillæ may, under certain circumstances, materially differ from one another? I cannot discover any reference to the fact in the recorded observations of Davy, Wunderlich, or Sydney Ringer.

On June 9, 1870, I was descending the steep hill leading from Lynton to Lynmouth, with a friend, when I accidentally found that my left side was decidedly warmer than my right. To satisfy myself that the sensation was not subjective, I

asked my companion to feel the sides of my chest with the same hand, and to tell me which was the warmer. He pronounced in favour of the left side. I then applied my hand to his axillæ, and found the same increase of temperature on the left side. This was perceptible to his own sensation as well as to mine. The observation was made at midday. Both were healthy adults; both very warm, having walked during the preceding three hours under a powerful sun, over very irregular ground. At 8·15 a.m. we had breakfasted at the Lyndale on trout, eggs, and coffee; at 10 a.m. we had each taken a glass of light ale. If this be verified, it will be an important practical point to bear in mind that temperatures should always be read from the same side, for if the sides differ to so rough an instrument as the hand, they must, *à fortiori*, differ far more on the scale of a delicate thermometer.

I am, &c.

Taunton, June 12. EDWARD T. BLAKE, M.B., etc.

THE ALEXANDER MEMORIAL PRIZE.

LETTER FROM MR. JOLLIFFE TUFNELL.

[To the Editor of the Medical Times and Gazette.]

SIR,—As a slight mistake has been made in your notice of the 11th inst. upon "the Alexander Memorial Prize," will you kindly allow me to correct it? The prize was not founded "by directions contained in the will of the late Mr. Alexander, Director-General of the Army Medical Department," as therein stated, but by subscription amongst the Medical officers themselves, who, wishing to perpetuate Mr. Alexander's memory, contributed towards this end.

A sum of one hundred guineas was paid to Mr. Calder Marsh, R.A., for the bust of Mr. Alexander, which has been placed at Netley Hospital, a further sum of one hundred guineas has been expended in the execution of the dies for the medal by Mr. Wyon, and a balance still stands invested in Consols in the names of Sir T. G. Logan, Dr. T. G. Balfour, and myself, the interest of which is sufficient to give for ever triennially a purse of fifty sovereigns, together with a gold medal of the value of ten pounds, to the successful competitor for this prize.

The mode by which this memorial has been established being so complimentary to the memory of the deceased, I have deemed it right to trouble you with these few lines.

I am, &c.

JOLLIFFE TUFNELL, Honorary Secretary to the Alexander Memorial Fund.

MR. BRADY'S POOR-LAW MEDICAL OFFICERS' SUPERANNUATION BILL.

LETTER FROM DR. JOSEPH ROGERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just received the enclosed copy of a letter which has been sent to six members of the House of Commons by a gentleman in the west of England, asking their support on Mr. Brady's Superannuation of Medical Officers (England) Bill. The letter, though brief, is so much to the purpose, that probably if you would insert it in your this week's issue, it might be adopted by Medical gentlemen, who are perhaps at a loss for a ready and appropriate style of letter to such M.P.'s as they are personally acquainted with.

Whatever is done must be done at once, as the second reading will certainly come on on Wednesday, the 22nd.

I am, &c. JOSEPH ROGERS.

Dean-street, June 16.

Dear Sir,—Will you kindly support Dr. Brady's Bill for the Superannuation of Poor-law Medical Officers? The second reading will come on on the 22nd instant.

Did you know the number of Medical officers who are now sinking into their graves, worn out by useful though ill paid and arduous duties, I am sure your kind heart would not hesitate to support the measure to be brought forward for their relief, and which justice and humanity alike suggest.

I have the honour to subscribe myself,

Faithfully yours,

———, M.P.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 15.

DR. GRAILY HEWITT, President, in the Chair.

SPECIAL MEETING.

THE PRESIDENT said the meeting was called, in accordance with a resolution of Council, to consider further the scheme of amalgamation. He alluded to a document sent to all the Fellows containing a report of the meetings of the delegates and of the opinions of the Council of the Obstetrical Society as to the alterations made by the Royal Medical and Chirurgical Society. The Council had resolved on a certain line of procedure, and asked the delegates to draw up a statement and to have it circulated. In face of the fact that no one had carefully gone into the scheme or considered the future position of the Obstetrical Society, they had resolved on this plan, and they must further remember that if the advantages were patent, and the disadvantages less so, still the latter were many and various. He would next allude to the present position of the scheme. The Royal Medical and Chirurgical Society had modified the delegates' scheme by insisting on a Medical and Chirurgical Section. The Pathological Society had come to a conclusion favourable to the scheme, but the majority was insufficient to carry any important change. The Clinical Society was in its favour; the opinions of the others were not known. As to the moral aspects, the Royal Medical and Chirurgical Society was desirous of amalgamation, the Society having declined of late years. It was likely, should this Society not join, that a corresponding section would be formed in the Royal Medical and Chirurgical Society; so perhaps also as to others. He then read certain letters, amongst others one from Dr. Clay, of Manchester, opposed to the scheme; one only was in its favour. They had finally, he said, to consider whether the scheme was such as they could fall in with or not.

DR. TYLER SMITH rose to move a resolution rejecting the scheme. He had been asked by the Council to do so. This time last year, in perfect good faith, he had moved the contrary could union be effected on just and equitable terms. He had been constituted a delegate, and these went into the matter fairly. They granted the main features asked for by this society, but when the matter came before the Royal Medical and Chirurgical Society, without just reason and without just consideration for the delegates, they rejected it. The scheme was now essentially the scheme of the Royal Medical and Chirurgical Society. The amalgamation they were asked to consider was not that proposed by the delegates. It was only natural that the Royal Medical and Chirurgical Society should wish to perpetuate itself, but it should not have asked others to join on such terms. The refusal to separate Medicine and Surgery rendered it incumbent to reject the scheme. Without that they could not carry out the aims of their society. There were other minor matters, as finances. The Royal Medical and Chirurgical Society insisted on their giving up all property, all savings, and a proportion of income, in all about £200, and they getting only £150 return. Their position was dissimilar from that of all other bodies. They constituted the sole protection of obstetric interests in this country. Medicine and Surgery had colleges; they had none. He would, therefore, move—"That this Society, having regard to the interests of the department of Medicine to the cultivation of which it is devoted, declines to accept the scheme of amalgamation offered by the Royal Medical and Chirurgical Society, but would still be willing to negotiate for an amalgamation on the basis adopted by the delegates from all the societies." He feared the latter portion was useless, considering the terms of the Royal Medical and Chirurgical Society's circular.

DR. TILT having been long a Fellow of the Royal Medical Chirurgical and of this Society, had considered the question from both sides. He considered it his duty to support Dr. T. Smith's motion. Those who have wished to transform the Royal Medical and Chirurgical Society into something like the French Academy went on a wrong view. The French Academy was founded as a Government institution, it was no amalgamated body, but was formed to do honour to the Profession. Seldom was there any important discussion. The Government would not think of consulting the new body. He did not

think they were called upon to sacrifice their interests for the good of another body.

Dr. Day Goss asked what proportion the property of this Society bore to that of others intending to join.

Dr. Routh thought the matter was not so easy as it seemed. The proposed Society, no doubt, bore no relation to the French body, but it was merely because there was no such body the Profession had such little influence in the country. Were there a College of Obstetricians they might demand equal terms, now they accepted a subordinate position. Were there a Royal Society of Medicine they would be better off. The obstetric section of the Royal Medical and Chirurgical Society would very likely be formed, and would occupy the ground they now did. He thought the scheme of union likely to be ultimately successful, although not immediately. Something might be done to bring the Royal Medical and Chirurgical Society to a sounder mind, but this Society was to blame in not before asserting its position.

Dr. G. Murray thought they had tried to assert themselves in this very instance.

Dr. Savage proposed that negotiations at once cease. He denied the possibility of a society uniting all. He regretted he did not join this Society earlier. Obstetrics were at one time a kind of Cinderella. On one occasion when certain instruments were being considered at the Royal Medical and Chirurgical Society, the gentleman exhibiting them was hooted down. What were they to anticipate if they joined? Would they go on their old experience or in spite of it? As a matter of ordinary business, he could not see the benefit of the union to them. They had been going on negotiating too long. Did they join, they would have no chance of making a college. There was no difficulty in that now. Let them resolve themselves into a college, and the matter would be soon finished. He moved the omission of the last clause of Dr. T. Smith's motion.

Not seconded.

Dr. Cleveland was glad to see that no one seconded this; but would be glad to know how far they were prepared to go to obtain union.

Dr. Heywood Smith thought, no doubt, amalgamation would ultimately be attained. This Society had obtained very great influence throughout the country. Amalgamation would probably injure that. This Society had prospered because they had given so much for the money. To take full advantage of the section proposed in the new society, with library, etc., they would have to pay three guineas. Yet amalgamation, if it could be attained on equitable terms, would be good.

The President thought it would be disastrous were their body divided into two—one remaining as they now were, the other a section of the Royal Medical and Chirurgical Society. Unanimous action was desirable; if a large majority was for one side or the other, the others ought to go in with them.

Dr. Snow Beck had a strong conviction that another body would be formed, but he had the utmost confidence in their body. This really should not stop the way. He had great faith in numbers; the majority, as a rule, came to a correct conclusion. Not a twelfth part of the members being here, they could not give a fair verdict on the part of the Society. Let them take the votes or opinions of all; it could easily be done by circular.

Dr. T. Smith said what they had done was in accordance with the laws of the Society. They could not act as Dr. Beck suggested. The same thing applied to the Royal Medical and Chirurgical Society; he did not believe the majority of their Fellows were in favour of the scheme.

The President said if the resolutions carried involved a change of law nothing could be done till their annual meeting. It would be best to follow Dr. T. Smith's opinion.

Dr. Beck thought no law was involved; it was merely an expression of opinion wanted.

The President thought it best to take the sense of the meeting on the matter.

Dr. T. Smith said they were called together for a special purpose, and were bound to act as by law provided.

Dr. Beck proposed a motion in accordance with his former observations.

Dr. Playfair pointed out they would be no better off then than now.

Dr. Routh seconded Dr. Beck's motion.

Dr. G. Murray said there was a precedent for acting as they now were doing in the serious case which came before them two years ago.

Dr. Rogers thought the circular already sent quite enough. No reply, to his mind, indicated acquiescence with the views of the Council.

The President, on consideration, thought the laws were against the innovation, and ruled that they could not consider the motion.

Dr. Snow Beck formally protested against any such interpretation of the laws.

Dr. Tyler Smith thought the scheme after all was merely one for the resuscitation of the Royal Medical and Chirurgical Society. Still, it did good to discuss these things, and he was sure a great body would ultimately be formed. A proposition had been before the Royal Medical and Chirurgical Society which would have nearly secured that. Petty feelings stood in the way, and the scheme fell to the ground. The proposed body was to be formed by representatives of all existing societies, and would have constituted a real house of peers.

Dr. Madge and Dr. Squarey having spoken in favour of union,

Dr. Wynn Williams said the question was whether they were to make fools of their delegates or no. They had sent them to ask certain things, which had been contemptuously refused. Were they to submit to this?

The President then put to the meeting Dr. Tyler Smith's original motion.—Carried, thirty-six for; only three against.

Dr. Braxton Hicks then proposed a vote of thanks to the delegates and others engaged in the business, and the meeting separated.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 3, 1870.

Richard Quain, M.D., President, in the Chair.

Drs. Bristowe and Peacock reported on Dr. Payne's specimen of Morbid Heart. They considered the valve-like body not to be congenital, but due to fibroid thickening of the bands.

Dr. Langdon Down exhibited a boy, aged 11, in whose family there was no history of insanity, yet he thought his intelligence low, and he cannot stand. He was the subject of pseudo-muscular hypertrophy, and he contrasted him with the boy he formerly showed. He sleeps well, and has no cramps or fits. Sensation is unimpaired, but the induced current did not cause contraction. There was nothing particular beyond the hypertrophy. He had seen in all seven cases; in each there was mental deficiency.

Mr. W. Adams thought the cases illustrated the disease very well. He could not now state the ratio of intelligent, but some were quite right in their heads. Certain muscles were hypertrophied, certain atrophied.

The Secretary, for Mr. Maunder, exhibited a Larynx after Croup. The patient was a man, aged 43, a shoemaker. He became hoarse and feverish, and coughed up some casts. His lips and mouth were leaden. He died, when internal congestion was found general, and the larynx and trachea lined throughout by false membrane; the kidneys were congested.

Dr. Murchison was doubtful if this should be recorded as croup; the general impression was that the case was one of diphtheria.

Dr. Greenhow said croup never occurred in individuals aged 42.

Mr. Hulke thought it best to describe the case as one of laryngitis.

Dr. Crisp exhibited a Calculus weighing two ounces twenty grains, removed from the cloaca of a pelican. He had often found such accumulations extending from the cloaca into the ureters. He had only found them in carnivorous and piscivorous birds.

Sir H. Thompson alluded to the frequency of calculi in quadrupeds and birds reaching almost to the kidneys. He thought these were generally carbonate of lime.

Dr. Crisp believed that in quadrupeds they were mostly of carbonate of lime. It would be interesting to know the nature of the natives' food in those parts of India where stone was common.

Sir H. Thompson said one gentleman who had sent home a lot of calculi said they lived mostly on rice and sugar. The stones were chiefly oxalates.

Mr. Hulke said he understood Dr. Crisp to say that in sheep they remained as a pultaceous mass.

Dr. Crisp repeated that this was in rams feeding for show animals. They had great difficulty in keeping them alive from the sugar given them producing these masses.

Dr. Crisp said, with regard to fatty degeneration in the lower animals, he had examined many prize animals, and

never found anything of the kind. These may be reduced in bulk, and become perfectly healthy. When muscle is replaced by fat, that cannot be done.

Dr. Whipham exhibited a Syphilitic Deposit in the heart and aorta. There was no history of syphilis; yet the fibroid deposits were such as were generally attributed to syphilis. They were most abundant next the endocardium. In some parts the fibrous tissue was not very well defined. The man died suddenly and dropped from his horse.

Dr. Moxon asked the condition of the other organs. Syphilitic deposits in the aorta were very rare.

Dr. Whipham said they were all natural.—Specimen referred to Dr. Moxon and Mr. Arnott.

Dr. Whipham also exhibited a Tumour in the liver of a turkey which had been ill nearly a year. He thought it looked cancerous. The new formation consisted of a network filled with small shining bodies. The spleen was also affected.

Dr. Crisp said a number of birds in the Zoological Gardens died of this complaint. He called it tubercle. The deposits contained much carbonate of lime.—Referred to Drs. Whipham and Sanderson.

Dr. C. T. Williams exhibited a specimen of induration of the upper lobe of the right lung, adherent to the chest wall, and containing a small cavity. The mass was hard and fibrous, and compressed the right bronchus. The pleura was thickened, the glands large and hard. The other lung was emphysematous. The connective tissue of the part affected was increased, and its meshes filled with cells. Death seemed to result from gradual suffocation.

Mr. Arnott said he had often seen cells like these in chronically diseased lung. They cannot be distinguished from cancer cells, yet they are so common that they cannot well be such.

Dr. Murchison said constriction and pressure seemed to be incompatible with induration. Generally the bronchi were dilated.

The President said there was no appearance of malignant disease when he saw the case.—Referred.

Sir Henry Thompson showed a large cystic oxide calculus, removed from an old man, aged 81, two years and a half ago. He was still alive. Also a pure phosphate of lime calculus from a man aged 35—a specimen still more rare. There was only one in the College museum. It was semi-transparent in parts. He had heard it stated that such calculi only occurred in the human being after disease of the spine. This patient had angular curvature. It broke differently from the common stones.

Mr. W. Adams remarked on the rarity of the stone. One found after mollities ossium was of this kind; it was in St. Thomas's Hospital.

Dr. Fuller showed a polypoid growth from the bowel of a girl. Nine years ago she had suffered from obstruction of the bowels, but recovered. Afterwards the disease returned, and she died in Hospital. The whole of the small intestine was studded with polypoid growths, and a cicatrix was seen, probably the source of the stricture.

Mr. Hulke had seen something of the same kind some years ago in the person of an old man who had dysentery. The large intestine alone was affected.

Dr. Fuller also showed some hair, etc., which had been passed from the urethra by a lady, who seventeen years ago had been hunting, fell, and injured herself, losing much blood from the uterus. There was at this time a large tumour just above the pubes. She gradually recovered, but the tumour remained, till a jolting carriage induced pain, after which much pus passed by the bladder. A fortnight ago she came to town again in a jolting carriage, and much pus passed, as well as two masses, apparently *débris* of ovarian cysts, with hair, and the tumour almost disappeared.

Dr. Edis asked if there was any history of an extra-uterine pregnancy, which might account for the circumstance.—Referred.

Dr. Dickinson showed a tumour from a child, which had simulated a renal one. The boy, aged 7, had long been under notice. When in good health he fell, after which a swelling appeared under the ribs. It was supposed to be an abscess of the spleen. It gradually enlarged, and was next thought to be renal. When the child died, it occupied the exact position of the kidney, but was behind it, and pushing it forward. It consisted of an encephaloid mass, originating in the lumbar glands.

Mr. Arnott showed several microscopic specimens illustrating the Morbid Anatomy of Cancer of the Uterus, and, in introducing the subject, took occasion to reply to a remark made by Dr. Crisp earlier in the evening with reference to the frequent use of the terms "cancer" and "cancer cells" by those who yet shrank from the duty of clearly defining the real meaning of the words. Mr. Arnott was unwilling to venture upon any dogmatic statement whilst the subject was still under the consideration of the Morbid Growth Committee, but for his own part he was in the habit of limiting the name "cancer" to a structure in which an alveolar fibrous stroma contained in its meshes cells of varied shape and size, with large single or multiple nuclei, but all more or less closely resembling squamous epithelial cells in form, floating in a clear fluid, and having no visible intercellular matter separating them. Such cells grouped in such a manner he did not scruple to call "cancer cells;" but of course, viewed apart from their accompanying stroma, they were indistinguishable from many other cells met with in the body. He read a brief abstract of certain notes made of 57 post-mortems on cases of uterine cancer made by him during the past three years at the Middlesex Hospital. It appeared that in 34 cases no secondary deposits were found, in 20 the lymphatic glands were affected, and in 11 certain of the viscera, in the following order of frequency:—Ovaries 5 times, liver 3, lungs 2, heart 1, both breasts 1, and peritoneum 1. A satisfactory microscopic examination had not been made in more than 24 cases, and of these in 3 the structure could not be determined. Of the rest 11 were true cancer, 8 epithelioma, and 2 examples of spindle-cell sarcoma. He alluded to the diversity of opinion prevalent upon this subject (Lebert giving 45 cases, of which 39 were true cancer, and only 6 cancroid or epithelial; whilst Foerster quotes 42 out of 52 as epithelial), and to the difficulties of the investigation; but he thought that if Surgeons could get any definite notion of the usual form of cancer present, and of the number of cases in which glandular affection or visceral deposits were met with, they would be in a better position to judge of the possible utility of operative or other therapeutic measures in this disease.

Mr. Nunn thought it strange cancer of the uterus did not more frequently invade by the lymphatics. Perhaps the germs were destroyed by the periodic inflammations to which all cancerous growths were liable.

Dr. Wiltshire exhibited the Ruptured Heart of an old woman found dead in bed. It was ruptured in two places, in one quite through the wall, in the other opening on the outside only.

OBITUARY.

EDWIN LEE, M.R.C.S.,

Died a few days since. He was better known as Dr. Edwin Lee, but he held only the degree of the M.D. of Gottingen. He was a member and associate, however, of various Medical associations in Europe, and took the Jacksonian prize for an essay on the comparative advantages of lithotomy and lithotrity. He wrote several books and pamphlets on the mineral waters of different countries, and on homœopathy, hydropathy, etc. He was a kind of peripatetic Practitioner, and spent the "season" in London or at some watering-place on the Continent. He was a man of some talent and acquirements. He published a work on the Medical Profession in Great Britain and Ireland, and believed that it was everything that could be desired as an exposition of the grievances under which we labour, and the remedy for them. He was an amiable, good-natured man.

NEW INVENTIONS.

WHITEHEAD AND CO.'S SOLIDIFIED SOUP SQUARES.

We have received from Messrs. Whitehead and Co. some specimens of their solidified soup. The "soup squares" are said each to contain a pound and a half of fresh meat in a concentrated form, besides vegetables and flavouring matters. Thus far, however, we can certify that when a square is boiled for ten minutes in a pint of water a very pleasant palatable soup is produced. For convenience and rapidity of production this leaves nothing to be desired. The soup we have tried was not greasy; it had an appetising look—the colour of well-made Julienne soup—and it had a good flavour of meat and vegetables. It does not seem to contain much gelatine, for it

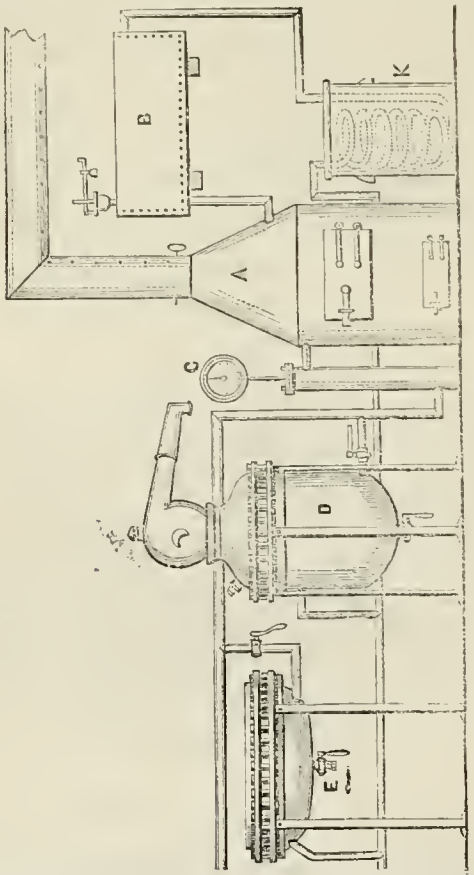
does not solidify on cooling. It is exceedingly moderate in price. Each square makes a pint of soup, and the squares are 8s. 6d. per dozen.

SAVORY AND MOORE'S PATENT VAPORISER.

This is an apparatus for the more efficient application of solution of carbolic acid, and other fluids for Medicinal and sanitary purposes, such as disinfection, inhalation, fumigation, etc. The apparatus, which is of tin, consists of two chambers, one fitting upon the other. The lower contains a spirit lamp, the upper a glass vessel for containing solution of carbolic acid, or other fluid, which by means of a suspended wick is made to fall *guttatim* on a tin plate, where it is exposed to the heat of the spirit lamp. The fluid is thus vaporised, and passing through a grating which covers the chamber is disseminated through the apartment. The vaporiser seems a very useful and manageable instrument.

COFFEY'S PATENT APPARATUS FOR DISTILLATION.

Mr. J. A. Coffey has patented an apparatus for distillation which he believes will be found of the greatest value for pharmaceutical and chemical purposes. By the use of Mr. Coffey's apparatus, heat can be regulated at any temperature from 70° to 800° or 900° F. with the most perfect safety, under thorough control, and without deterioration of the heating medium or loss of material. In Mr. Coffey's patent earthenware is used,



instead of platinum, gold, silver, tin or other metal. The apparatus may be made available for distillation, sublimation, filtration, boiling, and evaporation, and for cooking-houses, stoves —bakeries, breweries, etc. In metallurgical processes especially, this invention is said to be of great value. The apparatus may be seen working on the premises of Messrs. Doulton and Watts, 28, High-street, Lambeth, by writing previously for an appointment. It is well worth a visit from the scientific chemist as well as from the chemical and pharmaceutical manufacturer.

MEDICAL NEWS.

Royal College of Surgeons.—The following Members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on June 9:—

Parr, Staff Surgeon-Major Thomas, Recruiting Office, Peterborough, diploma of membership dated July 8, 1842.
Simpson, Frederick Hamilton, Fore-street, E.C., March 18, 1842.
Tilley, Samuel, L.S.A., Union-road, Rotherhithe, November 4, 1836.

At the same meeting of the Council the following Members were also elected Fellows, and will be admitted at another meeting:—

Gosse, William, Adelaide, South Australia, November 20, 1865.
Harris, Henry, L.S.A., Redruth, Cornwall, May 13, 1833.
Stacy, John Edward, Rendwick, Sydney, New South Wales, January 7, 1820.
Taylor, Thomas, L.S.A., Warwick-place, Grove-end-road, April 7, 1837.

It is stated that for the preliminary examination in Arts, etc., for the diplomas of Fellowship and Membership of the College, which will take place at the Whittington Club, on June 21 and following days, there are already 333 candidates—viz., 82 for the Fellowship and 251 for the Membership.

Apothecaries' Hall. — The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, June 9, 1870:—

Christian, John Griffith, Rhyl, Flintshire.
Evans, Samuel, Llandovery, S.W.
Tait, George Walter, Knowle, near Birmingham.

As an Assistant in Compounding and Dispensing Medicines:—

Read, Henry Holditch, Peterborough.

The following gentlemen also on the same day passed their First Professional Examination:—

Burn, George Wilson, St. Bartholomew's Hospital.
Sayer, Chas. Wathen, St. Bartholomew's Hospital.
Stamford, William, Middlesex Hospital.
Tattersall, Lord, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Banks, W. Mitchell, F.R.C.S.—Lecturer on Descriptive and Surgical Anatomy at the Liverpool Royal Infirmary School of Medicine.

Bradshaw, W. H. De la Maine, B.M. and M.S. Trin. Col., Dub., and L.M. Rotundo Lying-in Hospital, Dublin—Resident House-Surgeon to the Weston-super-Mare Hospital and Dispensary.

Christie, T. B., M.D.—Superintendent to the New India Office Asylum, Ealing, Middlesex.

Hingston, J. Tregelles, M.R.C.S., etc., Superintendent to the Isle of Man Lunatic Asylum—Superintendent of the North Riding of Yorkshire Asylum.

Seaton, E., M.R.C.S.E.—Resident Accoucheur to St. Thomas's Hospital.

Simon, M. F., L.R.C.P. Lond., M.R.C.S.E.—House-Surgeon to St. Thomas's Hospital.

Thomas, L. M., M.R.C.S.E., L.S.A.—House-Surgeon to St. Thomas's Hospital.

Torry, J. Cooper, M.D.—Visiting Physician to the Infirmary for Consumption and Diseases of the Chest, Margaret-street, Cavendish-square.

BIRTHS.

Dickson.—On May 13, at Mymensing, Eastern Bengal, the wife of Dr. Lindsay F. Dickson, Civil Surgeon, of a daughter.

Kealy.—On June 13, at Ashley House, Gosport, the wife of John Robert Kealy, M.D., A.K.C. Lond., of a daughter.

Knipe.—On April 21, at Rawul Pindee, Punjab, the wife of J. C. Knipe, Surgeon 36th Regiment, of a daughter.

Murray.—On June 13, at Edinburgh, the wife of John Ivor Murray, M.D., F.R.S.E., her Majesty's Colonial Surgeon, Hong-Kong, of a son.

Pilkington.—On June 11, at St. George's House, Chorley, Lancashire, the wife of Wm. Pilkington, L.R.C.P. Edin., of a son.

Turner.—On the 3rd inst., at Buxton, the wife of Frederick Turner, M.R.C.S., etc., of a son.

MARRIAGES.

Bagshaw—Dickinson.—On June 8, at the parish church of Lyndhurst, Frederick Bagshaw, M.D. Cantab., of 16, Warrior-square, St. Leonards-on-Sea, to Emily, eldest daughter of William Dickinson, Esq., of New Park, Lymington, Hants.

Baxtea—Eaton.—On June 9, at St. Martin's Church, Stamford, John Lea Baxter, of Cottingham, Yorkshire, to Elizabeth, third daughter of William Eaton, M.D., late of Grantham.

Martin—Roche.—On June 8, at St. Mary's Chapel, Norwich, Francis Martin, Esq., Beauchamp, Paisley, to Lydia, elder daughter of John Roche, M.D., Brunswick Lodge, Norwich.

Mercea—Wray.—On June 7, at St. Matthew's, Brixton, John T. Mercer, M.B., of Brixton-place, to Sophia Eleanor, only surviving child of the late Dr. Septimus Wray, of Tudor Lodge, Brixton, Surrey.

MUGGERIDGE—HAILEY.—On June 6, at All Saints' Church, Bayswater, Henry Harris Muggeridge, Surgeon, late of Reading, Berks, to Elle Grire Hailey, youngest daughter of the late George Arnold Hailey, Esq., of Great Wymondley, Herts.

WILMER—JACKSON.—On April 27, at St. John's Church, Meerut, John Randal Wilmer, Lieutenant R.A., Topographical Survey, to Frances Jane, daughter of the late W. Jackson, F.R.C.S., Superintending Surgeon, Sirhind Division, Bengal.

WOOD—HERAPATH.—On June 8, at St. Paul's, Portland-square, Bristol, Richard Wood, Surgeon, of Bromsgrove, to Martha Sophia Horwood, eldest daughter of the late William Bird Herapath, M.D. Lond., F.R.S., etc., of Bristol.

DEATHS.

BEIGEL, ADELHAID, wife of Hermann Beigel, Physician, at 56, Russell-square, on June 11.

LEE, EDWIN, M.D., Corresponding Member of the principal Medical Societies of Europe, and author of works on climates and mineral waters, on June 3.

PIDDUCK, CHARLOTTE, relict of J. Piddnck, M.D., late of 22, Montague-street, Russell-square, at 15, Tavistock-sqnare, on June 8.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

BATH MINERAL WATER HOSPITAL.—Resident Medical Officer; must have both Medical and Surgical qualifications. Applications and testimonials to B. Starr, Registrar, on or before June 30.

EAST SUSSEX, HASTINGS, AND ST. LEONARD'S INFIRMARY.—Assistant-Surgeon. Applications and testimonials to the Secretary on or before the 25th inst.

KENT AND CANTERBURY HOSPITAL.—Assistant House-Surgeon and Dispenser; must be duly qualified and registered, and not above forty years of age. Applications and testimonials to the Secretary on or before the 24th inst.

LIVERPOOL DISPENSARIES.—Assistant Resident House-Surgeon; must be duly qualified and unmarried. Applications and testimonials to the Secretary on or before the 22nd. Candidates to attend the meeting of the Board at 2 o'clock the following afternoon.

MEDICAL SCHOOL, SURGEON'S-HALL, EDINBURGH.—Lectureship on General Pathology and Pathological Anatomy.

ROYAL ORTHOPÆDIC HOSPITAL.—Resident House-Surgeon and Apothecary; must have both Medical and Surgical qualifications. Applications and testimonials to the Hospital on or before the 22nd inst.

ST. ANSTELL UNION.—Medical Officer for the Second District. Candidates must be duly qualified and registered. Applications and testimonials to Mr. R. G. Lakes, Clerk, St. Anstell, on or before June 23.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before July 2. Election on the 19th.

STAFFORDSHIRE GENERAL INFIRMARY.—Dispenser and House-Surgeon's Assistant (unqualified). Applications and testimonials to the Secretary.

UNIVERSITY COLLEGE HOSPITAL.—Professorship of Practical Physiology. Applications, etc., to the Secretary on or before July 6.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

St. Anstell Union.—The Roche District is vacant; area, 19,236; population, 6848; salary, £54 1s. 8d. per annum.

APPOINTMENTS.

Burton-upon-Trent Union.—Richard Thomas, L.S.A. Lond., L.F.P. and S. Glas., L.M., to the Etwall District. Thomas H. Cresswell, M.R.C.S. Eng., L.S.A., to the Lullington District.

Hexham Union.—William M. Kenton, M.D. Univ. Edin., M.R.C.S. Eng., L.S.A. Lond., to the Eastern Division of the Third District.

Skipton Union.—William Harrison, M.D., L.R.C.P.E., M.R.C.S., to the Gargrave District.

COLLEGIATE ELECTIONS.—The secretary of the Royal College of Surgeons having sent out the usual notices and particulars relating to the annual election of Fellows into the Council of the College on the 7th proximo, several gentlemen applied for the usual forms, amongst them, as we stated last week, Mr. John Adams, a former member of the Council, who has, however, now declined to be put in nomination this year. As the 13th inst. was the last day for sending in the nomination papers, we have ascertained that the following gentlemen will offer themselves to fill the two vacancies occasioned by the resignation of Messrs. Joseph Swan, of Tavistock-square, and Thomas Paget, of Leicester. It will be seen that Messrs. Wilson and Wells are honorary Fellows of the College, and Messrs. Coote and Lee Fellows by examination. Taking the candidates, then, according to seniority of their Fellowship, we have:—1. W. J. Erasmus Wilson, F.R.S., Henrietta-street, Cavendish-square, Professor of Dermatology to the College, diplomas of Fellowship and Membership bearing date respectively December 11, 1843, and November 25, 1831, nominated by John Wiblin, Southampton; William Adams, Henrietta-street, Cavendish-square; George Augustus Ibbetson, Cavendish-square; Edward Newton, Upper Wimpole-street; Thomas Carr Jackson, Weymouth-street; Henry Smith, Wimpole-street. 2. T. Spencer Wells, Upper Gresvenor-street, Grosvenor-square, August 26, 1844, and April 26, 1841, nominated by William Bowman, Clifford-street; Samuel Hey, Leeds; F. Seymour Haden, Sloane-street; H. D. Carden, Worcester; T. W. Nunn, Stratford-place; Sydney Jones, St. Thomas'-street. 3. Holmes Coote, Margaret-street, Surgeon to St. Bartholomew's Hospital, December 24, 1844, and July 4, 1838, nominated by Jonathan Hutchinson, Finsbury-circus; John Marshall, Savile-row; George D. Pollock, Grosvenor-street; J. Cooper Forster, St. Thomas'-street; William S. Savory, Brook-street; George W. Callender, Queen Anne-street. 4. Henry Lee, Savile-row, Surgeon to St. George's Hospital, December 24, 1844, and February 22, 1839, nominated by John Charles Hall, Sheffield; John Wood, Wimpole-street; Samuel Cartwright, Old Burlington-street; James R. Lane, Berkeley-street; George D. Pollock, Grosvenor-street; Edward Cutler, New Burlington-street.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The annual dinner of this Society was held on the 15th inst., at the Ship at Greenwich; Dr. Prior Purvis, President, in the chair. In proposing the toast of the evening, prosperity to the West Kent Medico-Chirurgical Society, the President dwelt on the number of excellent papers on Medicine, Surgery, and Obstetrics, which had been read before the Society during the past session. While testifying to the very satisfactory condition of the Society, the President regretted that more of those resident in the neighbourhood did not avail themselves of the privilege of membership. Dr. Carr, in an effective speech, then gave the health of the President, Dr. Purvis, which was received with enthusiasm. The Medical corporations were proposed by Dr. Thorowgood, and Dr. Pavy and Mr. Burton responded in speeches which were heard with great attention and applause. Among other gentlemen present as visitors were Mr. Reed, of the Royal Naval Department, Dr. Ward, Mr. Thomas Hawkins, and others. Mr. Reed made a most appropriate and interesting speech, detailing some of his improvements with regard to the arrangements of the "sick bays" in some of the new ships of the Royal Navy.

DR. ROBERT SMITH, the Resident Medical Superintendent of the Durham County Lunatic Asylum at Sedgefield, was, a few days since, knocked down by a large stone thrown by one of the male patients while returning from chapel. The blow appeared to be so serious that it was reported at the Durham Borough Police-station that Dr. Smith had died from it, which, however, was happily untrue, for, though he bled profusely, he was, after receiving prompt Medical attention, able to move about a little the same day, and was considerably better the next.

SINGULAR DEATH OF A PHYSICIAN.—The following has gone the round of the daily papers:—A much-respected Physician, residing at Berey, near Paris, has recently fallen a victim to his Professional zeal, under singular and painful circumstances. A young woman had thrown herself into the Seine from the Quai de Bercy; some young men plunged in after her and succeeded in bringing her body to the shore. Dr. Launessan was sent for, and on his arrival found the young woman apparently dead. He, however, had recourse to all the known methods of restoring animation, and among others to that of reviving the action of the lungs by the inspiration of his own breath. After two hours' assiduous efforts, he had the satisfaction of observing signs of recovery. The doctor was exhausted, and as his patient gradually recovered strength, so he became enfeebled, and finally died from exhaustion, produced by his incessant and successful efforts to preserve the life of one who was a complete stranger to him.

RUSSIAN STUDENTS.—The student type in Russia is much the same as in our Western and smaller colleges. He wears long hair, usually brushed straight back, or arranged so as to stand up on his head, and lets his beard grow, when he has any; moreover, he is generally dirty and careless in his dress. Just now he is inclined to Slavophilism, and in the street affects the red shirt, the high boots, and the Russian peasant costume, in which, however, he never dares appear at the lectures. In public he carries a heavy stick, and essays a general *air de vainqueur*. He is usually poor, and in his immediate circle of friends everything is common—coats, hats, shirts, tobacco, and books. A student's room is an amusing sight, with its disorder and dust, the single glass, the *carafe* of water (emptied as soon as filled) on the table, the paper of cheap tobacco on the window-sill, with scraps of paper which are

rolled into cigarettes, the enduring cloud of smoke, the scattered books and lithographed lectures. It is here they meet, six or seven, for it is usual to prepare for the examinations in groups, to read over the lecture notes by the light of a tallow candle or a small kerosene lamp, and afterwards engage in one of those ordinary student discussions, where every one speaks his loudest and no one listens. They regale themselves with a little herring and whisky, or rarely with beer. It is the poor students who give the tone, because they are in the majority; they are very democratic, regard all as their equals, despise gloves, neckties, and other belongings of aristocracy, and look with contempt on the "aristocrats" unless they will share in some way their mode of life.—*New York Nation.*

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

M.D., F.R.C.S., Royal Navy, Devonport, complains, and, we think, with some reason, that distinguished officers in the two public departments of the army and navy are not occasionally invited to take the chair at the annual festival of the Fellows of the Royal College of Surgeons. To his grievance we would also add that of officers of the Queen's Indian Army. Perhaps the stewards will consider the suggestion.

Mr. J. W. Hulke, F.R.S.—This gentleman brought his course of lectures on the Minute Anatomy of the Eye to a close yesterday (Friday) in the theatre of the Royal College of Surgeons.

Chirurgeon.—As you were only *elected* a Fellow on Thursday last, and have not yet been *admitted*, you will be ineligible for voting on the 7th proximo.

A Retired Surgeon.—All the Fellows of the College whose addresses are known to the Secretary have had circulars sent to them.

COMMUNICATIONS have been received from—

Mr. M. F. Simon; Dr. A. Smart; Dr. Hartsen; Dr. W. Pilkington; Dr. Tyler; Dr. Day; Dr. L. Kidd; Dr. E. T. Blake; Dr. J. Cooper Torry; Mr. Myers; Mr. Hulke; Mr. Lewis Murray; Mr. R. W. Foss; Dr. J. W. Moore; Mr. J. Chatto; Dr. Thorowood; Dr. W. Murray; Mr. J. Tufnell; Dr. J. Rogers; Mr. Haynes Walton; Mr. Sandford Moore; Dr. Bastian; Mr. H. Arnott.

BOOKS RECEIVED—

Larcher's Translation of Holmes's Surgical Diseases of Children—Newcastle-upon-Tyne Borough Lunatic Asylum Report—Davies on the Unity of Medicine; its Corruptions and Divisions, second edition—Dr. Clymer's Notes on the Physiology and Pathology of the Nervous System—Denton on Village Sanitary Economy.

NEWSPAPERS RECEIVED—

Nature—Liverpool Mercury—Medical Press and Circular.

APPOINTMENTS FOR THE WEEK.

June 18. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

20. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

Pathological Society, 8½ p.m. Adjourned Meeting on the Amalgamation Scheme.

21. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

22. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

23. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

24. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 11, 1870.

BIRTHS.

Births of Boys, 1058; Girls, 1006; Total, 2064.
Average of 10 corresponding weeks, 1860-69, 1889·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	672	601	1273
Average of the ten years 1860-69	610·9	581·4	1192·3
Average corrected to increased population	...	...	1311
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	7	29	3	9	...	1	5	11
North ...	618210	3	15	25	...	1	...	2	2	·
Central ...	383321	1	15	11	...	1	2	...	2	:
East	571158	4	12	7	...	9	...	1	3	5
South	773175	...	4	31	1	13	2	4	2	6
Total	2803989	8	53	103	4	33	4	8	14	34

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·969 in.
Mean temperature	58·0
Highest point of thermometer	76·8
Lowest point of thermometer	41·4
Mean dew-point temperature	47·3
General direction of wind	N.N.E.&W.S.W.
Whole amount of rain in the week	0·00

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 11, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending June 11.	Deaths Registered during the week ending June 11.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	2064	1273	76·8	41·4	58·0	14·44	0·00	0·00
Portsmouth ...	122084	12·8	70	42	77·4	45·6	59·8	15·44	0·00	0·00
Norwich	81087	1·09	48	29	70·5	42·0	54·7	12·61	0·00	0·00
Bristol	171382	36·6	126	68	74·1	42·4	57·0	13·89	0·02	0·05
Wolverhampton ...	72990	21·5	52	20	78·0	42·2	58·1	14·50	0·11	0·28
Birmingham ...	369604	47·2	270	116	78·0	43·5	58·5	14·72	0·00	0·00
Leicester	97427	30·4	83	22	...	...	...	...	...	...
Nottingham ...	88888	44·5	43	28	78·6	42·2	58·7	14·83	0·00	0·00
Liverpool	517567	101·3	351	198	72·2	45·8	56·9	13·83	0·21	0·54
Manchester ...	374993	83·6	200	167	80·2	43·0	58·7	14·83	0·31	0·79
Salford	121580	23·5	60	50	79·5	42·9	57·6	14·22	0·32	0·81
Bradford	143197	21·7	74	72	76·4	46·5	58·8	14·89	0·06	0·15
Leeds	259527	12·0	203	120	79·0	42·0	59·1	15·05	0·08	0·20
Sheffield	247378	10·8	140	94	77·0	40·0	57·3	14·05	0·13	0·33
Hull	130869	36·7	65	32	71·0	32·0	52·2	11·22	0·13	0·33
Sunderland ...	94257	30·5	73	29	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	76	46	73·0	45·0	54·7	12·61	0·12	0·30
Edinburgh	178970	40·4	149	93	74·7	45·0	57·8	14·33	0·20	0·51
Glasgow	468189	92·5	399	265	77·8	43·0	57·0	13·89	0·22	0·56
Dublin (City, etc.*)	321540	33·0	172	126	80·4	41·5	58·3	14·61	0·00	0·00
Total of 20 Towns in United Kingd'm	7209603	33·8	4727	2890	80·4	32·0	57·4	14·11	0·11	0·28
Paris—Week ending June 11	1889842	242	...	1058	...	...	...	...	...	...
Vienna—Week ending June 4 ...	605200	167	...	442	...	...	60·8	16·00	...	...
Berlin—Week ending June 9 ...	702437	128	624	373	...	...	...	...	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·969 in. The highest barometrical reading was 30·37 in. on Monday, and the lowest was 29·55 in. on Friday.

The general direction of the wind was N.N.E. and W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

ORIGINAL LECTURES.

LECTURES ON DISEASE: ITS NATURE AND TREATMENT.

BEING THE THIRD COURSE OF LECTURES DELIVERED AT OXFORD BY DIRECTION OF THE RADCLIFFE TRUSTEES.

By Dr. LIONEL BEALE, F.R.S.,
Fellow of the Royal College of Physicians, Physician to King's College Hospital, and Professor of Pathological Anatomy in King's College, London.

Lecture I.

Before we can hope to determine conclusively the nature of the changes which constitute disease, or form an accurate conception of the phenomena occurring in the abnormal or morbid state, we must be able to understand the phenomena which characterise health. We ought to be acquainted with the exact structure of the tissues and organs of the body in the healthy condition before we can appreciate the alterations which have occurred in disease. We must try to discover what goes on when the elements of the tissues are nourished, and what effects, if any, result from variations in the quantity of nutrient matter sent to the part in a given time. Above all, we desire to learn what happens when each individual cell or elementary part of every tissue and organ is nourished normally, and the changes which take place in it when the nutritive process is modified. An accurate microscopic physiology is the necessary precursor of accurate pathology and sound Medicine. Upon no other basis can Medicine be safely built. Hitherto, progress in Medicine has been invariably associated with advance in physiology, and of those who have contributed most to the advancement of Medicine not a few have been eminent as students of physiology. Milne-Edwards has well observed—"La Médecine est un art dont les progrès sont en grande partie dependant de ceux de la physiologie, et qui a sans cesse besoin des lumières fournies par les sciences physiques et chimiques."

In this course it will be my endeavour to show how much our knowledge of disease has been advanced by careful minute investigation of the affected tissues, and by instituting a comparison between these and the corresponding healthy structures. And I shall endeavour to indicate how very much more is yet to be gained by the further prosecution of similar methods of inquiry. If new observations shall compel us to change our views upon the nature of such important general pathological actions as fever and inflammation, we shall have little cause for regret if, at the same time, our notions are rendered clearer, simpler, and more definite.

Many a thoughtful person who has already gained much information in the Medical schools and in the wards of the Hospital, is forcibly impressed with the little real knowledge he seems to possess, and feels a very strong desire to acquire more accurate information concerning the actual changes which take place in the living body in health and disease than he had been able to obtain. Such a person would probably inquire at the very outset if it were known in what particulars the morbid differed from the healthy tissue, and he would naturally desire to obtain specimens of healthy tissues as standards of comparison, in order that he might be able to judge with some degree of certainty, and with precision, in what respects there had been a departure from the healthy state. Knowing how much the healthy tissue differs from the morbid tissue in its ordinary characters, as observed by examination with the unaided eye, he would be led to inquire exactly in what particulars the cells or elementary units of the healthy differed from those of the diseased tissue.

But strange as it will appear, this method of study has been followed by few observers, and as yet has met with little favour among Practitioners of Medicine. The practical difficulties are undoubtedly great, but by no means insuperable, if men well educated in the practical details will but believe the work is worth pursuing, and devote themselves to it with care, intelligence, and patience. The method has found very little favour in this country, and it is to be deplored that microscopical inquiry in connexion with disease has been discouraged by many whose opinions exert great influence. For the most part, what has been said proves that those who have expressed opinions adverse to minute investigation did not possess the knowledge to enable them to form a correct judgment on the matter. Perhaps it is natural, or at least not unnatural, that men who have risen to high position in the Medical Profession without knowing aught whatever of careful microscopical inquiry, should underrate its importance, and, from its very delicacy and minuteness, condemn it; but on the other hand, it is quite certain that if these very authorities, being unprejudiced, could only be persuaded patiently to look at the objects which can be shown to them, they would soon change their opinion, and become the warm supporters of a method of inquiry they had previously condemned as useless.

Since all the changes taking place in every form of disease, whether it falls to the province of the Physician or to that of the Surgeon, affect the minute elementary parts or units or cells of the tissues, it must be obvious that no true notion of the nature of the changes which occur can be formed unless these are carefully studied, and they cannot be even seen without the aid of the microscope. For the demonstration of some of the most important alterations which occur in disease we need the highest magnifying powers which have yet been produced. In order to use these with advantage great practice is required, and the observer ought to be well skilled in the preparation of tissues.(a) Without doubt such observations require great care and patience, but there can be no question that many of the younger members of the Profession are eminently qualified for the task, and would work zealously if they were not discouraged.

Of the elementary parts, units, or cells of the tissues.—By careful microscopical examination we learn that the elementary parts, or units, or cells of the tissues of man and the higher animals are very minute, few being as much as $\frac{1}{1000}$th of an inch in diameter, and many less than the $\frac{1}{2000}$th, yet we may in many instances distinguish healthy cells from diseased ones, and with precision. Each cell consists of matter in two very different states or conditions—1, *matter in the living state—germinal matter or bioplasm;* and 2, *matter formed from this, but in a lifeless condition—formed material.* The relative proportion of these two substances, as well as the size of the entire cell, differs at different periods of life. In disease the size of the cell, the rate of its growth, and the amount of the germinal matter and formed material exhibit the greatest alterations, and the changes which take place occur more slowly or more quickly than in health. But the healthy changes are also modified, and in a very remarkable degree, by the development within the organism of nutrient materials differing in composition from the normal pabulum.

The whole organism is made up of these elementary parts, and the *physics* and *chemistry of the body* can never be known until the physics and chemistry of these elementary parts are understood. It is therefore absurd to say that students should be taught the physics and chemistry of the body and not taught the physics and chemistry of the cell. But the study of the physics and chemistry of the cell leads to the study of the "*vital*" *actions* of the cell, and some people are very much afraid of any study which leads the student to think about vitality.

At an early period of development the "cells" are destitute of any covering or envelope of formed material, and in many parts of the body throughout life are naked masses of germinal matter, as the white blood corpuscles and the lymph and chyle corpuscles. The healthy changes are modified in a remarkable degree by the development within the organism of such naked masses of bioplasm or living matter which, although presenting no peculiarities to be rendered evident by microscopical or chemical investigation, nevertheless differ most remarkably in properties and powers from any which exist in the healthy state. So, also, a morbid state may result from the introduction into the organism of living matters of a peculiar kind, *living germs* originating in a diseased organism of man or animals. Living germs from certain species of the lower animals, and plants may make their way from without by passing through the tissues into the blood of man, and produce such derangement and lead to such disastrous changes, that permanent damage to important textures may result, if, indeed, the organism escapes death.

I shall also have to consider the probable nature of that material, but not "impalpable," substance, which gains entrance into our blood when we become the unfortunate subjects of contagious disease. The question of *contagium* is indeed a question of the highest interest, not only to those whose life's work is the study and treatment of disease, but to all who care for their fellow men, or look with any interest upon the generations which are to succeed, or who care to

(a) For new methods of preparation and the mode of examining tissues under high powers, *see* "How to Work with the Microscope." Fourth Edition.

investigate the circumstances which have determined the rise and fall of nations and races, as recorded in the history of the past.

The formation of the potent poison, the manner in which it is conveyed from place to place, the exact way it gains entrance into the now unaffected though perhaps not healthy organism, the changes it works there, must engage our earnest attention; while the consideration of proposals for preventing its entrance into the body, or for destroying it, or stopping its deleterious action after it has entered, are matters of such eminently practical importance, that any time devoted to the discussion of such topics can scarcely be wasted. But it has been said, and by very high authority, that all that was to be gained for medicine by investigating minute structure had been gained, that probably little remained to be discovered of importance to us, and that little or nothing was to be expected from the further and more refined prosecution of pathological anatomy. But is it not a fact that our knowledge in these matters is still most imperfect? Nay, if the successful labourers who devoted themselves to this branch of study were multiplied a hundredfold, I feel quite sure that there would yet remain plenty of new work to be carried on. This department of natural knowledge is as inexhaustible as every other. We may advance and advance, but our knowledge can never be complete.

And it has been said that our main business now is to advance therapeutics, our knowledge of which is very defective; but is it not a grave mistake to regard the treatment of disease as a subject altogether distinct from the question of its nature? Surely the first step towards treating a sick man is to ascertain exactly what is the matter with him; and if we are unable to succeed in this object to our satisfaction, ought we not to study in the hope of learning more than we know already? Much that is unsatisfactory as regards treatment unquestionably results from insufficient and imperfect knowledge upon our part of the nature of disease or of the exact points in which the morbid condition differs from the healthy state. So far, therefore, from suspending investigation into the minute structure of the tissues in health and disease, we should prosecute such inquiries with increased ardour, confident that to further knowledge regarding structure and change which structure undergoes, will very soon succeed improved methods of treatment. And is it not as encouraging as it is significant how very much more satisfactory is the treatment of those diseases which we thoroughly understand than those of the nature of which we have yet much to learn? Conflicting views and contradictory assertions as regards methods of treatment obtain particularly in affections concerning the nature of which many different opinions may be entertained in consequence of the inexact state of information.

Is it not certain that if we knew exactly how our remedies affected the nutritive and formative changes in the elementary parts of the various tissues and glandular organs of the body, we should be able to treat disease much more successfully than we do now? Should we not, therefore, try to ascertain what changes are effected upon these elementary units by the various substances employed by us as remedies—nay, can we hope to materially advance therapeutics without careful and very accurate investigations of this kind carried out by the aid of the higher powers of the microscope? Our knowledge of healthy structure and healthy change in the organism has been much increased by microscopical investigation. Our knowledge of morbid changes has progressed of late years by the very same means. Is it not, therefore, reasonable to infer—nay, are we not forced to conclude—that the treatment of disease will be materially advanced by the very same method of inquiry? Moreover, we may feel sure that each inquiry will advance the others, and that as we learn more concerning healthy and morbid structure we shall gain new knowledge which will aid us in improving the treatment of disease. No one can doubt for an instant that the elementary parts of a gland which are acting very freely under the influence of mercury differ in important particulars from the elementary parts of the same gland in a quiescent state, but we are unable to state what the difference is, and the only direct means by which we can hope to discover it is careful and exact microscopical observation and the comparison of well-made preparations under high magnifying powers. Important changes are effected in elementary parts by alcohol, alkalies or acids, various vegetable and mineral salts, and other reagents. This is well known to every one who is practically familiar with the delicate details of microscopical inquiry as applied to the investigation of the tissues of man and animals. Even in the lifeless state it has been observed that the elementary parts of different tissues are affected differently by the same reagent.

How, I would ask, is it possible that such a line of investigation should turn out unprofitable to the Medical inquirer? It has but to be prosecuted intelligently and zealously, and as great a change will be wrought in Medicine as has been already effected in Physiology.

I hold that he who advances our knowledge of the real nature of morbid action, must advance, and in many ways, the treatment of disease; and those who obstruct the progress of minute investigation of any kind, bearing upon the elucidation of the structure or action of the tissues and organs of man and animals, in health and in disease, are acting against the true interests of Medicine, and retarding not only the discovery of truth, but the relief of suffering in the years to come. The importance of clinical observation and diagnosis must be fully recognised, but at the same time the value of other and more delicate means of investigating disease must not be ignored. To demonstrate with certainty an extensive change which seriously affected the function discharged by highly important organs like the lungs, the liver, or the kidneys, and to be able to state the exact nature of the alteration, was indeed a step in advance of the Medicine of the last century, but in too many cases the information we gained only amounted to the knowledge that for days, weeks, months, and in some instances for years, a diseased process had been steadily advancing, until it had completely deranged the action of the organ involved, and that it continued to progress until it destroyed life.

The Medicine of the future has higher aims and brighter hopes. Its province is to prevent disease, to detect its earliest approaches, and to check its progress before it has attained that magnitude and definiteness to be of interest to the merely clinical observer. More light is likely to be thrown upon the nature of the changes occurring very early in the diseased state by the Physician who has studied in the laboratory and in the microscope room, than by the Physician who has restricted himself to bedside observation in the wards.

The first will endeavour to ascertain the nature of all those wonderful changes which distinguish the individual suffering—say from a slight cold, which may or may not go on to serious disease, and to interfere with their progress before actual disease is developed. The latter distinguishes with precision the various forms of actual disease, and is proud of diagnosing between certain forms of phthisis, and pneumonia, or pleurisy. The first would devote his powers to very minute investigation. The last is too often led by these who have preceded him cruelly to undervalue such inquiries, and to stubbornly refuse to allow that such careful and delicate inquiry belonged in any way to the Physician. Such refinements, in his opinion, are unfitted for the practical healer of disease. Such delicate investigation leads neither to the relief of suffering, nor to the cure of present disease. It is impractical, useless, at least, to the present generation, and any advantage likely to accrue from it in years to come is doubtful, and so hidden in the distant future that it cannot be appreciated or estimated in our days. This is the sort of argument by which the progress of Medical research has been terribly retarded, and especially so in this country, where there are marvellous opportunities and vast means at our disposal for the promotion of Medical science. And it is passing strange that eminently intelligent persons who pride themselves upon their practical notions cannot see that of all practical employments most highly useful to mankind that of preventing disease is the most so. But is it not little use to talk about preventing the development of disease while we remain ignorant of the changes which usher it in, and of the earliest alterations which occur in the tissues, and in the blood, which just before were in a perfectly healthy condition?

It has always seemed to me that the transition from the healthy to the diseased state was a subject for investigation of surpassing interest, although of marvellous difficulty, for the sufferers seldom come under our notice until the diseased condition is fully established, while the inquiry itself is so complex and so difficult that it is not likely to be popular among those who consider the province of the Physician strictly limited to the detection and treatment of distinctly developed morbid conditions.

Nor is the question of the nature of disease of Professional interest only. The public desires, upon a matter in which all are so deeply concerned, much information, and many of the most subtle points are not unfrequently adverted to in these days in the public journals. Although it is true very few people in health care much to know the structure of their own bodies, and the changes which are going on in the organism, it is not uncommon to find intelligent persons, suffering from slight and not easily defined ailments, extremely desirous of learning

from us exactly what is wrong. How frequently are we subjected to cross-examination, but how seldom, owing to our imperfect knowledge of the minute changes going on in the body, are we able to give explanations altogether satisfactory and clear even to our own understanding. But, nevertheless, is it not at this very time, before the change has proceeded to a sufficient extent to entitle it to be called a *disease*, that our interference might be of the greatest service? Disease may consist in an alteration in the rate at which a tissue lives and grows. If textures, which, in the healthy state, grow very slowly, appropriate nutrient matter with undue rapidity and in unusual quantity, *disease* results. And, in like manner, if the rate at which nutrition goes on be reduced much below the normal standard, the morbid state is developed. In very many cases, the chief difference between a healthy and morbid condition of a given tissue is in the rate at which the nutrient pabulum distributed to it is taken up and appropriated, and in the rate at which the production of formed material proceeds.

In some cases we find the tissues losing the healthy condition during a short time only. For example, the surface of the skin of the body may be affected in such a way that a soft discharging painful sore makes its appearance in place of the normal smooth cuticular surface. The ulcer, however, may soon heal again and the surface be restored to its former perfectly healthy state, the morbid condition perhaps reappearing after a certain time has passed, to be again succeeded by the healing process. And it is remarkable what very slight change in the conditions under which the patient lives seems to determine in such a case the healthy or the morbid action. Is it not therefore important that we should investigate the exact nature of the changes with the aid of the new means modern science has placed at our disposal, for is it not certain that by a thoroughly searching investigation we should be able to find out by what changes the healthy or morbid state of the skin is determined? The information would probably lead us at once to suggest the right remedial measures. Slight indigestion, sick headache, nervous and muscular pains, depression of spirits, various cutaneous eruptions, which tease many persons for years, are a few of the ailments which would probably be cured if our knowledge of pathological changes was in a satisfactory state, nay perhaps, if we had but a thorough knowledge of the changes which occur during the healthy condition. In many instances on the other hand the morbid change is such that the structure of the part affected is permanently damaged. Should we not therefore make the greatest efforts to learn the exact changes which occur, in the hope that we might discover some means of detecting them sufficiently early to prevent the progress towards an irremediable disease and permanent change of structure?

The very same pathological change will produce very different results as respects the well-being of the organism according to the particular texture affected. The skin and certain parts of the mucous tract are often the seat of pathological actions which need give us no anxiety whatever and which scarcely deserve notice. While, if actions of the very same nature occur in certain parts of the nervous system they would necessarily lead to changes which must terminate fatally in a short time.

And it is remarkable that the liability of the various tissues and organs to attack should vary greatly. We find that for the most part those textures which are the least likely to be permanently damaged are most easily affected, and suffer first in order, while those which would most probably be destroyed if attacked usually escape, or are at any rate the last to be affected by morbid change. Thus epithelium and connective tissue may be actually destroyed, while adjacent important textures entirely escape, and in internal organs the same fact is noticed. The membranes and the least important textures of the brain are sometimes found much damaged by disease, while the brain tissue itself appears to have completely escaped injury. And in inflammation and fever these less important tissues are invariably and often very seriously affected before any influence is exerted upon the more important nerve-cells. Much connective tissue might be completely altered by morbid action, without the integrity of the organism being in any way impaired, while a comparatively slight degree of change affecting a small portion of the brain tissue might lead to disastrous consequences.

The effect of any particular morbid change upon the general condition of the organism, will depend much upon the state of the body at the time of invasion. If the individual attacked had been perfectly sound previously, his tissues and organs would suffer little compared with those of an organism already altered by disease, or the subject of defective or imperfect development.

Although it is probable that a considerable number of the cases of disease which we meet with occur in persons unsound from birth, it will be better for us in this general sketch to discuss the changes as if they occurred in an organism perfectly sound. We may imagine, what perhaps is in truth the exception, that all the physiological actions of the body are properly carried on up to the time of occurrence of those preliminary phenomena of which the disease we have to deal with is the necessary consequence.

After what has been said it is not necessary to assure the reader that disease is not a substance which is to be weighed or measured, to be isolated or forced out of the organism by driving something else into it; and, indeed, I doubt if the idea that disease was a substantial thing that could be seen, or weighed, or measured, has occurred to the mind of any one living during the last fifty years who has seen and studied the actual condition of the sick. I should not have thought of alluding to such a view had not many writers made a great point of arguing against it. But it is simply a pity that so much space should be occupied now-a-days in scientific Medical works in attempting to dissipate with due pomp and circumstance the ghost shadows which seem to have been conjured up for this express purpose, but which have never vexed the mind of the innocent reader.

ORIGINAL COMMUNICATIONS.

THE ORGANIC GERM THEORY OF DISEASE.(a)

By JABEZ HOGG, M.R.C.S.

(*Concluded from page* 661.)

Many acute observers have endeavoured to connect epidemic diseases with the fungoid hypothesis, but which one after the other have been swept away.

Dr. Wallace, of New York, in 1845, endeavoured to connect epidemic disorders with fungi, and Dr. Cowdell, in 1848, published a work entitled "A Disquisition on Pestilential Cholera, being an attempt to explain its phenomena, nature, causes, prevention, and treatment, by reference to an extrinsic fungus origin." At p. 202, these remarks occur:—"The conclusion at which we have arrived, as to the nature of the cause of pestilential cholera is, that it is a minute fungus, probably resembling the *Torula cerevisiæ*."

Dr. Mitchell, of Philadelphia, in 1848, in a work on the origin of malarious and epidemic fevers, writes:—"The cryptogamic theory will well explain the peculiar domestication of different diseases in different regions, which have a similar climate—the plague of Egypt, the yellow fever of the Antilles, and the cholera of India. We have only to suppose, what is known to happen in other cases, that the fungi, on which cholera is assumed to depend, acquire at times, as do the germs of some contagious diseases, an unusual power of reproduction and diffusion, and a greater potency of expansion. Such germs may be carried by men, and goods, and ships; or be scattered by the winds, to regerminate wherever special conditions are found. Thus can we see why the poison prefers the route of streams, or infects the damp parts of cities; and why classes living in clean apartments, in dry districts, suffer so little."

In this author's writings we find a well woven hypothesis of cholera, one which it appears to be hypercritical to attempt to demolish. It is first necessary to mention the supposed discoveries in the same direction of Drs. Swayne and Brittan, who published (see *Lancet*, October 6, 1849) an account of their examinations of cholera evacuations. After repeated microscopical investigations, these gentlemen convinced themselves that fungoid and other bodies found in the rice-water discharges were characteristic of cholera. What, if possible, at the time was considered more conclusive, Dr. Budd announced that he had also succeeded in detecting the same bodies in the water of several districts where cholera had prevailed. Here was a wonderful confirmation of the fungoid origin of cholera at last. It so happened, however, that some of the evacuations and specimens were sent to Mr. Busk, who, at a meeting of the Microscopical Society, October 17, 1849, demonstrated that the large bodies figured by Dr. Swayne were merely "a species of *Uredo*, a kind of smut frequently found on wheat," exactly like specimens found by Mr. Busk in a loaf of brown bread

(a) Read before the Medical Society of London, March, 1870.

purchased that same day at Greenwich. *Uredo* is not destroyed even by caustic potash, and it readily passes, unaltered, through the intestinal tract. Other bodies supposed to be peculiar to cholera evacuations were found to be starch granules and portions of the cellular structure of the inner coat of the bran of wheat.

Professor Hallier, a botanical teacher of Jena, on examining the contents of the bowels of patients attacked by cholera during the two more recent visitations, believed that he had discovered the active agent which causes the disease. He detected in the evacuations spores, or seeds, and filaments, or roots, of a fungus. Hallier, like his predecessors in these inquiries, attempted to cultivate these spores, and in due time produced, as he thought, another fungus belonging to the genus *Oidium*, which, as you know, is seen in the mouth of infants suffering from "thrush." Proceeding with these investigations, he found he could produce from *Oidium* another fungus, *Urocystis*, known to attack cereals. The dark-coloured spores of *Urocystis* are very characteristic, and often infest the leaves of plants, but have never yet been suspected of having any connexion with *Oidium* or "mould," nor can it be proved that this fungi attacks the grain of any food plant, neither have the spores ever been detected on the leaves of the rice plant. Unfortunately, then, for his theory, Hallier assumed too much, for the entire foundation of it was based on an assumption that moulds are related to *Ustilagines*, or "smuts and bunts;" for "moulds," he says, "are mere unripe fruits of *Ustilagines*." He believes that his so-called "micrococci," having travelled with the rice plant from India, enter the stomachs of persons, and destroy the villi of the intestinal canal with amazing rapidity. Hallier has, however, after mature consideration, seen fit again to change his ground a good deal, and now says that he is not convinced that any infectious disease can be caused by spores or fungi *per se*. He also considers that there are ripe and unripe forms of "moulds," and on occasions even when ripe spores are cultivated on a weak and poor soil they do not produce "cholera contagium," so that, although large quantities of spores may occasionally be swallowed, they may not be retained long enough in the intestinal canal to produce ripe micrococci, and they then pass through inoccuously. He further describes micrococci to be particles of a plasmic mass without cell walls, requiring the highest powers of the microscope in skilful hands to detect them. A high temperature, he says, is necessary to maintain these micrococci in an active condition, and therefore only during warm weather, the summer of European latitudes, could we expect the fungus to germinate and propagate as in India. Thus driven from his original view that cholera is due to the *Urocystis* form of fungus, he adopts another which deserves no more confidence at our hands. Indeed, it has been, and can be again, most conclusively shown that diseased rice takes no part whatever in the production of cholera. Rice is never eaten uncooked either here or in India. It is always boiled, and well boiled, so that anything like vitality or germinating power is probably destroyed. But supposing that spores of any kind were found adhering to rice grains and taken into the stomach, would they remain there long enough to germinate? Certainly not. The spores of the edible mushroom require to be passed through the stomach of the horse, but, instead of germinating there, they only germinate in the excretions after exposure to a moist air; and because the spores of the mushroom may be taken from the dung of the horse and made to vegetate, it by no means follows that a crop of mushrooms could be produced in the intestines of the animal. The notion is preposterous.

Fungi are curious organisms, and we begin to find out that very little is known about the mysterious growth and distribution of these minute organisms. "If the spores of one species will not germinate until they have suffered the probation of the horse's stomach, may not another species require to pass through a similar probationary stage in the stomach of another animal? An analogy actually occurs in some of the lower animal forms, the entozoa. Furthermore, if it should be found that *Oidium* germinates in the human stomach, and that the intestines are the natural habitat of the fungus, should we not find spores in the excretions of those in health as well as in disease? At all events, we ought to find Hallier's unripe forms of *Ustilagines*."

I do not forget that in certain deranged conditions of health a fungus (*Sarcinia ventriculi*) is found in the stomach, and another (*Torula diabetica*) in the bladder, both of which are doubtless produced from particles of food (probably mildewed flour) and an excess of some salt; by contact action a ferment is sometimes set up, but the spores are not indefinitely multiplied; neither are they the cause of an epidemic visitation, or of sudden death, nor have they been known to supply evidence of the alternation of generations. Sarcinia have frequently been found after death when no disease of the stomach was suspected during the life of the person, and have no more to do with a specific disease than *Leptothrix* found between the teeth and in foul buccal secretions.

Experiments such as those of Hallier, upon mice, feeding the animals with bibulous paper steeped in choleraic putrefying evacuations, cannot be accepted as at all conclusive. Indeed, Dr. Thudichum, upon repeating the experiment (I quote Dr. Thudichum's experiments rather than my own), found that out of 51 mice 13 only became ill, 11 of these died, 2 recovered, and the remaining 38 were unaffected. The poison was active only between the fourth and tenth days, which is exactly the period when a chemical change is found to take place in the proportions of nitrogen and carbonic acid contained in it; and from this Dr. Thudichum argues that its power for evil depends on the evolution of hydrogen. If the poisoning were caused by fungi, all the animals should have been infected, or, at all events, there should have been no immunity for any particular time during which choleraic matter was administered. The conclusion arrived at by Dr. Thudichum is that the decomposition which is found to take place is such as might have been expected from the putrefaction or decomposition of albuminous matter by chemical processes, and not by any fungoid fermentation, as the action is going on in parts of the body into which fungi could never penetrate, and have never been alleged by the advocates of the fungoid theory to penetrate. An examination, also, of the cholera excreta by the spectroscope negatively confirms this view. It shows that a most complicated alteration of the chemical condition of the blood takes place during the rapid progress of this disease.

Liebig's latest investigations are nearly conclusive that the yeast fungus (*Cerevisia torulæ*), if it plays any part, must be a very unimportant one in the process of fermentation, or the transformation of glucose into alcohol and carbonic acid. This chemist looks upon fermentation as a purely chemical or physio-chemical process brought about by heat.

"It is possible," says Liebig, "that the physiological process stands in no other relation to the process of fermentation, than that, by means of it, a substance is formed in the living cell, which, by an action peculiar to itself (resembling that of emulsin), determines the decomposition of sugar and other organic atoms. In such case, the physiological action would be necessary for the production of this substance, but would be otherwise unconnected with the fermentation properly so called."

Dr. Thudichum revived what he found to be an old experiment—the immediate conversion of cane sugar into grape sugar. If we take two parts of white sugar, and rub it up in a mortar with one part of a perfectly dry solid—the so-called German yeast—it is transformed, as if by magic, into a flowing liquid mass—a syrup. This process of forming "invert sugar" can be watched under the microscope; the liberation of carbonic acid gas in large bubbles is seen to go on, simultaneously with the assimilation of the dextrose, and breaking up of the crystals of sugar; the cell increases in size, as well as in refractive power; a remarkable state of activity appears in the minute mass, which is very interesting. German yeast, as you are aware, is a spontaneously fermented mixture of wheaten flour, or malt, and water, or honey and malt. I believe, with Dr. Thudichum, that this experiment goes a long way towards "changing our view of the action of yeast in producing fermentation." The transformation is so instantaneous, "that it partakes of the nature of those actions which in chemistry are called 'contact actions.'" The amount of moisture retained in the German yeast is very nearly inappreciable, yet it must be supposed that there is a minute quantity retained, or the change would not be so very instantaneous. Is, then, the change—fermentation, as we call it—brought about by simple "contact action," or is it due to organic life?

I have for a long time past been devoting some attention to the question, and I am not sure that I am much nearer its solution; nor can I explain away the difficulties with which it is surrounded. On repeating some of my experiments of twelve or fourteen years ago, during my investigations "On the Vegetable Parasites of the Human Skin," and which, in 1859, I had the honour of submitting to this Society, I then stated that I had discovered little difference, except in size, between yeast fungus, favus fungus, aspergillium spores, or those spontaneously produced in the sweet-wort; they were equally capable of converting or changing levulose and dextrose into alcohol, and the results were very nearly identical in either

case, the differences observed depending more upon the pabulum on which the spores were fed, than upon any other circumstances whatever. Therefore, in connexion with cutaneous diseases there exists but one fungus; this floats about, seeking a suitable soil for its development. While diversity in form, as well as other results, depend upon food, temperature, etc., and whether the fungus be grown upon a sickly plant, an animal tissue, or a saccharine and albuminoid solution.

Later researches tend to confirm these conclusions, although by repeating some experiments and watching my results more closely under the microscope, I believe I am justified in saying there does appear to be some diversity both in form and in results, when I employ brewer's yeast in my experiments. But I cannot agree with M. Pasteur that the different fermentations, the vinous, the lactous, the acetous, etc., are produced by different species of fungi, nor can I go so far as to say that brewer's yeast belongs to another genus, although it may be another species. The difference observed is, the brewer's yeast cell is quite circular in form, pale in colour, the cell wall is thin and its contour not so well marked; it is filled with a granular matter, described as nuclei, varying in number from five to ten, and as soon as the solution becomes exhausted, the cell wall is ruptured, and the granular matter escapes, when, if fermentation is not soon stopped, bacterium-like bodies, vibrios, are produced, and acetous fermentation begins. The other kind of cell, by far the more important of the two, the cell wall is thick, and its contour is well marked, the interior is filled with a highly refractive protoplasmic mass, the central nucleus is faintly seen, and at times is not made out until the solution is nearly exhausted, when the cell has a tendency to become ovoid in form, and sometimes considerably elongated. The cell in its early life is precisely like the German yeast cell, and is mysteriously developed. It is doubtless identical with the fungus found floating in the air, and when it germinates in vinous solutions, it grows to a much larger size, and bears a striking resemblance to the well known fat corpuscle, and probably has been often mistaken for it. I term this the albuminoid form of cell, because the presence of albumen seems to add to the vigour of its growth. But the most remarkable fact in connexion with this fungus is, that it produces ten per cent. more alcohol than its congener, and does not become so readily exhausted as brewer's yeast. It is impossible for me to offer any explanation of this fact; the spores must float about in an almost impalpable dust, and it does appear that a dry powder equally with an extract of yeast, as it were, is all that is required for bringing about a transformation of sugar into alcohol.

It is curious also to notice, that with the exhaustion of the glucose, levulose, or dextrose, the development of vibrios or bacterium-like bodies is observed, at the same time the acetic change begins, which is a destructive process. The cell walls appear to supply food for these low forms of organisms, which ultimately die off and are succeeded by another generation. A large quantity of albumen seems to be produced by the contact action of these aërozoa; but if this substance is greatly in excess, the solution is more prone to a destructive ferment, especially so if cellulose be present at the same time. A remarkable instance of this has been brought to light. The Batrachospermeæ are algæ, living in a sort of albuminous envelope, and their zoospores are aggregated in cells. On placing masses of the algæ in a bottle, and adding fresh water, a spontaneous ferment is soon set up, the seed-vessels burst with the disengagement of gas, and with this operation the colour of the liquid changes; it assumes a delicate pink in direct light, which deepens to a reddish hue in condensed light; the fluid is now dichroic; it is fluorescent, and the spectroscopic appearance is one of interest: the spectrum is a well-marked one, and may ultimately assist in determining the presence of albumen in animal and vegetable solutions. It certainly appears that the physiological action set up in fluids having an excess of albumen present is one which differs considerably from the chemical changes observed under other conditions.

What, then, I may ask, has positively been made out with regard to the fungoid bodies or organic germs in the production of disease? The most carefully conducted examinations have as yet produced only negative results. In that most common form of disease in which fungoid bodies are found—Leptothrix—it is known to arise from a neglected condition of the mouth and teeth, and which can readily be cured by a proper use of the tooth-brush. If fungi cause cholera, how does it explain the suddenness of the attack? It is out of character to suppose that a few fungi, more or less, will kill suddenly or in the course of six or eight hours. If the specific germs lie dormant, and are capable of assuming other forms, then why are they not found in this state prior to the attack or during a condition of health? Hitherto all the bodies found during life have been satisfactorily traced to food, or are the natural product of the mucous membrane.

A condition of healthy vigour is certainly opposed to the growth of fungi; they give a preference to matters left at perfect rest—substances readily disintegrated, prone to decay or separation—and from which they draw sustenance. It is apparently life to them to assist in the work of decomposition and recomposition; decay is for them an organising process, a force arising out of decomposition. If, however, we require a formula for cholera, we may take "bad air, bad water, sewer emanations, floating stinks, germs if you please, bad ventilation," with perhaps a dozen or two more evils, which are all more or less concerned in originating the disease; but the prime occasion for its development is a mass of human beings aggregated together, either in towns, in barracks, or the country, into a sufficiently limited area of mud, gravel, granite, large and imposing structures, crowded courts, alleys, cellars in St. Giles's, or attics in Glasgow, and the necessary conditions for cholera as well as other zymotic diseases are provided. A vitiated state of atmosphere breathed and rebreathed until it becomes lung-tainted and poisonous, to which is added bad food, bad lodging, or some chronic disease assisting to lower the vital functions, and our catalogue is exhausted.

OBSERVATIONS ON

DR. BUCHANAN'S LECTURE ON PROFESSOR VON PETTENKOFER'S THEORY

OF THE

PROPAGATION OF CHOLERA AND ENTERIC FEVER.

By Professor MAX von PETTENKOFER.

(*Concluded from page* 663.)

It is high time to seek elsewhere than in the impure drinking-water for the local causes of typhus and cholera. How little the impure drinking-water, contaminated with excrement, can be the source of these and many other specific diseases of men and animals I may show by the following quotation from the treatise of Buxbaum on the typhus in the barracks at Neustift in Friesing(a):—

"I have practised about ten years in a neighbourhood in which the drinking-water must have been under all circumstances very impure, without my being able to prove it by analysis. It is the neighbourhood of Eichstadt, in which in consequence of its geological situation there is the greatest scarcity of water. This is particularly the case on the ridge of hills situated north of Eichstadt. Here, as in the whole of that region, the formation is the white Jura limestone, which extends as an undulating table-land, having neither brook nor stream. For as the arable soil lies more or less immediately on limestone, either stratified lime, or dolomite, or calcareous rock, the atmospheric precipitations disappear without leaving any traces through the numberless clefts in the depth of this limestone, coming again to light at a more or less distant valley as permanent or periodical springs. One sees in the field or wood of this plateau numerous funnel-like caverns, which gather at a considerable depth all the rain-water collected from its neighbourhood, and convey it bubbling to the bottom. There are therefore in this region not only no streams or brooks but also no wells. Frequently the drifted clay had formed an impermeable stratum in some trough [among the hills]. Here and there are found wells containing water to the depth of a few feet, generally in private possession, and closed by a lock to preserve its small quantity of water for the possessor or privileged persons. With the exception of these cases all the inhabitants must obtain their water by collecting the rain-water into cisterns by means of gutters.

"In a history of the town and district of Eichstalt by the district school inspector, the Rev. Mr. Hotte, of Wachenzell, it is said on this subject (p. 128):—'The inhabitants are allotted the rain-water in the gutters, which is named sparrow-water (*spatzenwasser*), because the sparrows also make free to drink from the gutters. However, this water is, when, as occasionally happens, salt or ashes are thrown into the cisterns, tasteful, and certainly more salubrious than others containing saltpetre or sulphur or iron.'"

(a) *Zeitschrift für Biologie*, Bd. vi. p. 32.

It will be seen that the author here gives the opinion of the inhabitants of the place, who consider their sparrow-water more healthy than that from more common sources. For as they have long observed that they are not exposed to so many diseases as their neighbours, they have believed that they derive health from their cisterns with as much propriety as those who descry the elements of disease in their drinking-water.

"That this sparrow-water cannot be deficient in organic material may be taken for granted without analysis; for rain-water collected from gutters into shallow cisterns, and often stored up there for a long time in dry summer or cold winter months, must indeed become rich in organic matters. It, in fact, generally swarms with all sorts of little animals, even visible to the naked eye, and must for this reason frequently have salts and ashes mixed with it to diminish the excess of organic life. And yet there probably is scarcely a region more exempt from all the so-called infectious diseases than that high range. During a ten years' practice there, I have, besides catarrhal affections, rheumatism, and inflammatory diseases, observed no acute illnesses, nor any cases of typhus. The intermittent fever which in the years 1856-59 very frequently visited the inhabitants of Altmühlthal I have never seen in that plateau. But the most remarkable example of the innocuousness of drinking-water rich in organic matters is is the so-called black water, which in the district in question is given to the cattle, particularly to the horned cattle, in order to save the sparrow-water for the use of the men. This *schwartzwasser* is obtained by collecting in one or more of the lower places of the village the rain-water which streams in all directions from the roads, dunghills, and the like. Here in this artificial black lake ducks and geese and swine sport themselves, and the animals come to drink. Professors Drs. Holzner and Lindner were kind enough to submit to microscopical and chemical investigation some of the water, and the result is annexed to my report. I obtained the sample from the district school inspector in Wachenzell, the Rev. Mr. Hotte, who sent me by letter as follows:—

"The black water reservoir of this place (Wachenzell) lies almost in the centre of the village, in a large natural excavation called a lake, which is supplied by rain water. As all the dung heaps lie there free and exposed, so not only does a heavy rain carry with it the liquid manure into the lake, but the same flows there almost constantly till the weather becomes too dry, whence the lake obtains the colour and quality seen in the accompanying samples. I observe that at this moment, and at times of very long drought, the water is much thicker than that sent. Now from this lake the horned cattle drink daily, and ducks and geese swim, and the horses are washed there; consequently, the smaller the influx in dry weather, the richer the contents, the blacker the water.

"The horned cattle, which were accustomed only to clear water, when they came here objected at first to the black water, but gradually came rather to prefer it to the rain-water of the wells. Lately only the horses drank it (the clean water), but they too in the scarcity of water contented themselves with the lake water. All the animals which drink this water are healthy, nay, the farmers go so far as to affirm that this water is more wholesome for them than the rain-water. Nothing is known here or in the neighbourhood of diseases of animals. And yet this same black water is here the general drink for animals over the whole of our mountains, from Schernfeld to Enkering, as well as on mount Irfersdorf, from Kipfenberg to Beilngries. For the summits of the hills mentioned have no spring-water, they are supplied only from gutters, and the so-called lake is in every village the general water reservoir. A farmer in Tornhüll had one immediately between his stall and dung heap; all his animals drank therefrom, and they always enjoyed the best health. When I stated to some farmers that I would send some of the water away for examination because it was not thought by scientific chemists to be harmless, they answered only by a contemptuous smile, as if there could be any doubt about a matter which appeared to them self-evident." "This communication of the Rev. Mr. Hotte I can confirm after many years' experience. I have observed with astonishment this foul water and the strong horned cattle which sipped so contentedly the fluid, which was regarded by the inhabitants as strengthening broth. I can remember seeing in Souversholz at a prosperous farmer's a well near the dungheap, which appeared to me by its position and the fluid it contained, designed as a proper receptacle for liquid sewerage. Knowing the general neglect of the liquid manure by the farmers there, I was very much astonished, and expressed to the owner my approval of his being a praiseworthy exception, and collecting his liquid manure for the field. He at first did not understand me, but on taking my meaning he assured me with the usual cunning smile that this supposed liquid manure was worth mere to him as a drink for his cattle.

"If we observe now the results of microscopic and chemical examination of these waters and the quantity of organic matter which they contain, and consider also the fact that certainly this water has already been used for hundreds of years by the animals dwelling in that district, and that these animals are thereby not only not diseased, but, on the contrary, enjoy an exceptionally good health, we can hardly any longer accept the hitherto received opinion that a drinking-water which contains in one litre 80-100 milligrammes of organic matter must necessarily be pernicious to men."

Professor Dr. Lindner has examined this black water, a sample of which Dr. Buxbaum sent to Freising, and found:

"This water was of a brownish colour, and rapidly passing into green; it was completely opaque. Its odour was stinking from sewerage, its reaction alkaline. On evaporation it gave the peculiar odour of cow's urine. The greater part of the sediment was of an organic nature.

1 litre of water gave 1·165 gramme of sediment,
of which 0·285 „ was inorganic,
0·880 „ organic.

Professor Dr. Holzner remarks on the microscopic examination of the black water:—"The dark brown bodies are partly made up of colouring matter, partly putrefying substances, partly of different kinds of diatoms of the genus Navicula, the green grains of single-celled Algæ, or colonies of cells, all containing chlorophyll enveloped in a general pear-shaped membrane. The black bodies are spores, the brittle episporesof which are granulated and black coloured. Besides the vegetable bodies, one finds a comparatively large number of infuseria and wheel animalcules. The mixture both of organic and inorganic matter is enormous in comparison with that contained in the dirtiest well water."

There are, then, places where, with the worst drinking-water, there is at the same time immunity from epidemic diseases, and therefore, however often bad drinking-water and epidemic disease coincide, the conclusion that there is a causal connexion between them does not of necessity follow, for the effect can in all cases proceed just as well directly from the soil as from the water.

By this I do not mean to say that we should now drink black water, or that we might drink it unharmed; on the contrary, we know the purer water to be better, and I am convinced that both men and animals on the Jura plateau at Eichstadt would be much more healthy and stronger if they, in addition to their soil, which is so unfavourable to the *materies morbi* of certain zymotic diseases, they had also good drinking-water. But I venture to bring forward these most remarkable facts, the truth of which I can guarantee, to show that a drinking-water, notwithstanding its demonstrably containing dung-water (*mistjauche*), is still incapable of engendering certain epidemics or of favouring their spread. The germs of epidemics and epizootics are certainly often conveyed from the valley of the Danube and the Alt Mühl river to the heights of the Jura platean, but, as experience shows, have never been able to strike root there, although the drinking-water both of men and animals was surely sufficiently contaminated with decomposing organic matters. The horned cattle, in particular, drink a water in which all the refuse from the surfaces of the filthy villages are mingled together in one common pool. These facts appear to me of a nature to lead etiological investigation away from false tracks into the right path.

The drinking-water theory appears to me at present in a transition stage, which will result in a perfectly natural manner in its passage over into the soil-and ground-water theory. The drinking-water theory cannot do without the soil, with which men come in contact essentially in two ways—through the water and through the air of the soil. It was quite natural that our attention should be first turned to that which is most perceptible to our senses—viz., the water, which we can see, feel, and taste—and that we should leave unnoticed the air which we cannot directly by our senses detect in the soil, although it makes up more than a third of the volume, of a dry porous earth which is able to sustain the heaviest building, and from diffusion, variation of temperature, and the mechanical movements of the whole atmosphere it must be in a state of continual motion, though this may be not sufficient to blow out a light or carry the hat off one's head. It has assuredly been by a great error or a great oversight that one has always hitherto imagined that the air ceases and another element—earth—begins at the ground on which we firmly

tread, when the soil is more pervaded by air than water, and the air in it is much more free to move than the water.

We know now, from the observations and inquiries of distinguished philosophers, that the air is able to support and carry along particles and organic germs of extreme fineness in comparatively great multitudes, which give rise to fermentation, putrefaction, and other processes, according as they find a suitable substratum. Might not the air in its passage through different strata of earth bear with it and bring to the surface that which may be able to derange our health?

Our dwellings stand as hollow bodies on the ground, as we place a glass bell over a volatile substance of which we would prevent the extension to the atmosphere. The air-circulation in a house is more insignificant than in the open air, so that all emanations from the soil become more collected and concentrated in the air of a house. We live in the air above the soil, and the greatest part of our lives is spent in dwelling-houses, and we probably use a disproportionally larger quantity of air than water. An adult breathes in twenty-four hours something over 8000 litres of air. The weight of this amounts to about 10,320 grammes, or more than 20 lbs., whilst we take during a day at most 2 to 3 litres, *i.e.*, 4 to 6 lbs., of water. If, therefore, hurtful matters become mingled in the least degree with the air, they come proportionally in much greater mass in contact with our organism, not, indeed, merely in the lungs, but also over the mucous membranes of the first portions of the air-passages which serve also as food-passages, amounting quantitatively to even more than if we drank freely of a contaminated water. In my opinion, we are supplied with undoubted facts not as to the drinking-water, but the soil itself. We must study the organic processes in the soil, and seek to find what it at different times and under different circumstances gives up to the air. Almost everything in this direction is enveloped in an obscurity which no ray of scientific light has as yet penetrated. I only claim for myself the credit of having collected and established facts which necessitated inquiry in this direction, and finally pointed it directly to the soil.

In such inquiries, to find new aspects and methods is now more useful than to think how a theory no longer tenable can perhaps be still upheld.

ON THE

REACTION OF AORTIC ANEURISMS ON THE HEART.

By Professor AXEL KEY, of Stockholm.

Translated from the "Nordiskt Medicinskt Arkiv," vol. i. part 4, 1869. By J. W. Moore, M.B., Ch.M. Dub.; Ex-schol. Trin. Col. Dub.

(*Concluded from page* 664.)

If we now cast a retrospective glance over the 17 cases of aortic aneurism described, exhibiting as they do a great variety of form and size, and all with one exception being situated near the heart, in either the ascending or transverse portion of the arch, or in both, we find that hypertrophy of the muscular structure of the left ventricle was not met with in a single instance; that, on the contrary, the wall in comparatively few cases has been of normal thickness, while in all the rest it has been more or less considerably attenuated, and this either without any or with a more or less trifling dilatation of the ventricle. Nay, in two cases (6 and 7) the cavity has appeared lessened, but the wall nevertheless has been very much attenuated.(a)

Frequently has the muscular structure at the conus arteriosus been extremely strong, while lower down it has been attenuated. This circumstance is best marked in case 4. Thus it appears that, instead of hypertrophy, an actual atrophy of the muscular structure in the wall of the left ventricle has occurred in the majority of instances, and this, too, with aneurisms of great size and situated near the heart. Cases 6 and 15 afford the best instances of this. Respecting the dimensions of the cavity itself of the left ventricle, if we disregard the cases where deficiency of the valves was found, it was in some instances rather diminished, in some normal, in some slightly increased. In several cases a slight transverse dilatation of the ventricle down at the apex was remarked, so that the latter was more rounded than usual. With this change, nevertheless, the cavity of the ventricle did not, as a rule, appear to be increased in its capacity. In the four cases where a more considerable dilatation of the left ventricle occurred this has invariably been found to depend on insufficiency of the aortic valves (10, 12, 17), or of the mitral (5). As regards the state of the valves, it is especially deserving of notice that only in three cases (10, 12, 17) were the aortic valves certainly insufficient, while in two other instances (9, 16) a trifling incompetency might be suspected. It is further to be remarked that stenosis was not discovered in a single instance, and that the valves in the great majority of cases were perfectly healthy, very often even without the partial thickenings at the corpora Arantii, or at the opposing or attached borders, which are so common in old persons, even where no other changes are met with. In connection with this, I will also lay stress on the interesting circumstance that the atheromatous degeneration, which in a greater or less degree was always found in the ascending portion of the arch, as a rule, terminated below, just at the upper edge of the sinuses of Valsalva, most frequently with a very sharp border, so that the internal coat in the sinuses themselves was smooth and even, while the degenerative process ravaged immediately above them. In some cases the process has even encroached somewhat on the superior parts of the sinuses, but in none has it completely penetrated into them. It will be seen that the protection against the friction of the current of blood, which the aortic valves afford to the walls in the sinuses, when the curtains fall back with the rush of blood from the heart, should be sufficient to preserve the internal coat in this situation from the irritation that produces the endarteritis. In this way we may also explain the circumstance that the aortic valves themselves were, comparatively speaking, so seldom found to have undergone changes, though we should be inclined to assume that, with aneurisms in the ascending and transverse portions of the arch, the endarteritis might, by extending from the walls of the vessels, easily seize on them. It appears, however, so far as my cases allow me to judge, in general to terminate above the sinuses; and, if the valves are altered, this must in most cases be a special alteration, not one due to the continuous spreading of the endarteritis.

The mitral valve in one case only (5) was decidedly insufficient, otherwise it was generally healthy, except in one or two instances, where it had undergone partial or somewhat diffused and inconsiderable thickening, such as is frequently observed in elderly people.

If we now turn our attention to the condition of the right side of the heart, we find the most noticeable feature connected with it to be the almost constant dilatation of the pulmonary artery at its orifice. The explanation of this is very easily found in the pressure of the aneurisms on the trunk or branches of the vessel itself, or on the lungs, but under these circumstances we should expect, as is stated, also pretty constantly to meet with dilatation or hypertrophy, or both combined, of the right ventricle; yet this is never the case. In ten instances (1, 2, 3, 4, 9, 10, 12, 14, 15, and 16), this chamber was not dilated, and in three of them (10, 12, 15) it, on the contrary, was diminished. In one of these cases (15) the diminution was, with a colossal aneurism, very considerable. In one case only (13) was the ventricle much dilated, while in six instances (5, 6, 7, 8, 11, 17) a slight hypertrophy existed. Actual thickening of the wall, again, has been met with only in two cases (4, 16), and in one of these the opening of the pulmonary artery itself was compressed by the aneurism. In another case with similar, but even greater, compression, and perhaps also with insufficiency of the pulmonary valves (9) neither hypertrophy nor dilatation had occurred. In one instance (13) a slight relative hypertrophy, particularly in the conus arteriosus, was met with.

The observations on the reaction of aortic aneurisms on the heart here communicated, militating, as they do, so directly against the views of the authors above cited, do not, however, stand altogether alone without gaining support from the observations of some other authors. Bamberger, indeed, repeats the general statement that "the reaction of aneurisms on the heart commonly declares itself through hypertrophy, with dilatation of the left ventricle, often of the entire heart, especially in the case of large aneurisms situated in the vicinity of the organ;" but he adds that exceptions to this are by no means infrequent, and that he has many times, even with large aneurisms, seen the heart of perfectly normal size. He regards it, however, as certain that "hypertrophy with dila-

(a) It should be remarked that the measurements were made in preparations which were kept in weak spirit, and that the dimensions may, perhaps, in consequence have fallen short of what they would have been if they had been taken in perfectly recent specimens. The difference cannot, however, be great; and above all, this circumstance cannot influence the main results, when the departure from the normal state of affairs is as considerable as the details of the cases relate.

tation is more frequently present than absent."(b) Günsburg, again, and especially Stokes, have arrived at results which agree more closely with mine. Thus, Günsburg says that "aneurisms in the aorta do not cause hypertrophy, but indeed sometimes dilatation of the heart." In fifteen cases observed by him, five times was dilatation of all the cavities of the heart found.(c) What the state of the valves in these cases was he has not specified. The dilatation may, therefore, very probably have depended on deficiency of the valves, not directly on the aneurisms. Stokes expresses himself still more decidedly —"Even large aneurisms of the thoracic aorta seem to exercise little or no influence on the increase of the heart;" and he also says "with a large aneurism the heart may be atrophied;" (d) and he particularly brings forward the fact that the heart in cases of aneurism is frequently not diseased, thus facilitating the diagnosis. The respect that they deserve has not been attached to these utterances.

From the investigations above communicated, I would be inclined to assume that the reaction of aortic aneurisms on the heart is in general the following:—When the valves are healthy, the aneurisms often appear not to exercise any influence on the heart as regards either its size, form, or condition in other respects. Hypertrophy of the left ventricle they do not, as a rule, produce; on the contrary, the muscular structure in this situation is frequently atrophied, sometimes to a great degree, and this with or without a slight dilatation of the chamber, or even combined with diminution of its cavity. A trifling dilatation is often met with, especially of the inferior portions of the ventricle, so that the apex becomes rounded and augmented in breadth, seldom in length. This widening of the inferior part may be relative, so that the capacity of the ventricle in its entirety is not increased. The aortic valves are most frequently healthy, and the mitral valve is still more seldom so changed that its function is disturbed; the atheromatous degeneration ceases, as a rule, at the superior border of the sinuses of Valsalva; the aortic opening itself is, in general, to a very trifling extent, or not at all, dilated; when a more striking dilatation of the ventricle, or when hypertrophy of it is present, these changes are generally speaking dependent on the valvular deficiency; the pulmonary artery with its orifice is pretty constantly widened; the right auricle is often not dilated, and when dilatation is found, it is usually slight, and very seldom combined with any noticeable hypertrophy, frequently with atrophy; sometimes, also, the right ventricle is diminished in size, and the heart may altogether be atrophied.

If we ask ourselves how it happens that aneurisms do not produce a hypertrophy from overwork, in the first place, of the left ventricle, as is stated, and as on the ground of the physical elements present we should expect, the difficulty attaching to this question is not small. Many other elements besides the sudden widening and narrowing of the tube of the aorta may, however, here come into play and co-operate towards the neutralising of the effect of the increased resistance on the heart.(e) In the first place we should be disposed to attach importance to the fact that the aneurism, through pressure on the pulmonary artery, or on its branches, or on the lungs, impedes the pulmonary circulation, of which the consequence is that a lessened quantity of blood is carried to the left ventricle, its work being thus lightened. In connexion with this it is, nevertheless, to be remarked that, if this circumstance in general played a very prominent rôle, hypertrophy with dilatation of the right ventricle should be more constant than I have found it to be; but yet the tolerably constant dilatation of the pulmonary artery shows that this element must be taken into consideration. Further, we should lay stress on this, that, if the aneurism is large, it constantly retains a corresponding quantity of blood, which is thus withdrawn from the circulation, and the heart consequently works with a proportionably smaller quantity; lastly, a condition of the circulation and blood due to depraved nutrition, subsequently causing an anæmic state, must, in these cases, have great influence on the mechanical labour of the heart. Of what important weight these latter elements must be in actual fact is seen from the cases where the entire heart is atrophied, notwithstanding that the physical elements otherwise seem necessarily to imply a hypertrophy of both its ventricles.

(b) Bamberger, "Lehrbuch der Krankheiten des Herzens," Wien, 1857, p. 415.
(c) Günsburg, "Klinik der Krieslaufs- und Athmungsorgane," Breslau, 1856, p. 197.
(d) Stokes, "Die Krankheiten des Hertzens und der Aorta," deutsch von J. Lindwurm, Würzburg, 1855, p. 489. (Stokes, "Diseases of the Heart and Aorta," 1854, p. 579.—*Translator.*)
(e) Cf. Key, *Proceedings* of the Swedish Society of Physicians, 1865, page 265.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

THE GREAT NORTHERN HOSPITAL.

The case of ovariotomy at this Hospital, published in our last number as under the care of Dr. John Murray, should have been reported as under the care of Dr. Gustavus C. P. Murray, Obstetric Physician to this Hospital. We may add that the patient now sits up, and that the wound healed through almost its whole extent by first intention. The actual cautery was not used to the stump of the pedicle. This was merely tied, the ligature cut short, and the whole returned into the abdomen.

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Medical Times and Gazette.

SATURDAY, JUNE 25, 1870.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND AND THE AMENDED GOVERNMENT MEDICAL BILL.

Professor Haughton, when addressing the meeting of the British Medical Association on the subject of the Medical Reform Bill now before Parliament, was understood to hint that Sir John Gray's Bill had been launched on the political ocean not merely for its ostensible purpose, but partly to withdraw the attention of Parliament from Irish affairs in which during the past and present sessions both Houses of the Legislature have evinced such a lively and unwonted interest. A more sea-worthy tub to amuse a whale than the very cranky leaky vessel launched by Sir John Gray was undoubtedly the Lord President's Medical Act (1858) Amendment Bill. But even this has been forced to give way to the superior attractions of the Irish land question, the adjourned debate on which in the Lords took the place, on Friday, the 17th, of the committee on the Government Medical Bill. It is now, we believe, intended that the consideration of Lord de Grey's measure shall be resumed on the 30th of the present month. Any further postponement must undoubtedly annihilate all chances of a Medical Reform Act for this session.

Although, however, it is too evident that the prospects of any useful measure of Medical reform in this session are becoming daily dimmer, yet it is impossible to say what our Legislators may do under the influences of heat, desperation, and the attractions of the moors. If the Bill is passed by the Lords, it is possible that the Liberal majority may force it hastily through the Commons for the sole purpose of getting

rid at once of a troublesome subject, in which the general public take very little interest. That the Bill as amended by the Lord President should become law would, we maintain, be the most disastrous thing that could happen to our Profession. We, therefore, are glad to see that strenuous efforts are being made in several quarters to procure alterations in its provisions or, should these efforts fail, to insure its rejection.

The most important of these movements is that initiated by the President and Council of the Royal College of Surgeons of England. The authorities of the College have, unsolicited, determined on convening a meeting of the Fellows and Members in the College on Tuesday, June 28, for the purpose of procuring the restoration of the 18th clause of the Bill as originally drawn. The necessity for such restoration has been repeatedly shown in our former articles on the Bill. The original Bill was drawn to erect one portal to the Profession of Medicine, with, it is true, a door for each division of the kingdom. The omission of Clause 18 simply adds three to the already existing nineteen portals. Clause 18 embodied the great redeeming principle of the Bill. Without it the Bill is a piece of mischievous legislation, by which the Medical Profession is deprived of own government, and is placed under the power of the Privy Council, without one single benefit which can compensate for the loss of its independence. We therefore hail with pleasure the decided step which the President and Council of the Royal College of Surgeons have taken. Not one of the existing Medical authorities, in hitherto supporting the Bill, has shown greater willingness to make large sacrifices for the "one portal" principle than the Royal College of Surgeons. That their support has been disinterested is beyond question. But now that they see the great principle of the Bill in danger of being abandoned by the Government at the bidding of the universities, the College rightly steps forward to urge the Lord President to retrace his steps in this matter, or, failing this, to refuse all further support to the Bill. To do this with effect, the authorities of the College have most rightly and most wisely appealed to the great and powerful body of their Fellows and Members for their aid in the contest. That the invitation of the President and Council will be loyally and largely responded to we have no doubt. By the line of policy on which the College has now entered, it can hardly fail to become the most popular, the most powerful, and the most respected body in the whole list of Medical authorities. In the services which, by its museum and professorships, it renders to science, it is already confessedly without a rival; but by calling to its aid at a juncture such as the present, the great body of Surgeons who are affiliated to it for the support of a great and popular principle, it assumes a moral power which no Medical body has hitherto ever wielded, and which no Minister of the Crown, however powerful, would desire to encounter.

THE POOR-LAW MEDICAL OFFICERS' SUPERANNUATION BILL.

To few men of the present day is the Profession of Medicine more indebted than to Dr. Brady, and he has now conferred on us the crowning obligation of having obtained from the House of Commons a decisive vote, by an overwhelming majority, in favour of granting superannuation allowances to the Poor-law Medical Officers of this country. After the vote of Wednesday a provision in old age for Poor-law Surgeons may be looked on almost as a certainty. To Dr. Brady, as the prime mover and agent in this success, the thanks of all Medical men are specially due. In saying this, we by no means would forget or underrate the support he has received. In such an enterprise no independent member could hope to succeed unless his efforts were warmly seconded. The assent of Mr. Goschen was obtained in part no doubt in consequence of the representations made to that gentleman by the President of the Royal College of Physicians and the Vice-Presidents of the Royal College of Surgeons, and by the deputation from the Poor-law Medical Officers' Association, presided over by Dr. Rogers, at their interview on Monday last. How heartily Dr. Brady was aided by Medical men throughout the country may be understood by the fact that before moving the second reading of the Bill he presented no less than than three hundred petitions in its favour. The whole success proves that the Medical Profession is a body rising in public power and influence, partly, we believe, through the interest which has been growing of late years in the public mind on all matters connected with hygiene, but partly, and in no small degree, through the efforts which Medical men have themselves made to secure a footing in the state befitting a useful and learned Profession, and to the representation which they have obtained in the House of Commons.

Dr. Brady, in moving the second reading of the Bill, based his advocacy, not merely upon the justice which his measure would render to the Medical officers, but on the benefits which would accrue to the public from the inducements which superannuation would offer to a superior class of Medical men to enter the public service. He urged that in this way his measure would conduce to the diminution of preventible disease. For ourselves we believe that for many years the standard of Medical education has been gradually improved, and that all classes of Medical men have consequently been raised in scientific and Professional status. But it cannot be concealed that the miserable terms hitherto offered to Poor-law Medical officers have had the effect of preventing the best men from applying for poor-law appointments, unless from local circumstances such appointments could be made subsidiary to private practice. This will no longer be the case when superannuation is granted by the Legislature. The successful performance of poor-law duties will be looked on as one and a certain means of obtaining the competence which should be enjoyed in old age, and however badly a man's private practice may afford opportunities for accumulation, it will be felt that services rendered to the poor will bring not only the highest moral reward—the consciousness of the right performance of duty—but the mundane advantage of honourable rest and modest provision when brain and limb are wearied with the work of life.

THE WEEK.

TOPICS OF THE DAY.

Our Profession has received a fair share of the honours which the University of Oxford has been liberally bestowing during the present Commemoration week. Amongst the new D.C.L.s are Sir James Alderson, President of the Royal College of Physicians, Dr. Paget, President of the General Medical Council, Dr. Henry Bence Jones, and Sir William Jenner. It will be remembered that the last-named eminent Physician was prevented by attendance on her Majesty from receiving from the University the honorary degree of D.C.L. in August, 1868, when the British Medical Association met at Oxford. We are certain that on no more worthy recipients did these coveted academical honours descend than on the four distinguished Physicians whom the University has selected.

We notice also that an honorary degree of M.A. has been recently conferred by the same University on Mr. F. Symonds, F.R.C.S., the University coroner.

We have before us amendments to Lord De Grey's Amended Bill to be moved in Committee by the Duke of Richmond, Lord Cairns, Lord Talbot de Malahide, the Duke of Devonshire, Lord Somerhill, and the Lord President of the Privy Council. Some of these, especially those to be moved by the Duke of Richmond and Lord Cairns, are of very great importance. One of the Duke of Richmond's amendments is to the effect that if it be established to the satisfaction of the General Medical Council that any Medical or Surgical diploma

or degree granted by any Medical authority is as good an evidence of a thorough Medical education as the licence to be obtained under the Act, the Council shall place such diploma or degree upon a list to be published by them. It is also proposed that the Council shall have the power to remove such diploma or degree from such list, right of appeal on the part of the Medical authority which may suffer by such removal to the Privy Council being allowed. Persons holding such a diploma or degree, if they apply for examination for a licence under the Act, are only to be examined in the practical and clinical departments of Medicine and Surgery only, and the fee for such examination is not to exceed five guineas. It will be observed that the former part of the amendment is entirely opposed to the "one portal" principle, and the second is merely permissory. It does not oblige persons holding these diplomas to present themselves for examination for the new licence, but only allows them to do so if they please on easy terms. We, therefore, cannot see that any benefit would accrue from these amendments, and inasmuch as they interfere with the only principle which will render the Bill an acceptable one to the Profession, we hope they will be strongly opposed.

But the Duke of Richmond has a still more important amendment on the paper. Under, it is said, the inspiration of the Scottish universities, of one of which he is Chancellor, he proposes to omit all that portion of the 10th clause which disposes of the surplus funds from examination fees in maintaining the museums, libraries, and lectures of the Medical authorities. It is said that the Scottish universities have discovered, and intend to maintain, the principle that to charge a candidate who enters a profession more than the bare cost of examining him is a fraud upon that candidate. As this is a perfectly new principle in the history of professions, it may be worth while to examine it a little. The Profession of Medicine is a body to which the State grants a certain monopoly on condition that its members possess, for the public good, certain educational qualifications. In order to obtain and maintain these qualifications, a certain machinery of lectureships, libraries, and museums is necessary. This machinery is possessed and supported by the great Medical corporations for the benefit of those who are entering and have entered the Profession. The corporations have been hitherto enabled to do this by funds derived from the examination of the candidates for admission to the benefits of the monopoly, and the State now proposes to give a new sanction to the arrangement. Instead of this being a fraud upon the candidate, we maintain that it is only reasonable and just. A contribution, for instance, to the Hunterian museum and the library is paid by every Member and Fellow of the College of Surgeons in the fee he pays for his diploma, and the museum and library are maintained for the special benefit of the Members and Fellows. The new Bill, indeed, puts the burden upon the whole Profession, but it proposes that the whole Profession shall reap the benefit. It seems monstrous to endeavour to direct these funds into other channels. It is not for the honour or benefit of the Profession of Medicine that the Hunterian Museum should be handed over to the Government, and we are perfectly certain that the Government are neither prepared to disburse the enormous sums which the College of Surgeons has spent upon it, nor to tax the public for its maintenance. If the Duke of Richmond persists in pressing this amendment, it must be fatal to the Bill, which we should hope Lord De Grey would withdraw.

Lord Cairns in his paper of amendments proposes that the names of the successful candidates for the licence, with the number of marks obtained by each candidate, should be published, together with the name of his Medical school and Hospital, and any previous qualifications he may have obtained. He would limit the right of granting Medical diplomas to unlicensed persons to such Universities as require graduation in arts as a preliminary qualification for graduation in Medicine or Surgery. As this would restrict the privilege, we believe, to the Universities of Oxford and Dublin, it is certain not to find favour with the rest, and, if it passed the House of Lords, would not be very likely to be allowed to become law by the friends of the University of London in the House of Commons. One of the best of Lord Cairns's alterations is that he proposes to leave out the majority clause —29—of the amended Bill.

Lord de Grey's amendments are chiefly verbal, and Lord Somerhill's principal one is to permit the Irish Colleges of Physicians and Surgeons specially to confer their memberships on duly qualified persons, which memberships are to give the right of registration under the Act—a proposal which at least is a sufficiently *naïve* one. From what we have said, it will be seen that the Bill will not get through the Committee of the Lords without considerable discussion. For our own part, we are convinced that nothing can make the Bill an acceptable one but the reintroduction of the eighteenth clause, the reconstruction of the General Medical Council on a broader basis, and the omission of the unjust majority clause.

We have left ourselves but little space to notice the several petitions which have been addressed to the House of Lords on the subject of the Bill. Three of these are now before us—one from the Royal College of Physicians of Edinburgh, one from the Faculty of Physicians and Surgeons of Glasgow, and one from the Apothecaries' Hall of Dublin. The Edinburgh College and the Glasgow Faculty urge the injury done to the great principle of the Bill by the omission of clause 18, and by granting special privileges to the universities. On this point, the petition of the Edinburgh College contains the following well-founded remarks:—

"That your petitioners are of opinion that the universities should occupy one or other (not both) of two positions.

"First, either their degree and their title, whether of M.B. or of M.D., giving a higher status and social position than the mere licence to practise, should be conferred on those who have already attained that by a course of additional study, and by examinations of increased stringency, in which case these examinations should not form part of, or be accepted in lieu of, the examinations of the conjoint boards.

"Second, or if the universities claim for their degrees to be ordinary licences to practise, they should be subjected to the same rules and regulations as may be imposed on the strictly Medical boards giving the ordinary licences to practise.

"Your petitioners are of opinion that it should be the object of all universities to make their degrees valuable by the amount of literary and scientific attainment which they attest, and that they should not, therefore, aim at bestowing a large number.

"In this view, the university examination for degrees should be superadded to the examinations of the conjoint board to be established under the Bill, and should neither be conjoined with these, nor taken in lieu of them."

The petition presented by the Apothecaries' Hall of Ireland is intended to neutralise the effect of a petition presented by the King and Queen's College of Physicians. The latter body have suggested to their Lordships' House that the Apothecaries' Hall of Dublin should not be considered or retained in the Medical Act Amendment Bill as one of the Medical authorities in Ireland, on the ground that it is a trading body. The Apothecaries in answer, remind their Lordships that they have very lately decreed that it would not be politic to place legal restrictions upon Medical Practitioners who may desire to dispense and vend medicines, and while the wants of the community at large stand in need of such a class of Practitioners. They then recount the public Acts, including the Act of 1858, in which the position of the Irish apothecaries as Medical Practitioners is fully recognised. Not the least convincing part of the petition is the signatures appended by the Governor and Secretary of the Company, each of whom signs himself M.D.

We regret to notice that Lady Simpson has not long survived

her husband, the late Sir James Y. Simpson. Lady Simpson died at Killin, Perthshire, on Friday last week.

The meeting of the Pathological Society on Monday last gave an impetus to the cause of amalgamation of the Medical societies which will most probably enable it to surmount the dangers and difficulties which beset it. Next to the Medical and Chirurgical Society, the Pathological is undoubtedly the most healthy and vigorous Medical society in London, whilst in scientific reputation and achievement it is second to none. That this Society has accepted but with few and slight alterations the scheme offered by the Medical and Chirurgical gives to the promoters of that scheme an immense accession of strength. We have before shown that in the line they have taken the members of the Pathological Society have undoubtedly been actuated by devotion rather to the cause of the Profession, which requires an Institute or Royal Society of Medicine to represent it, than by the interests of their own Society. The Pathological Society has nothing to gain by union, and its adhesion is a thoroughly disinterested one. For the sake of the scheme of a great central Medical scientific association, which we have always advocated, we rejoice at the results of last Monday's meeting. At the same time, we believe there is much truth in the warnings which Dr. Peacock and Dr. Murchison uttered, and that it will require all the vigilance of the friends of the Pathological Society to prevent it losing, when in the subordinate position of a section, in usefulness and resources. The line which the Obstetrical Society will take at the present juncture remains to be seen. We think that they had valid cause for their recent decision, but as the other societies are unanimous, it seems a pity that so large a body should remain aloof. We cannot but think that even yet some modification might be introduced in the scheme of the Medical and Chirurgical Society which might be satisfactory to the opposed parties, and might prevent the formation of a rival obstetrical society in the form of an obstetrical section.

FELLOWS OF THE COLLEGE OF SURGEONS ELIGIBLE FOR ELECTION TO THE COUNCIL.

We announced last week that the four candidates for the two vacancies to be filled up on July 7 are Messrs. Erasmus Wilson, Spencer Wells, Holmes Coote, and Henry Lee. This is the order of seniority by their standing on the roll of Fellows. The following is an extract from the roll; and it may be useful as showing the standing both of the metropolitan and Provincial Fellows:—

Metropolitan.

Fredk. Dover, Kensington, December 11, 1843.
Erasmus Wilson, Henrietta-street, December 11, 1843.
J. N. Tomkins, Fitzroy-street.
G. L. Cooper, Woburn-place, December 11, 1843.
G. V. Ellis, University College, December 11, 1843.
E. J. Chance, New Broad-street, December 11, 1843.
C. G. De Morgan, December 11, 1843.
J. Dixon, Portman-square.
F. Hird, Cleveland-gardens.
R. W. Tamplin, December 11, 1843.
C. Holthouse, Storeys-gate, Westminster, December 11, 1843.
Sir J. W. Fisher, August 26, 1844.
George Cooper, Brentford, August 26, 1844.
Chas. Brooke, Fitzroy-square, August 26, 1844.
Wm. Bowman, Clifford-street, August 26, 1844.
T. Spencer Wells, Upper Grosvenor-street, August 26, 1844.
T. Wharton Jones, George-street, August 26, 1844.
Holmes Coote, Princes-street, December 24, 1844.
Henry Lee, Savile-row, December 24, 1844.

Provincial.

Henry Denne, Canterbury, December 11, 1843.
S. W. L. Parker, Birmingham, December 11, 1843.
H. D. Carden, Worcester, December 11, 1843.
John Dickin, Shrewsbury, December 11, 1843.
A. J. Ward, Gloucester, December 11, 1843.
Sir Henry Cooper, Hull, December 11, 1843.
C. Lestourgeon, Cambridge, December 11, 1843.
J. Long, Liverpool, December 11, 1843.
D. Embleton, Newcastle, December 11, 1843.
J. Hammond, Cambridge, December 11, 1843.
G. Bullen, Ipswich, August 26, 1844.
F. F. Lallemand, Macclesfield, August 26, 1844.
J. S. Harrison, Lancaster, August 26, 1844.
G. May, Reading, August 26, 1844.
R. Jones, Leamington, August 26, 1844.

CONVERSAZIONE AT THE ROYAL COLLEGE OF PHYSICIANS.

The President and Fellows of the Royal College of Physicians, in spite of the heat, assembled a large and, need we add, distinguished crowd of guests on Saturday last. The *conversazione* was attended by professors of other arts and sciences than those which are presided over by the tutelary deities of the College. Law was represented by several able lawyers, amongst whom we noticed Sir William Erle; painting and design by Mr. Millais and Sir Digby Wyatt; and music by the Guards' band, whose pleasant strains mingling with the cooler air of the staircase had evidently more attraction for many of the guests than the heat and microscopes of the reception rooms. The Nawab of Bengal, accompanied by his sons and suite, under the guidance of the courteous President, examined the collections of scientific and artistic curiosities with very praiseworthy interest. We cannot attempt to recount the long list of exhibited objects, but amongst them Lieutenant Palmer's beautiful and laborious illustrations of surface oceanic life between Hong-Kong and England, and Mr. J. W. Stephenson's erecting binocular microscope, an instrument which permits microscopical dissections to be performed in the sitting posture and without fatigue, especially attracted our attention. Altogether, the *conversazione* was an exceedingly pleasant one, largely attended by our own Profession; indeed, we missed but few familiar faces.

SIMPSON MEMORIAL.

A deputation from the Edinburgh committee formed for erecting a suitable memorial to Sir James Y. Simpson has been in London for some days organising a corresponding committee. As the result of their labours, a meeting of a private character was held on Thursday afternoon at Stafford House, by permission of the Duke of Sutherland. The circular calling the meeting was signed by the Duke of Sutherland, Earl of Dalhousie, and Lord Elcho. His Grace the Duke of Sutherland presided. The following resolutions were proposed:—

It was moved by Sir Roderick Impey Murchison, and seconded by the Right Honourable Edward Gordon, Q.C., M.P.:—

I. That this meeting cordially approves of the proposal to endeavour in some suitable way to perpetuate the memory of Sir James Simpson—one who has done so much for scientific Medicine, and to assuage the sufferings of the human race.

The Right Honourable the Earl of Dalhousie moved:—

II. That without undervaluing the proposal that has been made to erect a statue in the metropolis of his native country, this meeting is of opinion that no commemoration of a man so eminently practical would be complete which did not embrace the establishment of an Hospital where the diseases peculiar to females could be treated, which every friend of the late Sir James Y. Simpson knows was an object ever near his heart.

This was seconded by George Dempster, Esq., of Shibo.

Moved by the Right Hon. W. Cowper Temple; seconded by Lord Ronald Leveson Gower, M.P.:—

III. That this meeting is of opinion that a committee should be formed in London to co-operate with the other committees, and to secure the establishment of a suitable and lasting memorial of the fame and character of the deceased, and that the following gentlemen constitute said committee, with power to add to their number:—

Moved by the Marquis of Westminster; seconded by the Hon. Arthur Kinnaird, M.P.:—

IV. That his Grace the Duke of Sutherland be requested to act as Chairman of the Committee.

Moved by Archibald Campbell Swinton, Esq.; seconded by Dr. J. Risdon Bennett:—

V. That the Hon. Arthur Fitzgerald Kinnaird, M.P., be requested to act as honorary treasurer, and the Right Hon. Lord Elcho, M.P., and Dr. William Playfair and Dr. Black be requested to act as honorary secretaries, of said Committee.

Moved by Sir George Warrender, Bart., seconded by John Pender, Esq., of Minard,

VI. That the thanks of this meeting be awarded to His Grace the Duke of Sutherland for his conduct in presiding, and for kindly permitting the meeting to be held at his residence.

Dr. Priestley hinted that perhaps a better form of memorial than an Hospital might be suggested. Dr. Alexander Wood, of Edinburgh, defended the decision of the Edinburgh Committee. There were present—The Duke of Sutherland, the Marquis of Westminster, the Earl of Dalhousie, Lord Ronald Leveson Gower, Lord Houghton, the Hon. Arthur Kinnaird, M.P., the Hon. W. Cowper Temple, M.P., Sir Roderick I. Murchison, Sir George Warrender, Sir Charles Locock, Sir C. Nicholson, Sir S. Waterlow, the Right Hon. E. J. Gordon, M.P., D. McLaren, Esq., M.P., J. Miller, Esq., M.P., A. C. Swinton, Esq., Dr. J. Risdon Bennett, Dr. P. Frank, Dr. A. P. Stewart, G. Dempster, Esq., Dr. Priestley, Dr. Arthur Farre, Dr. C. J. B. Williams, Dr. Andrew Clarke, Dr. J. Watt Black, Dr. Wm. Playfair, Dr. George Harley, Dr. Graily Hewitt, Dr. Alex. Wood, of Edinburgh, Bailie Skinner, of Edinburgh, Councillor Colston, of Edinburgh, John Pender, Esq., of Minard, Henry Lee, Esq., A. Campbell Dunn, Esq., Harry Leach, Esq., Edward Cock, Esq., T. Spencer Wells, Esq., A. R. Cotton, Esq., of Grinnard. Apologies were received from the Duke of Argyll, Earl Russell, Lord Elcho, Sir William Fergusson, Bart., Dr. Tyler Smith, Mr. Startin, Dr. Sieveking, Dr. Gull, and Professor Flower.

THE EPIDEMIC OF SMALL-POX AT PARIS.

We do not purpose to continue an analysis of the proceedings of the Vaccine Conference or Congress at Paris, as they are well nigh devoid of interest and utility. A confused assemblage of some two hundred persons, lay and professional, guided by no form of methodical procedure, directed by no person of the slightest note, and sometimes relapsing into positive tumult, is not a very likely means of eliciting truth and meeting the requirements of a grave crisis. One feeling, however, seems to have been strongly predominant—hostility to "animal vaccination," which was loudly declared on all sides to have proved itself a sham and a failure. One speaker alone, M. Danet, brought forward a considerable number of facts in its favour derived from his employment of it in prisons and seminaries on a large scale. In his hands it certainly furnished some excellent results, due, no doubt, to the careful and leisurely way in which it could be employed in such establishments. A crowd of testimony, however, declared against its efficacy, and especially when transported by means of tubes. M. Warlomont, of Brussels, has found that it can best be distributed on ivory points, longer and stronger than those which we have in use; and he is as warm an advocate of it as ever. In Brussels, indeed, the whole matter of vaccination is dealt with efficiently; and it is remarkable that in a city so near Paris, and in such constant communication with it, there is no small-pox whatever prevailing. Animal vaccination at Paris is no doubt at the present time unjustly suffering from the reaction consequent upon its indiscriminate adoption as a fashionable folly. It owes no thanks for its vindication to its apostle, M. Lanoix, who, at the conference, met his adversaries in the lamest manner, adducing statistical statements of the most meagre and flimsy character, which he was at last obliged to submit to a committee of investigation. One fact of a satisfactory character comes out of this turmoil—namely, that the faith of the mass of French Practitioners in the Jennerian virus continues unshaken; and it is only to be hoped, after this panic has subsided, that an efficient organisation will be established for its supply.

Two or three official documents have been published containing facts worthy of note. M. Fauvel communicated the following statistical statement to the Académie de Médecine:—From February 1 to May 31, 275 cases of variola were treated at the Hôtel-Dieu, 40 proving fatal, or 14·55 per cent., 185 were cured, and 50 remained under treatment. Of the 275 cases, 28 had not been vaccinated, and of these 21, or 75 per cent., died; 247 had been vaccinated in infancy, and of these 19, or 7·69 per cent., died. Of these last, 12 had been revaccinated at least three years prior to the attack, and all recovered. Three persons revaccinated (2 with success) during this epidemic, all recovered. These 3 persons are the only ones who have taken small-pox among 1017 vaccinated and revaccinated at the Hôtel-Dieu.

M. Husson, the Director-General, has also published a document in consequence of a general opinion prevailing that *revaccinations* practised during the prevalence of an epidemic are mischievous, showing that the number of cases admitted into the Hôtel-Dieu, Charité, and Salpétrière that have been revaccinated is very trifling. The total number of cases in the three establishments has been 1893. Of these 74, or 3·91 per cent., had not been vaccinated, 1819, or 96·09 per cent., had been vaccinated in infancy, and 45, or 2·33 per cent., had been revaccinated.

A report has also been drawn up, at the request of the Secretary of State, by M. Tardieu, on the comparative number of deaths from variola during 1865-66-67-68-69 and 1870, with a view of showing that the small-pox has not suddenly assumed its present prevalence. Of the six years, 1867 presented the minimum of deaths from this cause—viz., 301—but 1865 furnished 740, 1866 615, 1868 655, and 1869 723, so that the disease has exhibited an epidemic form for five years. From January 1 to May 24, 1870, there were admitted into the Paris Hospitals 4251 cases, of which number 683, or 16·07 per cent., died—a proportion which speaks favourably for vaccination. But this is seen to most advantage in the army, in which every soldier on joining his corps is vaccinated or revaccinated. From January 1 to May 27, 1870, among 13,050 who applied to Val de Grace for Medical aid, only 116 did so on account of variola, and of this number only 4 died—*i.e.*, 3·44 per cent.—a vast step, indeed, since the period when 8 out of every 10 patients died. Still, even in the very centres of civilisation the practice of vaccination is neglected, and much mischievous effect has been produced by the representations of some of the journals that vaccination in the midst of the epidemic only tends to render it more virulent. Whether vaccination be performed from the infant or the heifer little matters providing that good virus be used by a competent hand; and so far from its performance during the epidemic aggravating this, the mortality would have been far more considerable and extensive had not vaccination and revaccination been so vigorously resorted to. The report concludes with an earnest appeal to all concerned, and has been forwarded to all the préfets of the empire. The reporter states that, as has happened in the former epidemics, the present one may be expected to decline in June and July. Unfortunately, it shows little disposition to do so, as the mortality from small-pox for the week ending June 18 amounted to 238 (of a general mortality of 1144), being 20 more deaths than in any former week.

PARLIAMENTARY.—MEDICAL OFFICERS' SUPERANNUATION BILL.

In the House of Commons on Wednesday, June 22,

Dr. Brady, having presented more than 300 petitions from various districts in England in favour of this Bill, moved its second reading. The object of the measure was not merely to do a slight act of justice to Medical officers of the poor, but also to confer a substantial benefit on the poor themselves and to relieve local taxation. The sanitary condition of the country was in a most deplorable state, and urgently called for altera-

tion and improvement. The amount of preventible disease which stalked abroad in towns, as well as in the rural districts, was absolutely alarming. From reports which had been laid upon the table of that House he found that one million cases of preventible diseases, and 111,318 deaths resulting from them, occurred annually. Those figures afforded sufficient reason for an alteration being effected in the present system of Medical poor relief. The existing system had been introduced in 1834, and although it had effected a vast amount of good, it required amendment. The great blot of the present system was that the power was given to the poor-law guardians to appoint the Medical officers and to control them, the result being that the guardians sacrificed the interests of the poor to economy. In conjunction with every other hon. member who had studied the question, he was surprised that the Government had not taken up the subject of Medical poor relief long since. The measure he had introduced was entitled to consideration on the grounds that it proposed to do an act of justice to a most deserving and self-sacrificing class, and that it would conduce to economy. The objections to the Bill were that the people were already over-taxed, and that to provide a more able staff of Medical officers would add to the local rates. It was also objected that the Medical officers had a private practice, and were not dependent upon the salary attached to their office; but he contended that the preservation of human life was more important than the saving of a few pounds in local rates, and he assured the House that the appointment of an efficient staff of Medical officers to keep under strict surveillance those nurseries of disease which were known to exist among the poor in every large town would check the spread of disease and go far to prevent the occurrence of epidemics. He concluded by moving the second reading of the Bill.

Mr. D. Dalrymple seconded the motion, remarking that it was mistaken economy to underpay officers occupying the position of Medical officers to unions, just as it had been found mistaken policy to underpay Medical officers in the army and navy.

The rejection of the Bill was moved by Mr. J. Fielden, who objected altogether to the principle of superannuation, and, while admitting that Medical officers were hardly treated and badly paid, argued that its tendency would be to make their position worse. Mr. Mellor also opposed the bill as an unnecessary addition the burdens of taxpayers.

Mr. Goschen supported the Bill as a measure of expediency, showing how shortsighted a policy the parsimonious treatment of Medical officers is. Dr. Playfair, Mr. Wheelhouse, Mr. Broderick, Mr. Beach, Mr. Gordon, Colonel Corbett, and Mr. Maguire also supported the Bill; but Mr. Henley, Mr. Muntz, and Mr. Rylands spoke against it. On a division, the second reading was carried by 139 to 28.

THE NEW ST. THOMAS'S HOSPITAL.

Having already given our readers a descriptive account of the architectural arrangements of this Hospital with regard to isolation of wards, and a general plan of the building descriptive of the block system of architecture, it only remains for us at present to take a retrospective view of the amount of work done, and to report upon the progress made in the interval. We regret to find that the communicating corridors running the whole length of the building level with the ground and first floors are not constructed for that amount of isolation we had at first supposed. In our last report, we stated that the corridors were the connecting links between the blocks, and that in the event of erysipelas, fever, etc., appearing in a block, the windows of the corridors would be taken out and the passages closed, so that the only communication would be by the underground passage in the basement. This, however, is not possible, for the whole of the space between the central corridor on the ground floor and that which forms a continuous screen at the back of the first floor is filled up by rooms for the out-patients, dispensary, etc. In each case the light will be very deficient, being for the most part borrowed from the corridors between which they are situated.

In the terminal block only, or that for the contagious diseases proper, will it be possible to isolate the wards by cutting off these channels of communication, for there are no offices fitted into the space between the corridors leading to this block.

Such an explanation becomes the more necessary now that it is considered undesirable to herd together patients suffering from the same disease, be it an infectious fever as typhus, or a Surgical fever the result of some severe operation. The mortality of all diseases is no doubt increased by aggregation, decreased by segregation; and, after providing ample cubic space and good ventilation, the next thing to do is to congregate together in one ward diseases varying as much as possible as to their physical conditions and relative mortality. Some means of isolating the more virulent forms of fever is, however, absolutely necessary.

Considerable progress has been made towards completing the outside walls of the Hospital. The contractors expect to have the roofs completed and the scaffolding down by the middle of July. Two of the blocks are in this forward state now; the stonework has been washed, and they present a very imposing appearance. Up to the present time scarcely any plasterers or carpenters have been at work. We presume that the contractors will not be able to find room for them until the bulk of the masons have been paid off.

We certainly noted very little progress in fitting up the interior. The walls are just as bare as they were twelve months ago. A few more patterns of glazed cement for covering the walls were exposed for inspection, and the authorities seem still in doubt as to which to select. The difficulty seems to be to make the colouring uniform—it is very likely to become patchy. Many of the window-frames, manufactured in Norway and sent over upwards of twelve months ago, are not yet put in. The wood must be well seasoned by this time.

The building, as a whole, is highly ornamental, but there is no doubt that, compared with the very elaborate architecture of the Houses of Parliament on the opposite side of the river, there is no unnecessary architectural display. Still, we think the staff have some reason to complain if, in consequence of these decorations, they have been kept out of their new Hospital beyond the contract time. When the South-Eastern Railway took possession of the old Hospital in 1862, the staff were told that they would only have a short interregnum at the Surrey-gardens; but the two or three years of confinement in the house of detention, instead of being commuted, bids fair to be prolonged to ten years, and that for no fault of their own. No doubt the school has suffered in consequence.

According to the plans, it is intended to have an open colonnade facing the river, linking together the front facets of each block, and forming the front boundary to the quadrangles. This we very much object to—1st, because it shuts out some of the light and air from the wards; 2nd, because it is purely ornamental; and 3rd, because the building would be dwarfed by it. The blocks would undoubtedly look more imposing by appearing in relief.

Most of the patients will have to be carried up-stairs, for the basement will be occupied as store-rooms, and the ground floor as kitchens and other offices. There are one or two small wards on the ground floor for special cases. We were surprised to find that it is intended to "brick in" portions of the building which cannot be turned to account. We would rather have them left open as air shafts to assist in the ventilation. In some of these spaces water has been laid on, so that lavatories and water-closets can be constructed if found necessary. There cannot be too many of these, we should have thought. Much has to be done before the building is complete, and we shall congratulate the governors and the staff if they get into their new building by the middle of next year.

NEW BOOKS, WITH SHORT CRITIQUES.

Notes on the Treatment of Skin Diseases. By Robert Liveing, A.M. and M.D. Cantab., Demonstrator on Diseases of the Skin and Assistant-Physician to the Middlesex Hospital. London: Longmans, Green, and Co. 1870.

*** When we remember the great scarcity of manuals on skin diseases three or four years ago, we seem to be now almost *embarras des richesses* in this respect. A good book, however, is always useful, and, therefore always welcome, and hence we gladly greet this little work of Dr. Liveing's. The writer has had such large experience in teaching students, that he is eminently qualified for preparing such a ready guide. It is a *vade mecum* in every sense of the word, since it is hardly too bulky for the waistcoat-pocket, and yet contains a fair amount of information upon the nature, history, and most successful treatment of all cutaneous affections. There is also a useful

glossary of terms employed in this branch of Medical literature, some practical notes on the classification of the various diseases, and a valuable collection of formulæ derived chiefly from the prescriptions of Hebra, Anderson, and the Pharmacopœia of the Skin Hospital at Blackfriars. Altogether it seems to us that this is just the little book to suit the student who wants to get some general knowledge of skin diseases with a special view to their treatment, and who does not care to attempt any of the more exhaustive works on the subject, of which there is now certainly no lack.

GENERAL CORRESPONDENCE.

ON THE FORMATION OF GASTRIC JUICE.

Letter from Dr. W. H. Broadbent.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Murray is hasty in attributing to Dr. Thudichum the discovery that the hydrochloric acid of gastric juice is derived from the sodium chloride of the blood. Dr. Thudichum himself makes no such claim, but says merely that it is necessary to assume that chemical changes take place resulting in the liberation of hydrochloric and lactic acids from the chlorides and lactates. I suppose the hypothesis that the chloride of sodium of the blood is the source of the hydrochloric acid of the gastric juice is as old as our knowledge of the composition of this secretion; it would be an injustice to past chemists to think they had overlooked such an obvious idea, and it is, in fact, an idea with which I was made familiar in my very earliest lessons in physiology, the soda, moreover, being supposed to pass out of the blood in the bile. But if Dr. Thudichum does not pretend to have originated this hypothesis, it is certainly matter for astonishment that he should pronounce the splitting up of NaCl and H_2O, and the cross combination of their consitituents, to be a very simple process. I confess I had done your reviewer the injustice to attribute the expression to him. Of course it is a simple matter hypothetically to rearrange the constituents of NaCl and H_2O; so it is to lift a ton weight, but in both cases force is required actually to accomplish the thing, and before the operation is set down as simple and certain it ought to be shown what is the force by which the dislocation of Na and Cl and of H_2 and O is effected. Till this is explained, the hypothesis as stated by Dr. Thudichum cannot be accepted. Not even in the presence of pepsin will a solution of common salt resolve itself into hydrochloric acid and soda. An hypothesis which does not involve the same violent improbabilities has been advanced by Dr. Bence Jones, according to which the oxidation taking place in the gastric capillaries results in the formation of an organic acid, which is supposed to seize the sodium of the chloride and set free hydrochloric acid, as lactic acid is known to be capable of doing. This would be fatal, it is true, to Dr. Thudichum's explanation of the non-digestion of the stomach by its own secretion, but we may be well content with Dr. Pavy's, which refers the protection of the gastric mucous membrane to the normal alkalinity of the blood circulating in it. Is not, moreover, Dr. Pavy's idea the parent of Dr. Thudichum's? At any rate, Dr. Pavy's experiments would be needed to establish Dr. Thudichum's rationale. I am, &c. W. H. Broadbent.

Seymour-street, June 17.

INEQUALITY OF THERMOMETERS.

Letter from Dr. Walter Fergus.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with interest Dr. E. T. Blake's observation of the unequal temperature of the right and left sides of the body. Of late, when taking the temperature of a case where the thermometric evidence was important, I have used two thermometers, one in each axilla, and on more than one occasion I have noticed a higher temperature on one side. This fact led me to ascertain whether the thermometers agreed in themselves. I have three clinical instruments, one by Casella, two registering by Hawksley. Casella's is a long curved non-registering instrument; one of Hawksley's is 6-inch, the other a pocket 3-inch. I tried them first in water, then in oil, heated within their extreme indications; the following were the results:—

Casella's showed	104·60
Hawksley's 6-inch	104·20
Hawksley's 3-inch	104·40

A chemical thermometer graduated from below zero to 300° showed a temperature of 1·5° greater than the highest of the clinical thermometers. These facts show the necessity of always using the same instrument in observing a case as well as taking the observations from the same side of the body. I do not think that the value of thermometric observations can be overrated, and I have in my possession records of such observations taken in London regularly so long ago as the year 1837, when we were obliged to work with instruments lacking the finish of the modern clinical thermometers.

I am, &c. Walter Fergus, M.D.

Marlborough College, June 20.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Monday, June 20, 1870.

Richard Quain, M.D., President, in the Chair.

SPECIAL MEETING.

At the request of the President the Secretary proceeded to read the proposal of the Royal Medical and Chirurgical Society clause by clause, it being understood that when no objection was made the clause was accepted by the Society.

After reading the first clause, providing for the formation of certain sections of the new body, Dr. Peacock objected to the giving up of the name of a society for that of a section. This body, he said, was well-known everywhere over the world, and it would never be recognised in the guise of a section of the new body. He further considered that the divisions adopted were absurd, if anything was wanted it was a Therapeutical section, which should have been included in the scheme. He thought the object aimed at might be accomplished by five sections, but he could really see no advantage whatever in the proposed amalgamation.

Mr. Solly was sorry to disagree with a colleague, but he considered it of the utmost importance to have a powerful united body, to speak in behalf of the Profession, in any crisis when united action was desirable.

Dr. Buchanan rose to order; the Society had already resolved to accept the general principle, and here was the whole question being reopened, for the proposal to retain the title *Society* really amounted to that.

Dr. Greenhow also rose to order; there was really no proposition or motion before the meeting.

The President explained the course adopted; each section was supposed to be put as a substantive motion from the chair, so that any discussion which arose was perfectly in order. He also thought that a little latitude was allowable when a matter of such vital importance to the Society was being discussed.

Mr. Holmes said Dr. Peacock objected to two things; to sections being called such, and to the grouping of the sections. If Dr. Peacock could hit upon any more appropriate title than that of section, he was sure the Royal Medical and Chirurgical Society would not object. As to the number and names of the sections, logical completeness had suffered from the necessity of amalgamating existing bodies. Therapeutics were really placed in a superior position, being made common to all. It was a cardinal defect in this body that they were now excluded.

Dr. Greenhow reminded the Society that they had already agreed to the general principle of the scheme, and had sent delegates who had drawn up this paper, so that they were really discussing their work.

Mr. Holmes thought the Royal Medical and Chirurgical Society considered only two points essential to the scheme; these were, that the Medical and Chirurgical section should not be divided, and that the new body should have absolute control of the common property.

Dr. Bristowe proposed that the new body be called the Royal Institute of Medicine, and that the sections should be called societies.

Dr. Murchison seconded the motion.

Dr. Hare pointed out that a section and a society were totally different things, whilst Mr. Brooke maintained that to

use the word society in such a connexion was a complete perversion of the English language.

Dr. BROADBENT asked if they were to adhere to their resolution or no. The question was not what they could get, but what good they could do. To haggle about names at this period was preposterous.

The motion having been put from the chair was lost by a large majority. After some conversation as to sections 3 and 9, the whole were passed to section 25, which having been read.

Mr. ARNOTT asked if the latter portion of the clause was intended to exclude any one not being a fellow of the society from the chair of a section.

Dr. WEBB, objecting to it on the ground that it introduced two classes of members in each section, moved that the second portion of the clause be omitted.

Mr. ARNOTT seconded the motion.

Mr. HOLMES pointed out that the President of each section was *ex officio* a member of the Council of the Society—the body which would have to deal with its property. It was out of the question that men having no share in this should be allowed to deal with it as their own.

Dr. WEBB thought that the property could not be considered to belong to any one man.

Dr. POWELL held that a man could not well be a Vice-president of a society not being a Fellow of it, and the Presidents of sections were *ex officio* Vice-presidents of the Society.

Mr. BROOKE thought such a proposition tantamount to placing a man in a corporate body who was not a member of the corporation.

Dr. BROADBENT said that it was after all only the matter of a couple of guineas for two years. The proposition having been put, was lost by a majority.

Clause 26, which dealt with the financial portion of the scheme, having been read,

Dr. MURCHISON proceeded to say that this was the most important of all, that it was their duty to try to do as much good after amalgamation as before. This was a pure matter of business, and must be considered as such. It was not a question of hostility at all. The expenditure of the Pathological Society amounted on the average to about £300, their income to £379. Out of this £94 16s. would go to the new society. They would also lose their entrance fees—about £30—and the interest on their funded property—£14 or £15; in all about £140. He would like to know what were the *special* purposes referred to in the clauses. They might include the tea and coffee consumed by the Society, at the cost of 30 guineas; the Secretariat, which cost 30 more, and collector's poundage amounting to about £20. He believed they would be unable to go on as before without new members, and the Society might be unable to grant them the aid required.

Mr. HOLMES pointed out that Dr. Murchison proposed no modification of the scheme. Tea and coffee were not special, but general purposes. No statement could make it clearer than Dr. Murchison's that the gain balanced the loss in the proposed scheme. He thought they might often spend less on their *Transactions* without at all impairing their value.

Dr. MURCHISON only wanted clearly to understand the meaning of the words "special purposes."

Mr. EASTES proposed, for the sake of clearer definition, that the word "scientific" be inserted between the words "special" and "purposes."

Dr. FAOGE seconded the motion.

Mr. HOLMES said they must of course run a certain risk, as they could never be absolutely certain of success. His opinion was that the subscriptions might soon be reduced.

Mr. HULKE asked what would be the position of the Society if the whole thing went to smash. Mr. SOLLY, on the other hand, was confident of success, whilst Mr. HOLMES pointed out that, if anything happened, it would be the library which would suffer, not the *Transactions*.

Mr. EASTES' motion having been put, was carried, and after some conversation as to the position of Honorary Fellows, Dr. BUCHANAN moved a vote of thanks to the delegates, which was seconded by Mr. SOLLY, and cordially agreed to, whereupon the meeting terminated.

BEQUESTS, ETC.—Miss Emma Lea, of Dublin, bequeathed £100 each to the Adelaide Hospital, the Meath Hospital, and the Hospital for Incurables, all in that city. The Marquis of Westminster has given £100 towards the reduction of the debt of £621 owing by the Chester General Infirmary.

MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their Examination in the Science and Practice of Medicine, and received Certificates to practise, on Thursday, June 16, 1870:—

Mugliston, Henry Boyes, Upton, Essex.
Wilton, John, Sutton, Surrey.

The following gentleman also on the same day passed his First Professional Examination:—

Claridge, William, St. George's Hospital.

APPOINTMENT.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

ADAMS, T. RUTHERFORD, M.D., L.R.C.P. Lond., Surgeon to the Croydon General Hospital.—Surgeon to the Croydon Convalescent Hospital in connexion with the North-Eastern Hospital for Sick Children, London.

MILITARY APPOINTMENTS.

MEDICAL DEPARTMENT.—Staff Surgeon-Major John Elliot Carte, M.B., C.B., to be Deputy Inspector-General of Hospitals, *vice* William Holmes Jephson, M.D., deceased; Assistant-Surgeon George Andrew, M.B., from the 6th Foot, to be Staff Assistant-Surgeon, *vice* Edwin Philpot Haward, deceased.

6TH FOOT.—Staff Assistant-Surgeon John Joseph Crean to be Assistant-Surgeon, *vice* George Andrew, M.B., appointed to the Staff.

47TH FOOT.—Staff Assistant-Surgeon Frederick Robert Wilson, M.B., to be Assistant-Surgeon, *vice* James Jameson, M.D., promoted on the Staff.

BIRTHS.

ADAMS.—On June 15, at Barnes, Surrey, the wife of James Adams, M.D., of a son.

BULLOCK.—On June 15, at Spring-grove, Isleworth, the wife of Henry Bullock, F.R.C.S., of a daughter.

LICHTENBERG.—On June 16, at 47, Finsbury-square, the wife of George Lichtenberg, M.D., of a daughter.

MUMFORD.—On June 14, at 60, Fetter-lane, the wife of William Lugar Mumford, M.D., of a son.

MYATLE.—On June 16, the wife of Dr. Myrtle, Harrogate, of a daughter.

PAINE.—On June 14, at Corbett House, Stroud, Gloucestershire, the wife of Dr. Paine, of a son.

PURVIS.—On June 16, at Royal-hill, Greenwich, the wife of John Prior Purvis, M.R.C.S.E., L.S.A., of a son.

WOODFORDE.—On June 16, at 5, Lansdowne-terrace, Bromley, E., the wife of W. T. G. Woodforde, M.D. Lond., of a son, stillborn.

WYLD.—On June 15, the wife of George Wyld, M.D., of 12, Great Cumberland-place, of a daughter.

MARRIAGES.

BLAXALL—MCHARDY.—On June 16, at the parish church, Springfield, Essex, Dr. Francis Henry Blaxall, Staff Surgeon Royal Navy, and Medical Inspector under the Privy Council, to Mulvina, eldest daughter of Admiral McHardy.

BOOTY—BRESLIN.—On June 14, at Christ Church, North Brixton, George John Booty, Esq., of Clapham, to Sophia Corry, eldest daughter of William Irwin Breslin, M.D., late of H.M.'s 46th Regiment.

BROWN—COLEMAN.—On June 15, at Trinity Church, Marylebone, Newnham Browne, of Horsham, to Margaret, second daughter of the late William Thomas Coleman, M.D.

HAYCRAFT—CUMMINGS.—On June 18, at St. Andrew's, Enfield, Charles Frederick, fourth son of the late W. T. Haycraft, M.D., to Catherine, the only daughter of the late Thomas Cummings, Esq.

RICHMOND—SHANKS.—On June 21, at Lily Bank, Johnstone Archibald Fullerton Richmond, Assistant-Surgeon Bengal Army, to Emily, youngest daughter of Thomas Shanks, Esq.

SERGEANT—LEAR.—On June 16, at St. Alphage, Greenwich, David Maurice Sergeant, M.D., of Warboys, Hunts, to Helen, eldest daughter of the Rev. Robert Lear, 6, The Grove, Blackheath.

WATSON—CLENDINNING.—On June 14, after banns, at All Souls', South Hampstead, Alexander Hook, eldest son of the late Rev. Alexander Watson, to Margaret Emily Geraldine, younger daughter of the late John Clendinning, M.D. Oxon, F.R.C.P., F.R.S., of Wimpole-street, W.

DEATHS.

ANGAS, JONATHAN, many years Surgeon in Clapham, at 6, Ladbroke-crescent, Notting-hill, on June 19, aged 80.

BISSET, JOHN AUGUSTUS, third son of Chas. Ed. Bisset, M.R.C.S., of Peckham, at Maclean, near King William's Town, British Kaffraria, South Africa, on April 13, in his 42nd year.

DONNALL, ORLANDO S., Deputy Inspector Army Medical Department, at Ormond-house, Westow-road, Bath, on June 10, aged 53.

HODDER, MILDRED FRANCES LOUISA, only beloved child of Staff Assistant-Surgeon Hodder and his late wife Emma Jane, at Toronto, Canada, on May 23, aged 17½ months.

LANE, JULIA, the beloved wife of W. R. Lane, Assistant-Surgeon Grenadier Guards, and eldest daughter of Edward Shackle, Esq., of Botwell House, Hayes, Middlesex, on June 18, deeply regretted.

LAWRIE, JAMES THOMAS BRUDENELL, M.D., eldest son of Major Lawrie, formerly of the 11th Hussars and late 79th Highlanders, on April 17, at Ballarat, near Melbourne, Australia, of typhus fever, aged 28.

Maclachlan, D., M.D., F.R.C.P., Deputy Inspector-General, late Physician and Principal Medical Officer, Royal Hospital, Chelsea, and formerly 79th (Cameron) Highlanders, at Claremont, Ventnor, Isle of Wight, on June 15.

Murdoch, George, M.B., M.S., R.N., son of George Murdoch, R.N., C.I.M.A., at Buckland, near Portsmouth, on June 19, aged 23.

Simpson, Lady, widow of the late Sir James Y. Simpson, at Killin, Perthshire, on June 17.

Snaith, Jane, widow of F. Snaith, M.D., at 13, Witham Bank, Boston, Lincolnshire, on June 15, aged 57.

Wright, Mary, the widow of Dr. Wright, late of Manchester, at 20 Elm Tree-road, St. John's-wood, on June 20, aged 60.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made, and the day of election (as far as known) are stated in succession.

Bath Mineral Water Hospital.—Resident Medical Officer; must have both Medical and Surgical qualifications. Applications and testimonials to B. Starr, Registrar, on or before June 30.

Chontales Gold and Silver Mining Company (Limited).—Surgeon, to reside on the Company's mines in Nicaragua, Central America; must have both Medical and Surgical qualifications. Applications and testimonials to Mr. G. Voakes, 185, Gresham House, Old Broad-street, E.C.

East Sussex, Hastings, and St. Leonard's Infirmary.—Assistant-Surgeon. Applications and testimonials to the Secretary on or before the 25th inst.

Hospital for Sick Children.—Assistant-Physician; must be F. or M.R.C.P.L. Applications and testimonials to the Secretary, at the Hospital, 49, Great Ormond-street, on or before July 5. An Assistant-Surgeon is also required; must be F. or M.R.C.S.E.

Leeds Public Dispensary.—Assistant Resident Medical Officer; must have, at least, one legal qualification. Applications and testimonials to Mr. C. J. Wright, 2, Park-square, Leeds, on or before July 6.

Liverpool Royal Infirmary School of Medicine.—Demonstrator of Anatomy. Applications and testimonials to the Registrar on or before July 9.

Northampton General Infirmary.—House-Surgeon's Assistant. Applications and testimonials to the Secretary, from whom further particulars may be obtained, on or before July 9.

Preston and County of Lancaster Royal Infirmary.—Junior House-Surgeon; must be duly qualified and unmarried. Applications and testimonials to the Secretary on or before July 6. The duties to commence on August 12.

Rotherham Dispensary.—Resident House-Surgeon; must have both Medical and Surgical qualifications, and be unmarried. Applications and testimonials to the Treasurer on or before July 4. Election on the 13th.

Royal South London Dispensary, St. George's-cross, Southwark.—Assistant Dispenser. Applications and testimonials to the Secretary, 174, Blackfriars-road, S.E., on or before the 27th inst.

Royal South London Ophthalmic Hospital, St. George's-circus, S.E.—Clinical Assistant; must have some qualification. Applications and testimonials to the Secretary on or before July 4.

St. Luke's Hospital for Lunatics.—Surgeon; must be F.R.C.S.E. Applications and testimonials to the Chairman of the Committee on or before July 1.

St. Peter's Hospital for Stone, 54, Berners-street, Oxford-street.—House-Surgeon; must be M.R.C.S. Applications and testimonials to the Honorary Secretary on or before June 30.

South Staffordshire General Hospital.—House-Surgeon; must have both Medical and Surgical qualifications. Applications and testimonials to the Secretary on or before July 2. Election on the 19th.

Stafford County Lunatic Asylum.—Assistant Medical Officer; must be M.R.C.S. and L.S.A. Applications and testimonials to Dr. Bower, Superintendent.

Staffordshire General Infirmary.—Dispenser and House-Surgeon's Assistant (unqualified). Applications and testimonials to the Secretary.

University College Hospital.—Professorship of Practical Physiology. Applications, etc., to the Secretary on or before July 6.

POOR-LAW MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the last census.

RESIGNATION.

Elham Union.—Mr. F. W. Pittock has resigned the Sellinge District; area, 8088; population, 1765; salary, £32 per annum.

Sheffield Union.—Mr. Benjamin Le Tall has resigned the Handsworth District; area, 3506; population, 3946; salary, £20 per annum.

Ulverstone Union.—Mr. John B. Oliver has resigned the Broughton West District; area, 28,956; population, 3169; salary, £42 per annum.

APPOINTMENTS.

Cockermouth Union.—Harrison Mitchell, M.B. and M.C. Univ. Edin., to the Second Cockermouth District.

Cuckfield Union.—Marshall Monckton, L.F.P. and S. Glas., L.S.A. Lond., to the Fourth District.

Hampstead Parish.—Thomas Morton, M.D., M.R.C.S.E., L.S.A., to the Kilburn District.

Honiton Union.—Charles Wm. Whitley, M.B. Univ. Aber., M.R.C.S. Eng., L.S.A., to the Fourth District.

Knighton Union.—John Roy Quick, L.F.P. and S. Glas., L.S.A. Lond., L.M., to the Brampton Brian District.

Newcastle-under-Lyme Union.—Thos. Roberts, M.R.C.S. Eng., L.S.A., to the Whitmore District.

Pembroke Union.—Douglas A. Reid, M.D. Univ. Edin., M.R.C.S. Eng., L.S.A., to the First District.

West Derby Union.—Robert H. Lloyd, M.R.C.S. Eng., L.S.A., as Assistant Medical Officer at the Workhouse.

We regret to hear that Mr. Syme continues in a very precarious condition. Some power which had been gained has been again lost, and there is, we fear, but little hope of recovery.

Royal College of Surgeons.—A meeting of the Fellows and Members has been advertised to be held at the College on Tuesday next to discuss an important question—viz., the advisability of petitioning Parliament in the name of the Fellows and Members at large in favour of the restoration to the Medical Act (1858) Amendment Bill of the original clause 18 of the Bill, viz.:—"18. After the date fixed for the commencement of the examinations by any Medical examining board under this Act, none of the Medical authorities shall grant any of the qualifications mentioned in schedule (A) to the principal Act as amended by this Act or by any of the Acts mentioned in the first schedule to this Act, except to persons registered or qualified to be registered under the principal Act." The President will take the chair at 3 o'clock.

Preliminary Examinations.—The half-yearly examination in Arts, etc., for the Fellowship and Membership of the Royal College of Surgeons was commenced on Tuesday last at the Whittington Club, when candidates presented themselves—viz., for the Fellowship and for the Membership. The result of the examinations, which extended over three days, being terminated on Thursday, cannot be known for several weeks. There were 311 candidates—viz., 81 for the Fellowship, and 230 for the Membership, of the College. The next primary and pass examinations will take place on July 16 and 22 respectively.

Collegiate Proceedings.—At the last meeting of the Council of the Royal College of Surgeons the President stated that at the special Council to be held on the 4th proximo it would be necessary to proceed to the election of a representative of the College, in the vacancy occasioned by the expiration of the term of office of Mr. Cæsar H. Hawkins. At the same meeting Mr. Charles Hawkins, in pursuance of his notice on the 12th ult., moved, "That no alteration in the bylaws be made until after the termination of the present session of Parliament;" and, the motion having been seconded by Mr. South, and the votes of the Council taken thereon, the same was carried *nem. con.*

Académie des Sciences.—At a recent meeting of this learned body the place of the late Professor Panizza, as Corresponding Member in the Section of Medicine and Surgery, was filled up by the election of Professor Rokitansky, of Vienna, thirty-seven of the forty members present voting for him. The other candidates were Messrs. Hughes Bennett, Bowman, Donders, Lebert, and James Paget.

In the case of Grimston *v.* Timms and others, Lord Penzance made an order on Tuesday on the defendant Timms for the payment of costs amounting to £981 4s. 3d. The case was one of disputed will of a person of the name of Huttley.

A meeting of the subscribers to the Bruce Memorial will be held in the operating theatre of University College Hospital on Friday, July 1, at 3 p.m., under the presidency of Mr. Erichsen.

At the Thames Police-court, on Wednesday, William Harding, "a Surgeon," who had been several times remanded on the charge of causing the death of a married actress at the Shoreditch Alhambra Theatre, was finally examined before Mr. Lushington and committed for trial.

A girl, aged 14, has been arrested at Clogher for the murder of her illegitimate child. She confesses that she burned the body, but asserts that it died naturally.

A patient of the Fever Hospital, Netherfield-road, Liverpool, in attempting to escape over the gate, during the night, got impaled on the spikes, and was instantly killed.

Vaccination.—Thirty-five persons were convicted at Oldham, on Monday last, of infringing the provisions of the Vaccination Acts, and fined from one shilling to twenty shillings each.

Francis Home Scaife, charged with embezzling the moneys of his employers, Drs. Hassall and Anderson, of Richmond, was committed by the magistrates of that town, on Wednesday last, for trial.

Presentation to Dr. Carter.—A numerously attended meeting of the students of the Liverpool School of Science and their friends was held last Tuesday night at the Free Public Library, William Brown-street, to present Dr. Carter, their lecturer, with an address and timepiece as a small acknowledgement of the appreciation of his services. The chair was most efficiently occupied by Mr. Sarsfield, who, in the course of a few

remarks as to the Doctor's ability and gentlemanly conduct on all occasions to the students, said he was sorry that his other engagements would in the future debar him from attending most, if not all, of the classes as their teacher. The timepiece (a very handsome one) was then presented to the Doctor, who, in returning thanks, expressed a hope that the kind sympathy which had subsisted between himself and the students would continue to exist, though they might be separated from each other. The company spent a pleasant evening in viewing various microscopic, spectroscopic, and other interesting objects. A vote of thanks to the chairman brought the proceedings to a close.

Western Medical and Surgical Society of London.—At the annual meeting held on June 3, the following gentlemen were elected officers for the ensuing session:—President: Dr. Fineham; Vice-President: Mr. C. Hunter, Mr. T. Holmes, Mr. Rouse, Mr. Mould; Council: Dr. Webb, Mr. G. Pollock, Mr. St. John, Dr. Hugh Mackintosh, Staff Surgeon Elkington, Mr. Hatchard, Dr. Egan, Dr. T. Godrich, Dr. Martyn, Dr. Painter, Mr. Foxon Foxon, Mr. Keen; Treasurer: Dr. Baines; Honorary Librarian: Dr. Godwin; Honorary Secretaries: Mr. Milner, and Dr. A. Fyfe; Auditors: Mr. Risdon, and Mr. Colebrooke.

Court Dress Makers.—A case was brought before the magistrate at the Westminster Police-court on Wednesday last by Dr. Aldis, the Medical Officer of Health of St. George's, Hanover-square. The defendant was summoned for "permitting young women to work in her house after the hours prescribed by the Act—viz., 4 o'clock on Saturday and 9 o'clock on other nights." The defendant pleaded guilty to both charges, but in excuse said that she had a very pressing order to execute, and it was impossible to reckon the number of stitches to a nicety beforehand, and if a lady was going to a ball she must have her dress. After some other proceedings, Mr. Arnold said he was afraid the provisions of the Act were not well known. If the persons who employed the defendant were made to understand that a penalty was the result, they would not have the hardihood to call upon her to commit a breach of the law. If they did, their names, whatever their rank or station, should be held up to public obloquy. Any lady deserved it who gave such orders as involved a breach of the law. The defendant said the magistrate had no idea what peremptory orders she received at this time of the year, and she could not get extra hands if she wished. The defendant was fined 10s. and costs in each case, and warned not to repeat the offence.

A Notice.—On Monday, July 5, at a quarter past five in the afternoon in the Larger Theatre of the Royal Polytechnic Institution, Regent-street, Mr. Balmanno Squire invites members of the Profession to witness an experiment for demonstrating cutaneous diseases by means of coloured photographs from life taken on glass, which will be placed in the dissolving-views apparatus and there illuminated by the lime-light and so thrown on the screen in a dark room. Thus a perfect representation of the precise form, colour, and size of life will be produced. The advantages Mr. Squire claims for his method are these—Firstly, that his published photo's on paper of skin diseases, whose chief defect was their small size, may by this means be exhibited to lecture classes the size of life. Secondly, that systematic lectures on the subject may by this means be made clinical. Thirdly, that the acknowledged difficulty of finding illustrative cases for demonstration is got rid of. More than this, such representations are convenient from another point of view, inasmuch as, unlike the patient himself, visible only to the select few—viz., to the nearest students who have secured good places—they are made visible to all. Mr. Squire desires to propose to the lecturers on Medicine and Surgery at the various Medical schools that they should adopt this process. He furthermore claims for it an advantage over large drawings of cutaneous diseases. Since photographs on glass are more accurate, much cheaper, occupy less packing space, can be exhibited at will of any required size, and their image being the only illuminated object in a dark room, is far more distinct and more visible from distant parts of a large room than a coloured drawing usually is.

A Protest.—At the special general meeting of the Obstetrical Society of London, held on Wednesday, June 15, the following resolution was duly proposed:—"That, as the majority of the Fellows of this Society reside out of town and cannot attend this meeting, it is desirable to obtain the expression of opinion of each of the Fellows by a printed circular before any decided resolution be adopted as to the amalgamation with the Royal Society of Medicine." The President, Dr. Graily Hewitt, refused to put this resolution to the meeting, stating, as his reason, that it was contrary to the laws of the society. I beg to enter this protest against that decision on the following grounds:—

1. There is not any law or bylaw of the society which prohibits such a resolution from being put to a special general meeting called for the purpose "to consider the scheme of amalgamation."

2. There does not exist any custom in societies in general which would prohibit this resolution from being considered by the society.

3. The laws to which reference was made at the time do not in any way affect this resolution. Laws III. and IV., chapter 16, only refer to the alteration of the present laws and the adoption of new laws; whilst Law I., chapter 7, which states the President shall "interpret the application of the bylaws, and decide every doubtful question," cannot be construed as giving him power to capriciously exclude any proposition properly brought before any special general meeting and referring to the business for which this meeting was convened.

4. By interfering with the expression of opinion of the Fellows present in any way not provided for by the laws, and contrary to the usual custom of societies, the President has rendered any other resolution invalid which might be put to the meeting.

5. By preventing the free expression of opinion by the Fellows upon any question brought before them for consideration, the President has rendered the proceedings inoperative upon the Society, and left the Fellows at liberty to adopt any course they may individually consider advisable or right.

T. Snow Beck.

To the Secretaries of the Obstetrical Society of London, June 21, 1870.

Traumatic Tetanus.—Dr. Poma relates a third apparently desperate case of traumatic tetanus occurring in a woman, aged 19, which he succeeded in curing by large doses of quinine and laudanum, aided by chloroform friction. In the seventeen days of treatment 34 grammes of quinine, 25 of laudanum, and 75 of chloroform were employed.—*Gazette Med. Lombarda, June* 4.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Mr. F. Godfrey, Gibraltar.—Your letter, with enclosure, received with thanks.

George Denholm.—We have already referred to Dr. Coghill's candidature.

Mr. John Forster, Hindmarsh, Adelaide.—Your letter and enclosure have come safely to hand.

Reader.—The subject has not yet been determined on.

Dr. F. Royston Fairbank.—We shall be very glad to receive the notes of the case.

Vatican.—We do not know of any special book or paper in answer to the writings you mention.

A Voting Fellow.—Mr. John Adams is *not*, as we stated last week, a candidate for a seat in the Council of the Royal College of Surgeons.

H. M., F.R.C.S.—As Mr. Cæsar Hawkins is *not* a member of the Council he could not have seconded the resolution; perhaps our contemporary who makes the blunder intended it for Mr. Charles Hawkins.

Yorkshire must pass the preliminary examination.

A Patient.—No letter of recommendation is required.

A Pupil.—The certificates will be received; but the candidate will have to pass the examination as if the attendance on the lectures had been recent.

Pater.—The fee varies. Absolute apprenticeship is not necessary. Arrangements can be made for the pupil to attend lectures and Hospital practice during his "apprenticeship."

Criticus.—A thermometer gives precision. "Criticus" should read the "Report of the Commission on the Heating, Lighting, and Ventilation of the South Kensington Museum" (Blue Book, 1869), and he would see how the Commissioners make fun of the notion that "personal sensations" of heat and dryness "can be compared for value with accurate instrumental observations."

Echo.—The statement is to some extent an invention, at least so far as the removal of the skin was done for experiment. Some correct account of the proceedings will no doubt be given by those interested.

Vis Vitæ should apply to some respectable Surgeon and shun the advertising quacks. There is usually in such cases very little the matter, when judiciously treated; but the quack will aggravate the mischief in order to extort more money from the victim.

A. B. C.—Of 50,000 idiots and imbeciles in the United Kingdom it is estimated that 13,000 live in the seven counties of Lancashire, Cheshire, Cumberland, Durham, Northumberland, Westmorland, and Yorkshire. For their benefit the Royal Albert Asylum is being built, and a special effort has been commenced at Preston in aid of the institution.

M.D., F.R.C.S.—It has been decided in several cases that, unless the assurance office makes a promise to pay, the Medical attendant of the proposed assurer cannot recover any fee for his report on the state of health of his patient. It has been held that the plaintiff need not have answered the questions unless he pleased, but having answered them he could not recover a charge for so doing.

The Causes of Excessive Infant Mortality.—M. A. B. writes:—I am glad to find in your notice last week of Dr. Norton's little work, that you agree with the writer in his estimate of the disastrous effects upon infant health and life of the improper food which is so commonly given to young children who are hand-reared; and I quite concur with you in questioning the accuracy of Dr. Norton's second and third propositions with reference to the "poisonous effects of starch food," for when given in moderation and in combination with milk, I have found properly prepared farinaceous foods most beneficial, in cases in which milk alone was either rejected or proved insufficient for the purposes of nutrition. In my pamphlet on "Excessive Infant Mortality,"(a) I have described very fully my experience on this subject.

HUNTER'S PORTABLE TURKISH BATHS.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—As an old contributor to your journal, I hope you will insert this letter, as several of my Medical friends and patients have pointed out to me an advertisement which often occurs in the *Times*, headed "Old Age or Accident, not Disease, should end Our Days." A pamphlet by "C. Hunter" is then advertised, advocating a "Portable Turkish Bath."

As it happens that I some years ago wrote a series of papers on hot water, hot air, and Turkish baths, and objected to the use of the latter (Turkish baths), in some of the diseases for which the pamphlet by "C. Hunter" indiscriminately advocates their use, I trust you will insert this letter to let my Professional friends know that I have nothing whatever to do with the said "portable baths" or the pamphlet by C. Hunter.

I am, &c. CHARLES HUNTER.

30, Wilton-place, S.W.

COMMUNICATIONS have been received from—

Dr. J. WHITMORE; A. SURGEON; Mr. G. DENHOLM; Mr. TYRRELL; Mr. S. M. BRADLEY; M. A. B.; Mr. C. HUNTER; Mr. C. F. MAUNDER; Dr. BROADBENT; Dr. BOWER; Mr. G. GULLIVER; Mr. G. STREET; Dr. WALTER FERGUS; Dr. C. KIDD; READER; Mr. BALMANNO SQUIRE; Mr. C. E. HARDYMAN; Mr. W. CARTER; Dr. JAMES SAWYER; Mr. C. J. WRIGHT; Dr. J. W. MOORE; Dr. LIONEL BEALE; Dr. D. DYCE BROWN; Dr. J. MACPHERSON; Dr. WILTSHIRE.

BOOKS RECEIVED—

Biology *versus* Theology by Julian—Watson on Abscess and Tumours of the Orbit—Pharmaceutical Journal, No. 133—Dr. Engelman on Kreuznach—Report of the Peking Hospital in connexion with the London Missionary Society—The Trial of John Reynolds by Dr. Echeverria—Journal of the Scottish Meteorological Society—J. Soelberg Wells's Treatise on Diseases of the Eye, Second Edition.

NEWSPAPERS RECEIVED—

Nature—The Melbourne Age—New York Medical Gazette—Liverpool Daily Post.

APPOINTMENTS FOR THE WEEK.

June 25. *Saturday* (*this day*).

Operations at St. Bartholomew's, 1½ p.m.; St. Thomas's, 9½ a.m.; King's, 2 p.m.; Charing-cross, 1 p.m.; Royal Free, 2 p.m.; Hospital for Women, 9½ a.m.

27. *Monday.*

Operations at the Metropolitan Free Hospital, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; St. Peter's Hospital for Stone, 2½ p.m.

28. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal Free, 2 p.m.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Dr. Hilton Fagge, "On the Anatomy of Molluscum Fibrosum." Mr. E. Barker (of Melbourne), "On Extroversion of the Bladder in a Female." Report of the Scientific Committee on Bain's and Pacini's Methods of restoring Suspended Animation.

29. *Wednesday.*

Operations at University College Hospital, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; St. Thomas's 1½ p.m.; Ophthalmic Hospital, Southwark, 2 p.m.; Samaritan Hospital, 2.30 p.m.: King's College Hospital (by Mr. Wood), 2 p.m.

SOCIETY OF ARTS, 4 p.m. Annual General Meeting.

30. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic Hospital, 2 p.m.; West London Hospital, 2 p.m.; University College Hospital, 2 p.m.

July 1. *Friday.*

Operations at Westminster Ophthalmic, 1½ p.m.; Central London Ophthalmic Hospital, 2 p.m.

(a) Messrs. Churchill and Sons.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 18, 1870.

BIRTHS.

Births of Boys, 1074; Girls, 925; Total, 1999.
Average of 10 corresponding weeks, 1860-69, 1941·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	680	612	1292
Average of the ten years 1860-69	639·3	549·2	1188·5
Average corrected to increased population	...	...	1308
Deaths of people above 90	...	...	...

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1861.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	458125	...	7	24	...	6	1	1	3	15
North ...	618210	5	10	30	4	4	6	5	1	12
Central ...	383321	1	6	8	...	2	2	1	5	11
East	571158	1	5	11	1	4	3	4	2	9
South	773175	...	8	27	2	9	4	5	4	9
Total	2803989	7	36	100	7	25	16	16	15	56

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·920 in.
Mean temperature	64·6
Highest point of thermometer	86·2
Lowest point of thermometer	50·5
Mean dew-point temperature	53·4
General direction of wind	W.S.W.
Whole amount of rain in the week	0·15

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 18, 1870, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population in middle of the year 1870.	Persons to an Acre. (1870.)	Births Registered during the week ending June 18.	Deaths Registered during the week ending June 18.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3214707	41·2	1999	1292	86·2	50·5	64·6	18·11	0·15	0·38
Portsmouth ...	122084	12·8	82	43	78·8	49 5	61·3	16·28	0·23	0·59
Norwich	81087	1·09	32	25	81·8	49·5	61·7	16·50	0·31	0·79
Bristol	171382	36·6	130	83	77·3	52·3	59·2	15·11	0·51	1·30
Wolverhampton ...	72990	21·5	59	31	77·0	49·6	59·9	15·50	0·33	0·84
Birmingham ...	369604	47·2	233	111	79·0	51·0	61·0	16·11	0·54	1·37
Leicester	97427	30·4	68	29	...	...	...	...	...	...
Nottingham ...	88888	44·5	52	26	...	...	...	...	...	...
Liverpool	517567	101·3	381	202	71·0	49·0	58·3	14·61	0·60	1·52
Manchester ...	374993	83·6	320	188	75·0	46·0	59·1	15·05	0·44	1·12
Salford	121580	23·5	104	56	73·9	44·1	57·6	14·22	0·67	1·70
Bradford	143197	21·7	90	70	75·0	48·0	59·1	15·05	1·21	3·08
Leeds	259527	12·0	206	99	75·0	44·0	58·8	14·89	1·37	3·48
Sheffield	247378	10·8	204	99	75·0	46·0	59·6	15·33	0·75	1·91
Hull	130869	36·7	64	52	...	...	...	...	...	...
Sunderland ...	94257	30·5	65	37	...	...	...	...	...	...
Newcastle-on-Tyne	133367	25·0	92	57	71·0	47·0	58·2	14·55	0·35	0·89
Edinburgh	178970	40·4	148	92	68·7	46·0	57·6	14·22	0·30	0·76
Glasgow	468189	92·5	409	241	66·0	44·4	55·9	13·28	0·82	2·08
Dublin (City, etc.*)	321540	33·0	161	127	72·9	47·0	58·8	14·89	0·10	0·25
Total of 20 Towns in United Kingd'm	7209603	33·8	4899	2960	86·2	44·0	59·4	15·22	0·54	1·38
Paris—Week ending June 18	1889842	242	...	1144	...	...	...	...	...	...
Vienna—Week ending June 11 ...	605200	167	...	436	...	...	...	...	...	...
Berlin—Week ending June 16 ...	702437	128	639	497	...	...	66·4	19·12	...	...

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·920 in. The highest barometrical reading was 30·05 in. on Sunday morning, and the lowest was 29·71 in. on Friday.

The general direction of the wind was W.S.W.

Note.—The population of Cities and Boroughs in 1870 is estimated on the assumption that the increase since 1861 has been at the same annual rate as between the censuses 1851 and 1861; at this distant period, however, since the last census it is probable that the estimate may in some instances be erroneous. The estimates for Leicester, Nottingham, Leeds, Bradford, and Hull are based upon a local enumeration of the inhabited houses.

* Inclusive of some suburbs.

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Page 116, line 3, *omit* let[illegible] *read* "capillary coils termin[illegible] returu wires, which," etc.
Page 117, col. 1, line [illegible]ottom, *for* "frequency," *read* "
col. 2, line 29 f[illegible] *for* "sleep," *read* "fatality."
Page 331, col. 2, lin[illegible] ottom, *read* "death list," *vide* "D[illegible]
line 3 from bottom, *for* reprinted," *read* "of which mention is made in."
Page 332, note (a), *for* "Dr. von Hoht," *read* "Dr. von Hohl."
Page 333, col. 1, line 6, *for* "quinine," *read* "gum."
col. 2, line 34, *omit* "and bottle."
line 43, *for* "is very rarely advisable," *read* "is not to be set aside."
line 11 from bottom, *for* a "scientific Doctor," *read* a "Doctor of Science."
Page 334, col. 1, line 9, *for* "this year," *read* "last year."
Page 542, col. 1, line 38 from bottom, *for* "Duchernin," *read* "Duchemin."

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